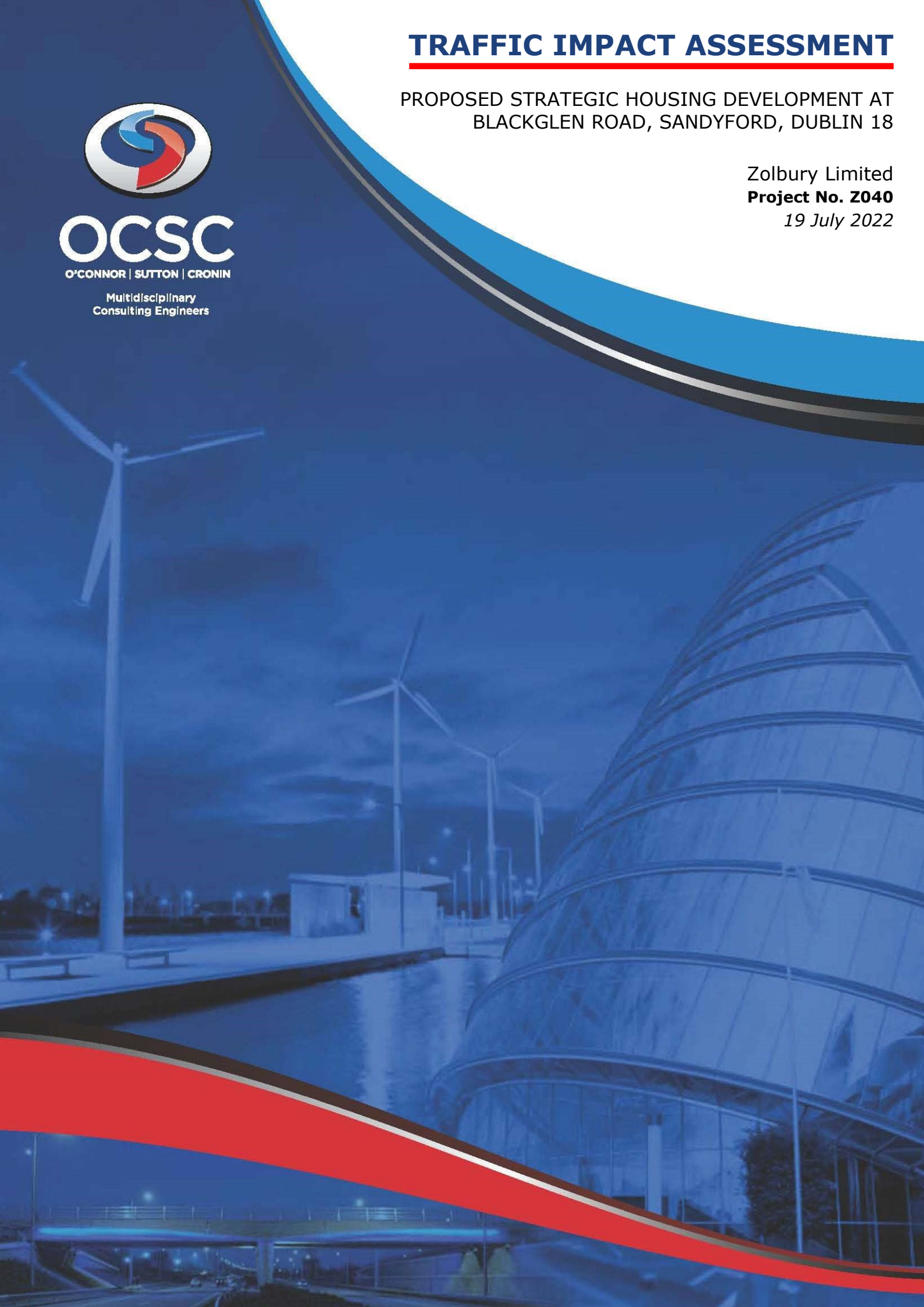
TRAFFIC IMPACT ASSESSMENT

PROPOSED STRATEGIC HOUSING DEVELOPMENT AT
BLACKGLEN ROAD, SANDYFORD, DUBLIN 18

Zolbury Limited
Project No. Z040
19 July 2022

OCSC
O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers



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ZOLBURY LIMITED

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PROJECT NO. Z040 **19 JULY 2022**

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1. INTRODUCTION

O'Connor Sutton Cronin & Associates (OCSC) have been commissioned to undertake this assessment with respect to the Proposed Strategic Housing Development at Blackglen Road, Sandyford, Dublin 18. The exact site location can be seen in Figure 1 below.

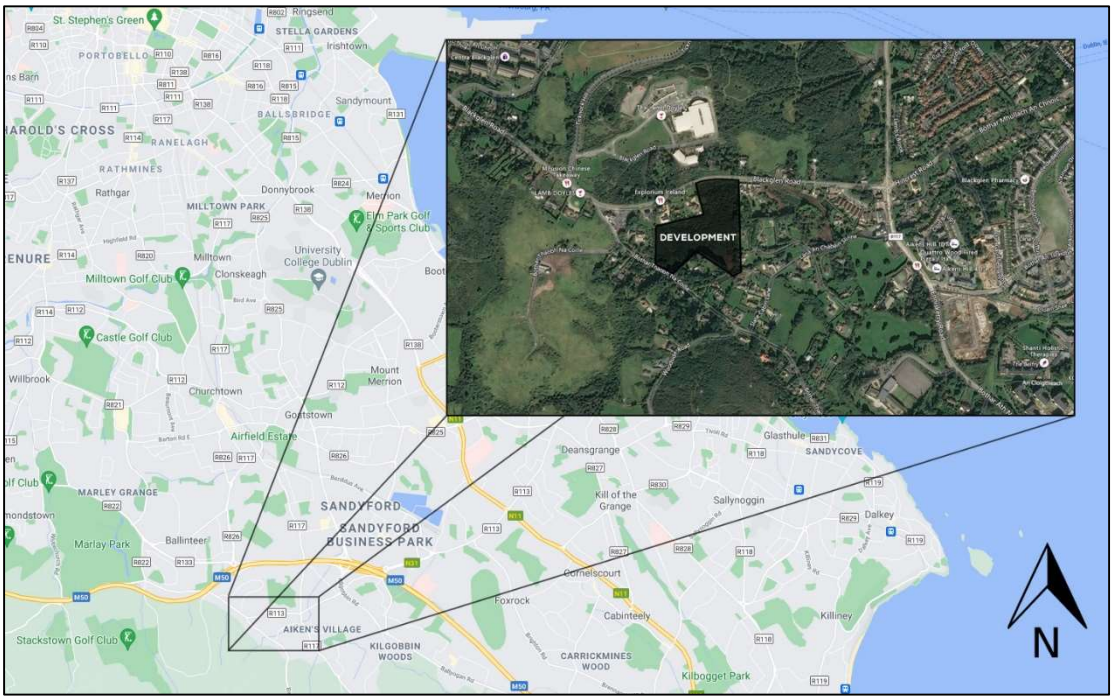

Figure 1: Site Location Map

The site is bounded by residential properties to the east & west, Blackglen Road to the north, and Woodside Road to the south.

Zolbury Limited intend to apply to An Bord Pleanála for planning permission for a Strategic Housing Development on a site of c. 3.7 ha at Blackglen Road and Woodside Road, Sandyford, Dublin 18. The development shall consist of a new residential scheme comprising 360 no. residential units, associated resident amenity facilities and a childcare facility in the form of 9 no. new apartment buildings (A1 – C3) as follows:

- Block A1 (4 storeys) comprising 18 no. apartments (3 no. 1 bed units and 15 no. 2 bed units); a crèche facility of approx. 401 sq. m with

associated outdoor play space of approx. 20 sq. m; and resident amenity facilities of approx. 30 sq. m.

- Block A2 (3-4 storeys) comprising 24 no. apartments (2 no. 1 bed units and 22 no. 2 bed units) and resident amenity facilities of approx. 390m2.
- Blocks B1 and B2 (2-6 storeys) comprising 69 no. apartments (30 no. 1 bed units, 34 no. 2 bed units, 5 no. 3 bed units).
- Blocks B3 and B4 (2-6 storeys) comprising 62 no. apartments (30 no. 1 bed units, 27 no. 2 bed units and 5 no. 3 bed units).
- Blocks C1, C2 and C3 (3-6 storeys) comprising 187 no. apartments (58 no. 1 bed units, 126 no. 2 bed units and 3 n0. 3 bed units); and resident amenity facilities of approx. 187.5 sq. m.

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

Total Open space (approx. 22,033 sq. m) is proposed in the form of public open space (approx. 17,025 sq. m), and residential communal open space (approx.5,008 sq. m).

Podium level / basement level areas are proposed adjacent to / below Blocks A2, B1, B2, B3, B4, C1, C2 and C3 (approx. 12,733 sq. m GFA). A total of 419 no. car parking spaces (319 no. at podium/basement level and 100 no. at surface level); to include 80 no. electric power points and 26 no. accessible parking spaces); and 970 no. bicycle spaces (740 no. long term and 230 no. short term), and 19 no. Motorcycle spaces are proposed. 10 no. car spaces for creche use are proposed at surface level.

Vehicular/pedestrian and cyclist access to the development will be provided via Blackglen Road to tie in with the Blackglen Road Improvement Scheme. A second access is also proposed via Woodside Road for emergency vehicles, pedestrian and cyclist access only.

The proposal also provides for Bin Storage areas and 4 No. ESBN substations to supply the development. 3 no. sub-stations shall be

integrated within the building structures of Blocks B and Blocks C. In addition, one Sub-station shall be classed as a unit sub-station mounted externally on a dedicated plinth.

The associated site and infrastructural works include provision for water services; foul and surface water drainage and connections; attenuation proposals; permeable paving; all landscaping works; green roofs; boundary treatment; internal roads and footpaths; electrical services; and all associated site development works.

The purpose of this report is to provide a detailed and conservative assessment of the development proposals and the potential traffic impact on the operation of the local road network.

In carrying out the above, this assessment has given due consideration to the relevant guidelines including:

- *Traffic & Transport Assessment Guidelines (2014)* as published by the former National Roads Authority (NRA) now Transport Infrastructure Ireland (TII);
- *Guidelines for Traffic Impact Assessment (1997)* as published by the Chartered Institute of Highways & Transportation;

Furthermore, the following documents have also been considered for this assessment:

- *Design Manual for Urban Roads and Streets*
- *Sustainable Urban Housing: Design Standards for New Apartments*
- *Greater Dublin Area Cycle Network Plan 2013*
- *BusConnects – New Dublin Area Bus Network Summary Report*
- *DLR County Development Plan 2022 - 2028*

2. STUDY METHODOLOGY

At the time of writing, the ongoing Covid 19 pandemic and associated restrictions have had a significant impact on traffic and travel patterns across the country. As a result, procurement of new survey data which would be a true reflection of typical traffic levels has not been possible. The only available survey data which was able to be procured ranges from 2017 to 2019. The use of this survey data combined with TII traffic growth factors to account for any background traffic increase in the interim is considered to give the most accurate representation possible of the typical traffic levels experienced within the study area. This is standard practice should more recent survey data not be available, and usually provides a more conservative result than updated data.

The traffic surveys were completed by IDASO Innovative Data Solutions at the following locations:

- *Junction 1*: Kellystown Road/Harolds Grange Road/ College Road Signalised Junction;
- *Junction 2*: Blackglen Road/Ticknock Road Priority Junction;
- *Junction 3*: R113 Blackglen Road/Woodside Road Priority Junction;
- *Junction 4*: Enniskerry Road/Hillcrest Road/Blackglen Road Signalised Junction;
- *Junction 5*: Leopardstown Road/Kilgobbin Road/Hillcrest Road Signalised Junction.

The exact locations of these junctions are highlighted in Figure 2 below.

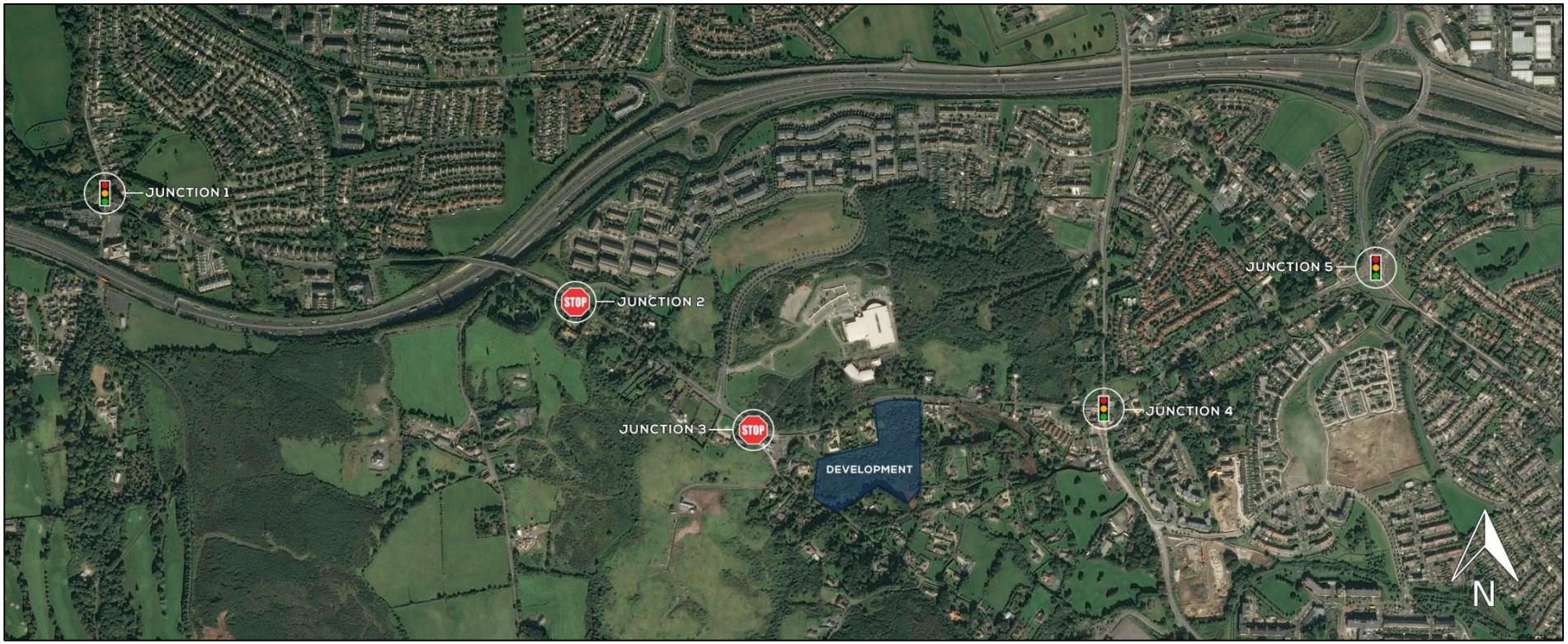

Figure 2: Study Area & Traffic Survey Locations

The surveys were carried out on the following days:

- *Junction 1*: Tuesday, 28 March 2017;
- *Junction 2*: Thursday, 7 November 2019;
- *Junction 3-4*: Tuesday, 18 June 2019;
- *Junction 5*: Tuesday, 24 July 2018.

Due to COVID-19 restrictions, it was not feasible to do any new surveys at ideal dates. The only available data which could be used is historical counts sourced from IDASO.

The surveys were done in 15-minute interval junction turning counts carried out between the hours of 07:00 – 19:00.

An eight-fold classification system was used which recorded cyclists, motorcycles, cars, taxis, light goods vehicles, two classes of other goods vehicles and buses.

The junction surveys also included:

- Queue length surveys which recorded the maximum queue lengths observed on a per lane basis at each approach of each junction over 15-minute intervals;
- Pedestrian crossing counts at each arm of each junction over 15-minute intervals.

A full copy of the results of all traffic surveys can be found in *Appendix A*, attached to this report.

The short-term traffic counts were expanded to Annual Average Daily Traffic (AADT) using expansion factors[1] from TII. The base year flows were then

[1] Project Appraisal Guidelines for National Roads Unit 16.1 - Expansion Factors for Short Period Traffic Counts, TII (October 2016)

adjusted to the predicted Year of Opening for the development (2024) and the Design Year (2039) using medium-range TII growth factors[2]. This is conservative as traffic growth estimates are directly influenced by projections for economic activity which are now unlikely to be realised due to the impact of the global pandemic while commuter patterns are also expected to be permanently impacted.

The traffic generation potential of the subject site was then assessed using the Trics[3] planning database. This database contains information on thousands of sites in Ireland and the U.K. and can be used to predict the traffic that will be generated by numerous types of development.

The estimated additional traffic was assigned to the local road network and its impact on the operation of the local links and junctions was assessed using guidance from TII, Dun Laoghaire Rathdown County Council, and the *Design Manual for Roads and Bridges* (DMRB) and Transyt 15 traffic modelling software.

The assessment considered the following scenarios:

- Do Nothing – Allowance for natural background traffic growth only;
- Do Something – Allowance for natural background traffic growth and the additional trips estimated to be generated by the proposed development.

[2] Project Appraisal Guidelines for National Roads Unit 5.3 - Travel Demand Projections, TII (May 2019)
[3] **T**rip **R**ate **I**nformation **C**omputer **S**ystem

3. THE RECEIVING ENVIRONMENT

The receiving environment is urban in nature. The existing primary artery through the study area is Blackglen Road (R113), which is also the road on which access will be provided for the development.

Blackglen Road is earmarked to be improved, with the contract being awarded to Murphy International Limited on 24 August 2021. The road map for this upgrade is shown below:

- Autumn 2021: Construction contract commenced – 18-month contract period;
- Spring 2022: Junction improvement works at Grange Road/Harold's Grange Road/College Road/Kellystown Road to be completed;
- Spring 2024: Construction works completed.

Outside of the study area, development-generated traffic will dissipate considerably and so is expected to have a negligible impact on the operation of the wider network. While there is substantial variation in the type of traffic travelling on the links locally, during the peak travel hours, they would primarily be expected to carry commuter traffic.

EXISTING PUBLIC TRANSPORT, CYCLE & PEDESTRIAN FACILITIES

The site is located in close proximity to a number of public transport services including both rail and bus as discussed following.

RAIL

The northern boundary of the site is located approximately 1.9km (27 min) walk, 9 min cycle) from Glencairn Train Station (Green Luas Line). This station provides access to Brides Glen in the east, and Broombridge in the north. This forms part of the wider Luas network throughout the Greater Dublin Area and links the site directly to Dublin City Centre and the Red Luas, as set out in the following figure.

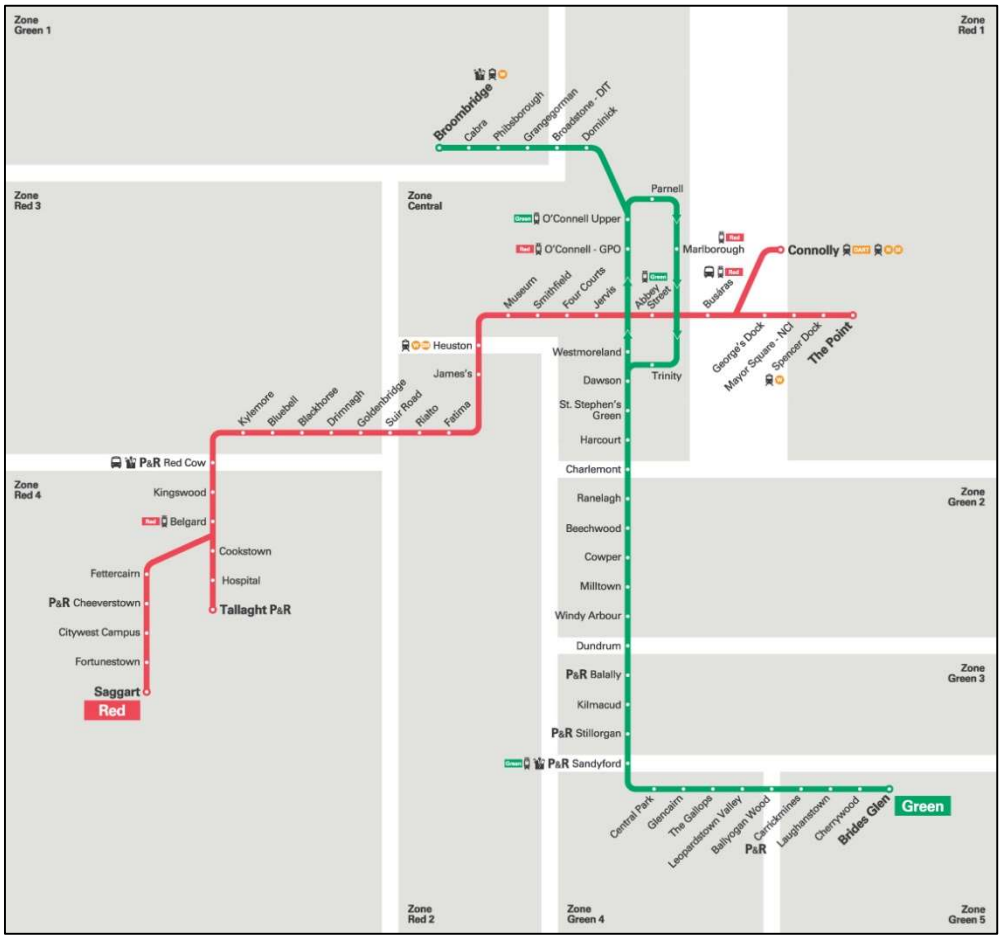

Figure 3: Luas Map[4]

The frequency of the Luas Green Line at the Glencairn Station is shown in the tables below:

Day	Min	Avg	Max
05:44 – 07:00	10	16	20
07:00 – 10:00	6	9	14
10:00 – 16:00	12	13	14
16:00 – 19:00	6	10	16
19:00 – 00:14	12	13	15

Table 1: Glencairn Luas Frequency - Monday – Friday

[4] Source: www.luas.ie/map

ENGINEERS IRELAND
cpd ACCREDITED EMPLOYER
OCSC O'CONNOR | SUTTON | CRONIN Multidisciplinary Consulting Engineers

Day	Min	Avg	Max
06:44 – 7:0010	15	16	20
10:00 – 16:00	14	14	15
16:00 – 19:00	14	14	14
19:00 – 00:14	7	14	15

Table 2: Glencairn Luas Frequency - Saturday

Day	Min	Avg	Max
07:14 – 12:00	12	14	20
12:00 – 19:00	12	12	12
19:00 – 23:14	12	13	15

Table 3: Glencairn Luas Frequency – Sunday & Bank Holidays

BUS

The northern boundary of the site is located approximately 120m (2-minute walk, 1 min cycle) from the nearest bus stop, Blackglen Court Stop 3533 east and stop 3494 west, which is served by Dublin Bus Service No. 44B and Go ahead service 114.

These services operate during peak hours, every 30 mins, and provide connections to the following nearby urban centres. Dublin Bus 44b provides a connection between the Dundrum Luas Station, Dundrum, Sandyford and Glencullen. Go Ahead service 114 provides access to Blackrock Station, Stillorgan Road, Ravenscourt Park and Rockview.

Neither bus route currently provides connections to the city centre. It is noted that BusConnects' plan for the area includes the introduction of bus services 86, 87, 88 and L33. Although these services will provide connections to the city centre, they are not expected to be "high frequency". These routes are discussed in more detail in the BusConnects section of this report.

CYCLING AND WALKING

The local cycle facilities within DLR currently consist of Radial and Orbital Cycle Routes, which span most of the county. The radial routes mainly service north-south movements, while the orbital routes service east-west movements. The closest connection with the DLR cycle route is on the R117, which is approximately 450m (1 min cycle) from the northern boundary of the site. A map of the cycle routes within the county is shown in Figure 4.

Currently, there is no pedestrian infrastructure present along Blackglen Road. It should be noted that the Blackglen Road Improvement Scheme will improve walking and cycling infrastructure in the immediate vicinity. This is discussed in more detail in Section 4. This will significantly improve accessibility for this development.

Two isochrone maps were prepared to indicate the proximity of the development to public transport points in terms of walking and cycling. The proximities are colour coded with green indicating areas within 10 minutes, the orange area within 20 minutes and red areas within 30 minutes of the development. These two isochrone maps are shown in Figure 5 and Figure 6.

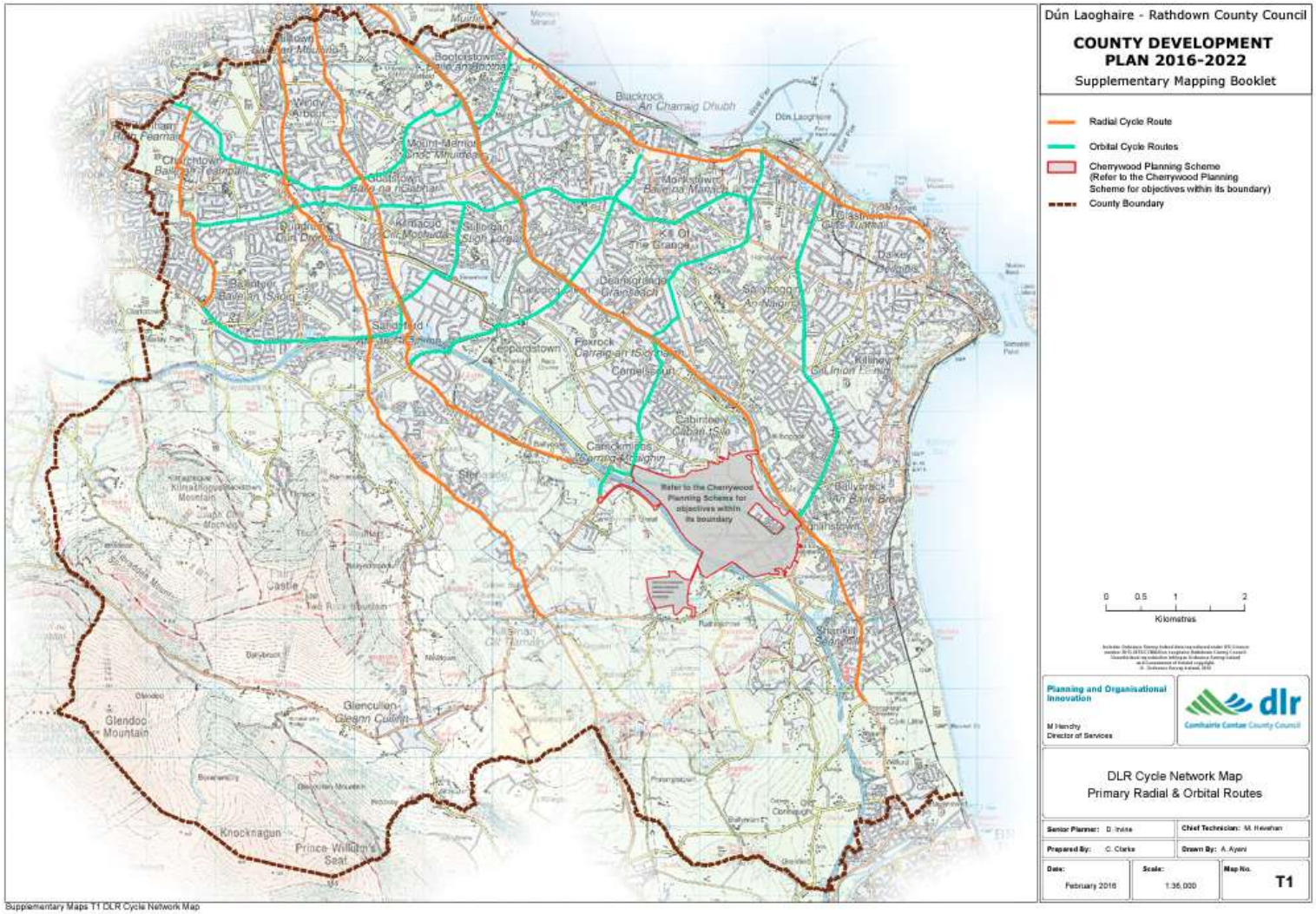

Figure 4: DLR Cycle Network Map - Primary Radial & Orbital Routes (source: dlrcoco.ie)

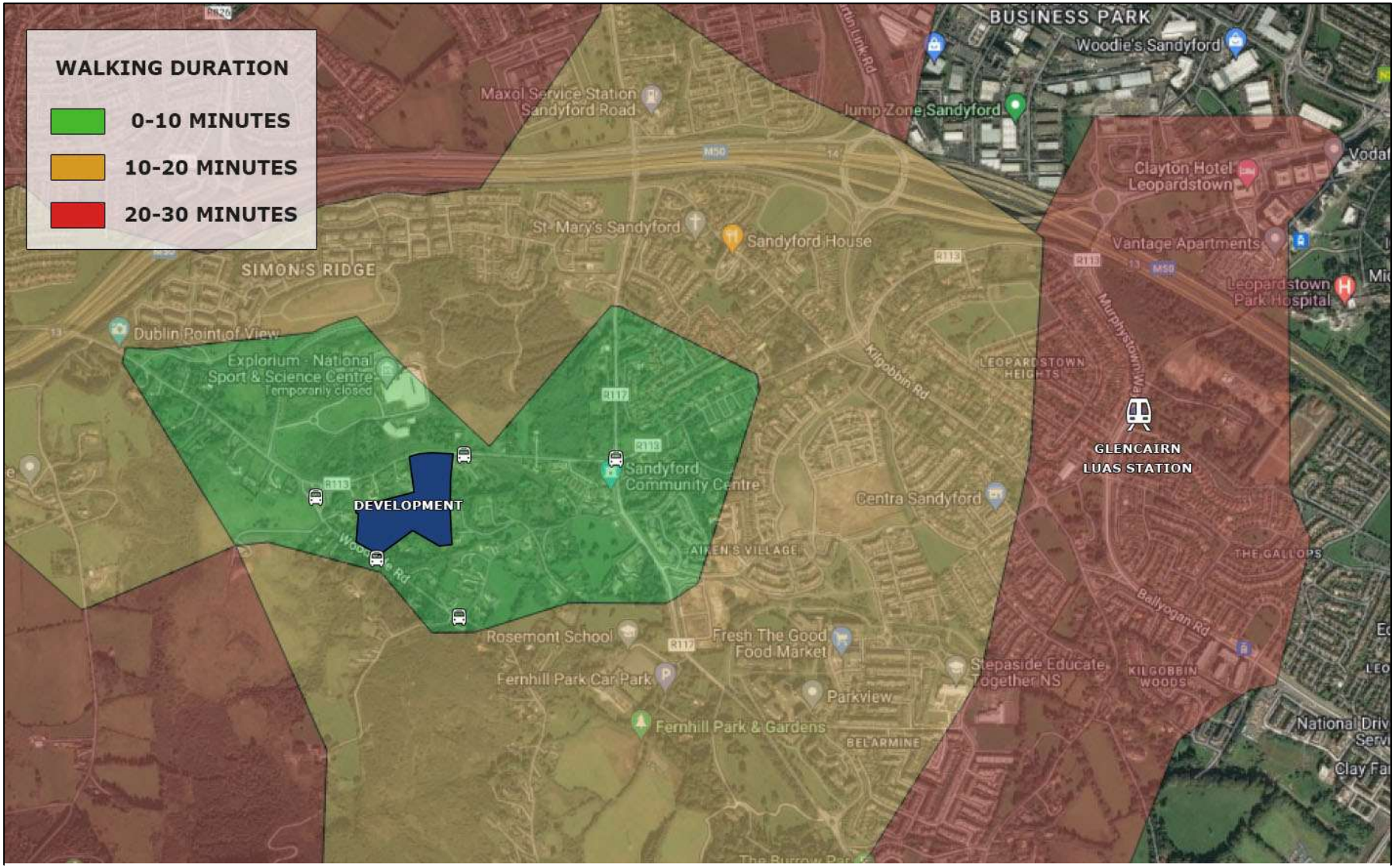

Figure 5: Walking Isochrone Map

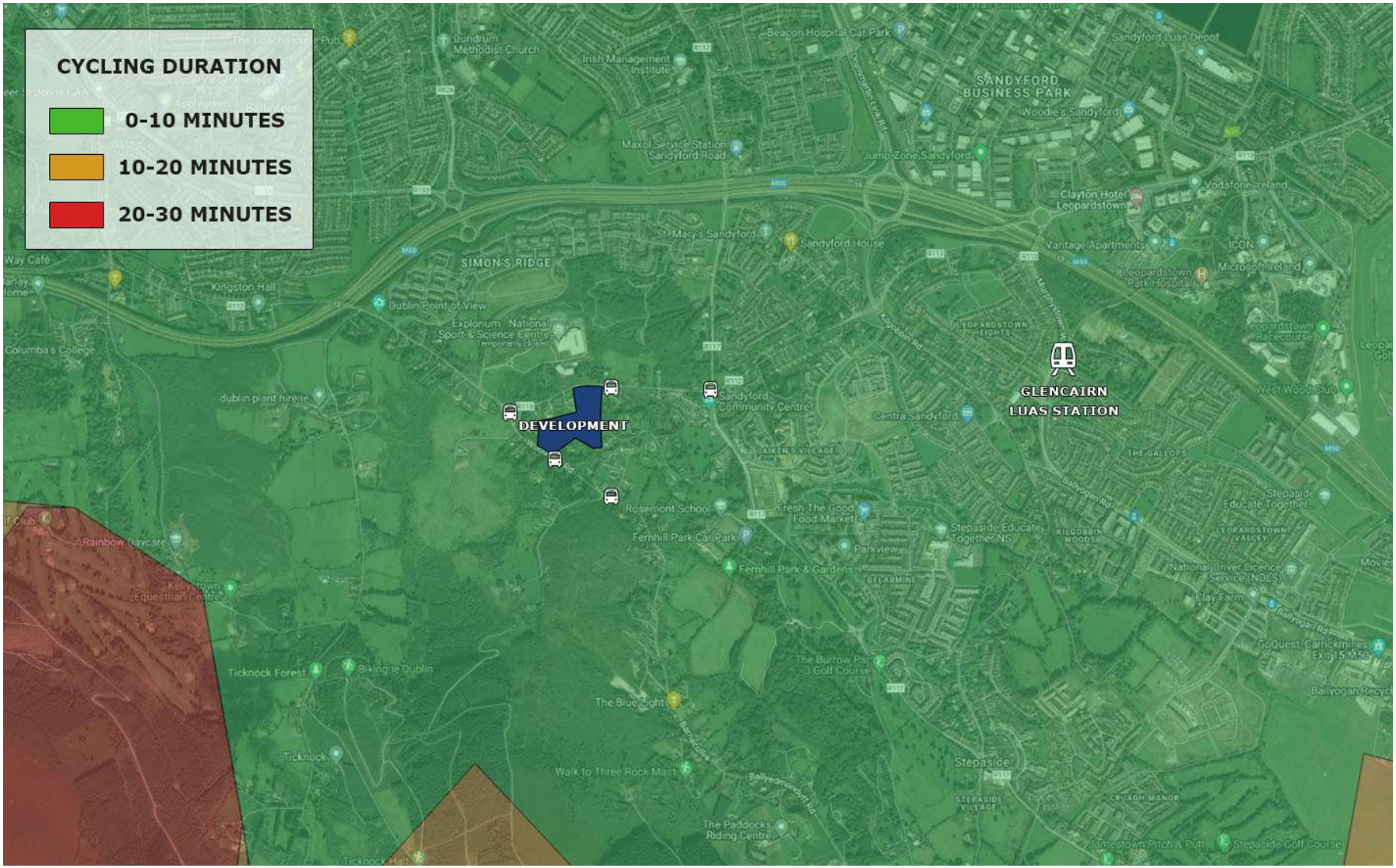

Figure 6: Cycling Isochrone Map

CAPACITY OF EXISTING PUBLIC TRANSPORT

The Glencairn Luas Stop was visited to determine the available capacity for this service. This was done on a Thursday 7 April 2022, during the morning peak period (8:00 – 9:00). Three trips were done from this stop, northbound towards the City.

The observations from this exercise indicated that there was ample spare seating, as well as standing space available for commuters. Photos were taken during this visit to illustrate the available capacity.

Figure 7: Glencairn Stop Capacity AM Peak

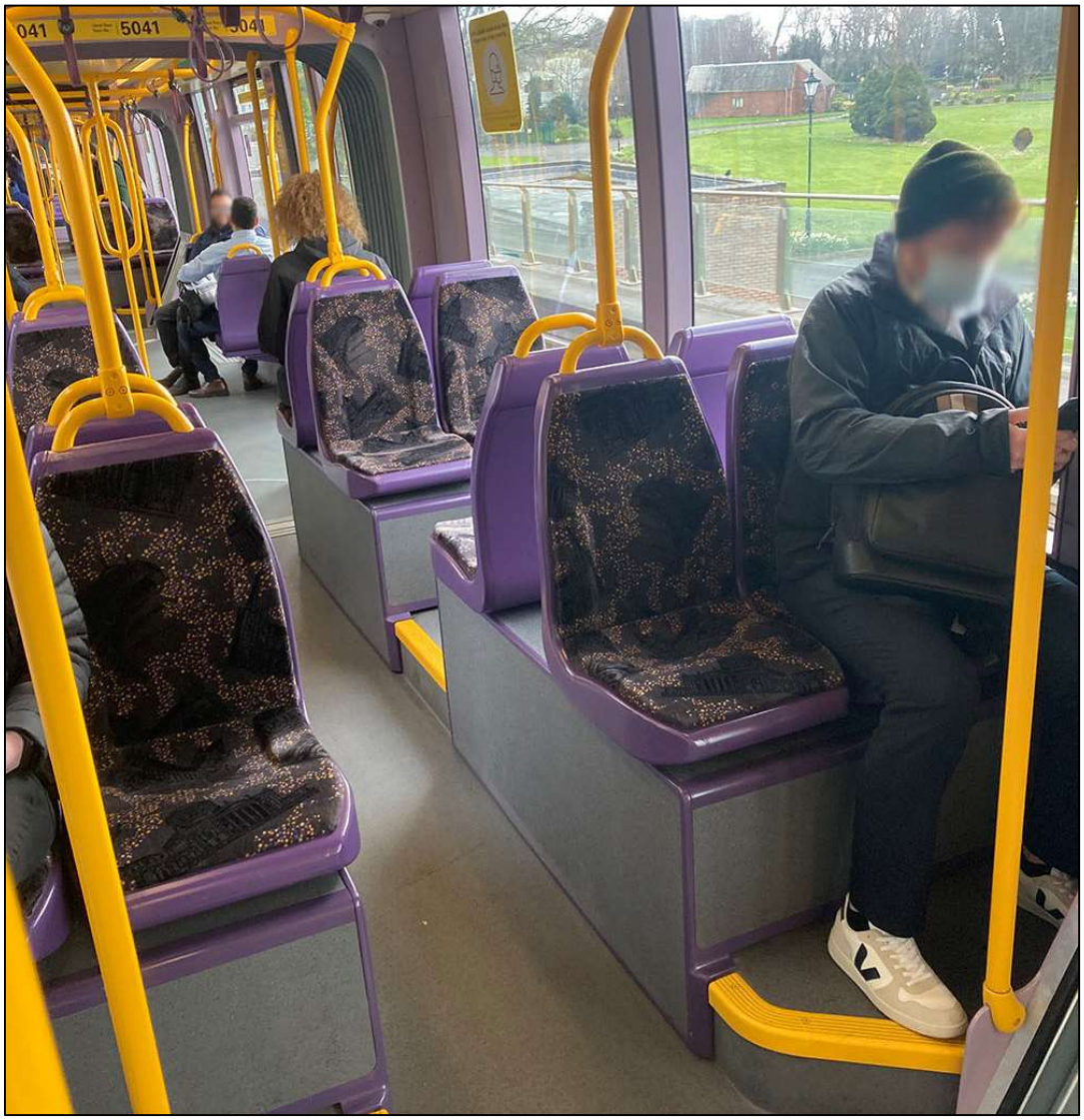

Figure 8: Glencairn Stop Capacity AM Peak

Figure 9: Glencairn Stop Capacity AM Peak

Furthermore, TII was contacted to source information on the demand at this stop. Surveys were conducted on a Thursday, Saturday, and Sunday in November 2019, which means that the data is pre-Covid.

The daily frequency of services at this stop is on average, in the northbound direction, 61 on a weekday, 58 on Saturday and 39 on Sunday. While the southbound direction provides 57 during a weekday, 58 on Saturday and 39 on Sunday. This means that in total, 118 services are provided on a weekday, 116 on Saturdays and 78 on Sundays. This data was sourced from the Luas website (luas.ie).

According to the Luas Green Line – Peak hour capacity requirements south of Charlemont document by MetroLink and TII, this section of the Luas Line uses a combination of Citadis 402 trams and Citadis 502 trams. These trams have capacities of 319 passengers and 408 passengers respectively. Assuming that the same is true for the Glencairn stop, an average capacity of 364 passengers is assumed per service.

This means that the following capacity assumptions can be made for this stop:

Day	No. Services & Capacity	
Weekday	118	42 952
Saturday	116	42 224
Sunday	78	28 392

Table 4: Glencairn Luas Stop Capacity

The total boarding and alighting figures obtained from TII result in the following demand percentages at the stop:

- Weekday: 6.48%
- Saturday: 4.95%
- Sunday: 5.71%

From the above, it is evident that the demand at the station is low compared to the capacity. This fact, combined with observations from the site visit indicates that there is ample spare capacity available to accommodate residents from this development on public transport services.

FUTURE PUBLIC TRANSPORT, CYCLE & PEDESTRIAN FACILITIES

There are a number of proposals which will further enhance the sustainable transport infrastructure serving the site, be it directly or indirectly. These are discussed in further detail below.

BLACKGLEN ROAD UPGRADE

DLR County Council is currently busy with road upgrades along Blackglen Road. The improvement entails the upgrade of 2.02 km of road, and includes the following transport infrastructure-related items:

- Construction of pavement, footpaths and cycle lanes which are currently not present along Blackglen Road;
- Upgrading of existing signalized junctions at Lambs Cross and Grange Road/Harold's Grange Road/Kellystown Road/College Road and new toucan crossing on Blackglen Road;
- Upgrading of bus stops on Blackglen Road, Sandyford Road and Enniskerry Road;

The extent of road improvements planned along this road is shown in the figure overleaf.

Specific to this site, walkways and cycle lanes will be added to both sides of the road adjacent to the site frontage. These upgrades will tie into the larger network and provide access to a variety of public transport services, including bus routes and the Luas Green Line.

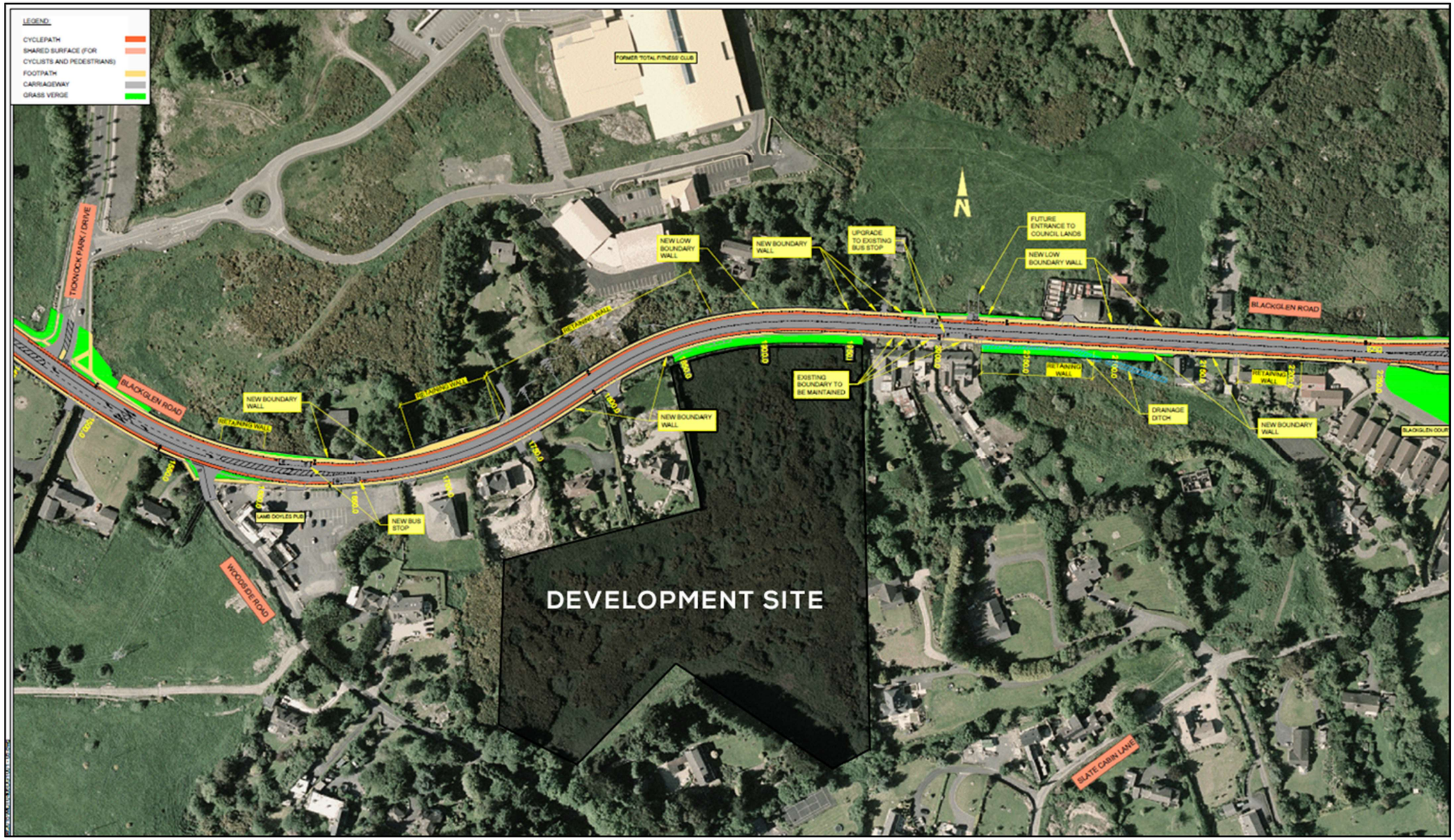

Figure 10: Blackglen Road Upgrade Scheme

BUSCONNECTS

With the planned implementation of the BusConnects network, additional routes will be added in the vicinity of the development. These are:

Other City Bound Routes:

- Route 86: Ticknock – Goatstown – Mountjoy Square
- Route 87: Belarmine – Dundrum – Mountjoy Square
- Route 88: Enniskerry – Belarmine – Dundrum – Mountjoy Square

Local Routes

- Route L33: Glencullen - Dundrum

Orbital Routes

- Route S8: Tallaght – Sandyford – Dún Laoghaire

The extent of these routes relative to the site location is shown in the figure below:

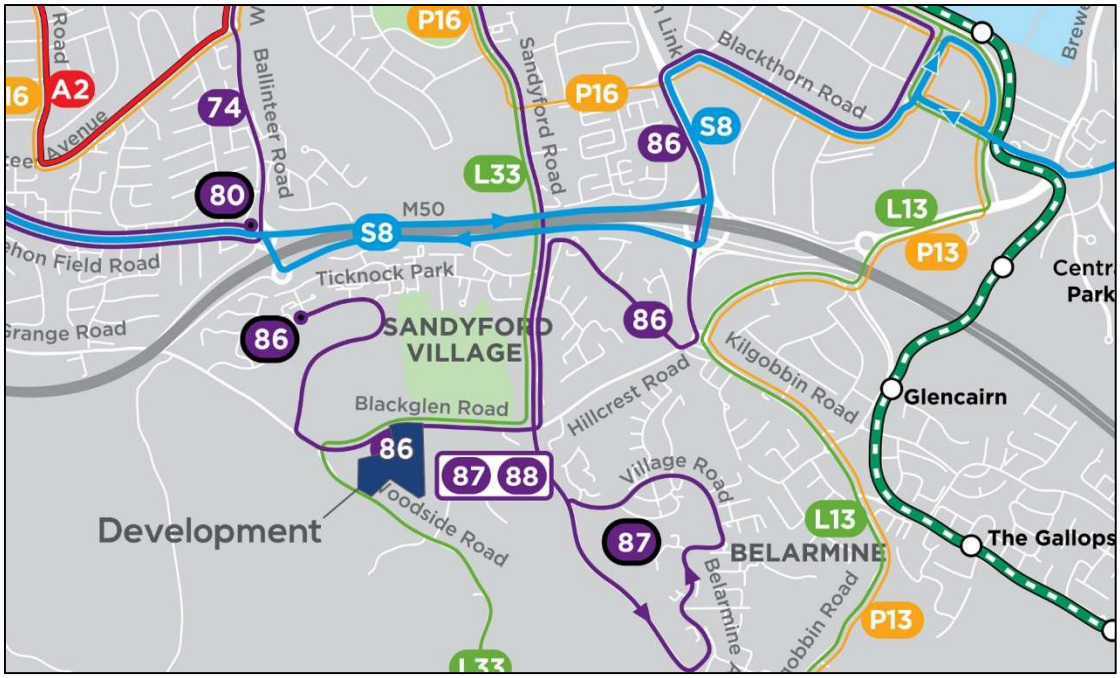

Figure 11: Location of Planned BusConnects Routes relative to Development

The planned frequency of these routes is shown in the table below:

Route	Peak	
	Weekday (mins)	Weekend (mins)
86	30	30
87	60	60
88	60	60
L33	60	-
S8	15	30

Table 5: Peak Time Frequency of Routes

From the above table, it can be surmised that in the vicinity of the development, a total of 5 local BusConnects services will be added to the area and replace the existing routes (44B & 114) during peak hours. This addition will significantly increase access to main areas from the development. It should be noted that these three City Bound Routes will also connect with the Luas Station at Glencairn.

Additional to this, the Orbital Route will add another 4 services within peak hours. This service will offer enhanced access to and from the area of the development and the coast, although it should be noted that the closest bus stop for this route is likely to be outside of a comfortable walking distance. This could potentially change should pedestrian access to this route be added through the Ticknock Park area. This would create a 1.5km (17-minute) walk from the development to this stop. However, at this stage, it is unclear if such an addition is planned.

RAIL

The only projected rail-related upgrade discussed in the County Development Plan is the progression of the development of the Blue Line Bus Rapid Transit Service, which will link the DART line at Sydney Parade Avenue to Sandyford/Dundrum Town Centre. This will provide integration between DART, bus and Luas services.

CYCLING/ WALKING

According to the County Development Plan, the Council has the following cycling and walking-related upgrades planned for implementation:

Six-year objectives Cycling and Walking:

- Leopardstown Link Road from South County Business Park;
- E.S.B. Roundabout on Leopardstown Road to Arena Road and Blackthorn Road;
- Leopardstown Roundabout Re-configuration to a signalized junction;
- Sandyford Pedestrian and Cycle Bridge, linking Kilgobbin Road to the Drummartin Link Road on the west side of the M50 junction 13.

Long-term objectives Cycling and Walking:

- Central Park to South County Business Link Road;
- Blackthorn Drive/Drummartin Link Road Grade Separation;
- Murphystown Road, over the M50 Motorway, to Central Park and South County Business Park;
- Cycle/pedestrian link, via the exiting, M50 access bridge, from Ballyogan Road into Horse Racing Ireland property and connecting Central Park and South Country Business Park.

The planned upgrades are shown in Figure 12.

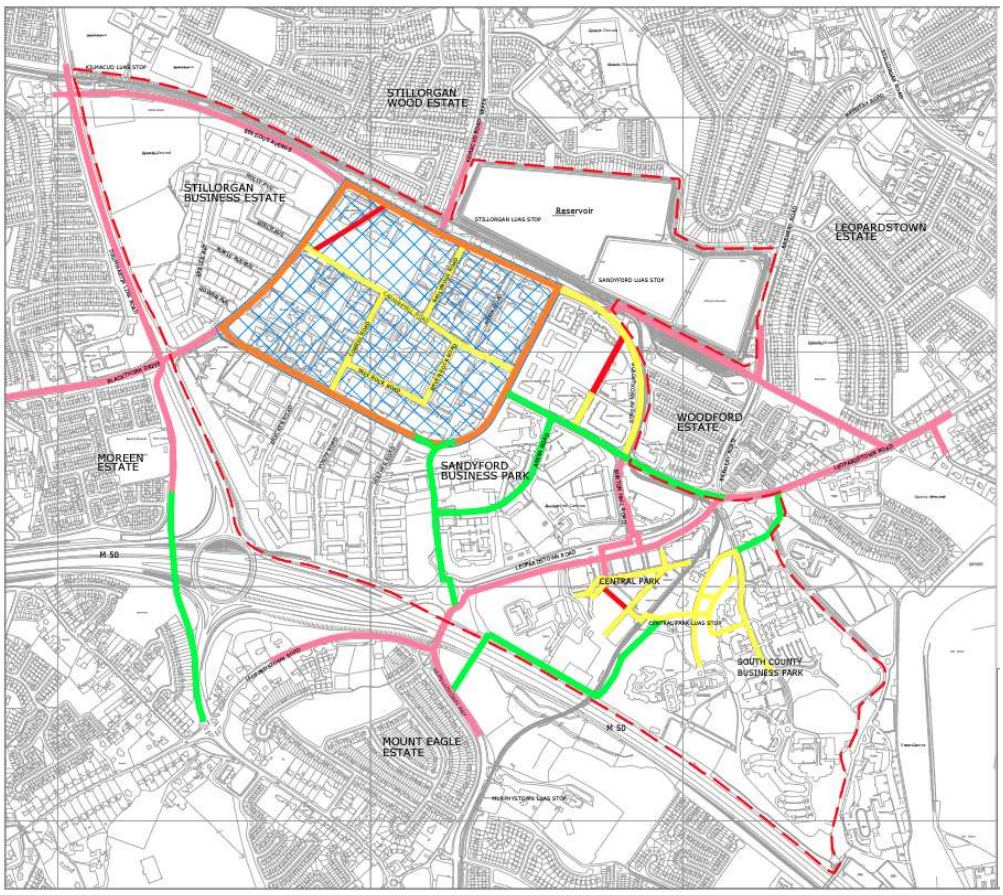

Figure 12: Walking & Cycling Routes (source: dlrcoco.ie)

The Council also plans to improve permeability and connectivity within the Sandyford Business District by creating a low-speed environment for cyclists and pedestrians, and by implementing circulation routes and traffic management measures. This should promote the use of non-motorised transport.

LINK CAPACITY

As noted earlier, base traffic levels have been surveyed on the local network between 2017 and 2019. By combining these base flows with the traffic generation estimates for the proposed development, the following peaks were identified:

- A.M. Peak Hour: 08:00 – 09:00;
- P.M. Peak Hour: 17:00 – 18:00.

The recorded flows during the above peak hours and across the course of an average day are shown in the following:

- *Diagram 1: 2019 A.M. Peak Hour Base Flows (08:00 – 09:00);*
- *Diagram 2: 2019 P.M. Peak Hour Base Flows (17:00 – 18:00);*
- *Diagram 3: 2019 Annual Average Daily Traffic Base Flows.*

These diagrams and all others referenced in this text can be found in *Appendix B*, attached to this report. Any apparent discrepancy in flows between sites may be attributed to vehicles accessing developments and minor roads between surveyed junctions.

TA 79/99 "Traffic Capacity of Urban Roads" from the DMRB provides information on the capacity of urban roads based on classification and width. Table 6 following shows the capacities of various road types based on this manual and uses a 60:40 split in flow.

Table 6: Urban Road Capacities

2 Way Single Carriageway – Busiest Direction of Flow (60/40 split)										
		Total Number of lanes								
Carriageway Width (m)		*2*			*2–3*	*3*	*3–4*	*4*	*4+*	
		6.10	*6.75*	*7.30*	*9.0*	*10.0*		*12.3*	*13.5*	*18.0*
Road Type	UM	*Not Applicable*								
	UAP1	1020	1320	1590	1860	2010	2550	2800	3050	3300
	UAP2	1020	1260	1470	1550	1650	1700	1900	2100	2700
	UAP3	900	1110	1300	1530	1620	*	*	*	*
	UAP4	750	900	1140	1320	1410	*	*	*	*

The local links have been classified based on the associated definitions in the DMRB. Using the previous table, link capacities have been calculated and current Ratio of Flow to Capacity (RFC) values have been assessed for the key links bordering the site. These are shown for the base year peak hours in
Table 7.

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It should be noted that given the variation in width across the links in question, an average figure for each has been used which is rounded down to the nearest value shown in the above table, thus ensuring a conservative assessment of link capacity.

Table 7: Base Year Link RFC Values for Local Network

Link	Width (m)	Link Capacity (veh/hr)	A.M. Peak (veh/hr)	RFC (%)	P.M. Peak (veh/hr)	RFC (%)
Grange Road	6.0	1020	524	52%	126	13%
Kellystown Road	5.0	900	112	13%	28	4%
R113	7.0	1260	499	40%	427	34%
Woodside Road	5.0	900	51	6%	56	7%
R117	7.0	1260	495	40%	615	49%
Kilgobbin Road	8.0	1590	567	36%	477	30%

As can be seen, all links are operating within capacity in the base case with RFC values ranging between 10 – 74% with the R133 experiencing the highest value during the morning peak, and the R117 experiencing the highest value during the afternoon peak. Overall, the R117 carries the highest volume across both peak hours.

TRAFFIC GROWTH

To accurately assess the impact of the proposed development in the future, the base traffic flows for the local network in 2019 (2017 and 2018 volumes were changed to 2019 using annual growth) have been expanded to the Year of Opening and the Design Year using the medium-range NRA growth factors detailed in Table 8 following.

Table 8: Background Traffic Growth Factors

Year	Growth Rates	
	Light Vehicles	*Heavy vehicles*
2019 - 2024	6.64%	12.33%
2019 - 2039	24.29%	53.40%

The future year traffic flows without development can be seen in the following:

- *Diagram 4: 2024 A.M. Peak Hour Flows – Do Nothing;*
- *Diagram 5: 2024 P.M. Peak Hour Flows – Do Nothing;*
- *Diagram 6: 2024 AADT – Do Nothing;*

- *Diagram 7: 2039 A.M. Peak Hour Flows – Do Nothing;*
- *Diagram 8: 2039 P.M. Peak Hour Flows – Do Nothing;*
- *Diagram 9: 2039 AADT – Do Nothing.*

The application of the above growth factors should be further considered in the context of the Covid 19 pandemic which is expected to have a lasting impact on the traffic growth potential and travel patterns over the coming years. Specifically, growth factors are generally developed having regard to projections for economic growth. The global pandemic has had a significant impact in this regard which means such projections are now unlikely to be realised meaning traffic growth is expected to be similarly over-estimated.

Furthermore, restrictions imposed because of the pandemic response have resulted in a significant portion of the population being forced to work from home. This has highlighted the viability of this approach in industries where it was previously thought to be incompatible. The knock-on effect is expected to be a percentage of workers continuing to be based at home on a part- or full-time basis even after the pandemic restrictions are lifted. This in turn will have a knock-on effect on commuter and peak traffic levels. The National Transport Authority (NTA) has acknowledged this likelihood in a recently circulated note titled "Alternative Future Scenario for Travel Demand" dated November 2020 where it defines the Covid 19 pandemic as a "shock wave" that "can lead to an acceleration in the natural rate of change in society". The note concludes that the total number of daily trips could be up to 8% lower than previous projections.

Thus, taking the above into consideration, the applied growth factors are considered to be very conservative.

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4. CHARACTERISTICS OF THE DEVELOPMENT

DEVELOPMENT & SITE OVERVIEW

The proposed development will consist of 360 no. residential units and associated infrastructure as noted in the introduction.

The proposed layout is shown in Figure 13 below.

Figure 13: Site Layout

Access to the Main Development Site will be via a junction on Blackglen Road, between Junctions 3 and 4.

The proposed access is a simple, single-lane, priority junction based on the results of the traffic analysis discussed in more detail later in this report.

The main vehicular access to the development car park will be via Blackglen Road. The car park on the eastern side of the development site will access directly onto Blackglen Road. This will be a very low-volume movement, with the majority of vehicles accessing the development via the main entrance. Additional access will be available via Woodside Road, although this access is only for emergency purposes and will not allow vehicular access under normal conditions.

DEVELOPMENT ACCESS

The development will be accessed via Blackglen Road. One main access to the development will be provided, with a second access just east of this. The second access will be minor and will provide access to a portion of car parking only, for the site.

The reason why this second access is required is due to the topography of the site. Drawing a line through the site from north to south, on the eastern side yields the following topography:

Figure 14: Topography of Site from North to South

From this topography, it is evident that there is a gradual slope (avg 4.0%) from Blackglen Road (left side) for approximately 50m, after which the slope increases significantly. From 50m to 100m the slope increases to an average of 10.7%.

Should this area be accessed from the site, the resultant ramp which would be required to get down from the top to the bottom would render this portion of the site unusable, as most of the space would be required for the access ramp. This means that parking spaces would need to be further reduced. Access via Blackglen Road will result in a much more gradual slope, which means the majority of the space in question can be utilised for car parking, rather than access.

REFUSE COLLECTION AND DELIVERIES

Autotrack was conducted for fire tender and refuse for the scheme, which means that large vehicles can traverse it. There will be a collection and drop-off area at the entrance to the site. It is envisaged that refuse will be collected throughout the development and moved to the entrance, where refuse vehicles can collect it.

TRIP GENERATION

The traffic generation potential of the proposed development has been estimated using the Trics software modelling database. This database contains records of surveys carried out at a range of development types across the UK and Ireland. It records a variety of details including the number and type of vehicles entering and exiting the site as well as several other site-specific factors.

When developing traffic generation estimates for any development, several surveys are selected from the database based on a range of factors including development type, size, location, public transport etc. The results are then used to establish trip rates for the development in question which is ultimately used to derive estimates for traffic generation.

The ancillary elements such as the amenities and childcare facility are expected to serve residents at the development and as a result, they are not expected to be independent trip generators and have not been included in this assessment from a trip generation perspective.

It is noted that the potential additional trips generated by the proposed SHD development are estimated by the housing trips to allow the maximum estimated trips included as part of this assessment to ensure a comprehensive and conservative assessment.

The trip generation estimates for the proposed development are shown in Table 9 while the Trics output files relative to this assessment can be found in *Appendix C* of this report.

Time Range	**Apartments**		
	Arrivals	*Departures*	*Total*
00:00-01:00	0	0	0
01:00-02:00	0	0	0
02:00-03:00	0	0	0
03:00-04:00	0	0	0
04:00-05:00	0	0	0
05:00-06:00	0	0	0
06:00-07:00	0	0	0
07:00-08:00	22	52	74
08:00-09:00	22	68	89
09:00-10:00	33	46	78
10:00-11:00	27	28	55
11:00-12:00	27	29	56
12:00-13:00	36	31	66
13:00-14:00	35	39	74
14:00-15:00	33	31	64
15:00-16:00	45	33	78
16:00-17:00	45	41	86
17:00-18:00	68	35	103
18:00-19:00	46	38	84
19:00-20:00	0	0	0
20:00-21:00	0	0	0
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-24:00	0	0	0
Daily Trips:	437	470	907

Table 9: Estimated Future Trips Generated by the Development

Based on this, the proposed SHD development is expected to generate approximately 907 additional trips per day. Of these, approximately 22 arrivals and 68 departures are expected during the A.M. peak (08:00 – 09:00) while approximately 68 arrivals and 35 departures are expected in the P.M peak hour (17:00 – 18:00).

The above traffic has been assigned to the local road network based on an overall consideration of its existing layout combined with surveyed traffic patterns in the study area. The assigned development traffic can be seen in the following:

- *Diagram 10: A.M. Peak Hour Trip Generation & Assignment;*
- *Diagram 11: P.M. Peak Hour Trip Generation & Assignment;*
- *Diagram 12: AADT Trip Generation & Assignment.*

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5. CAR PARKING STRATEGY

In developing the car parking provision, consideration has been given to a wide variety of factors including the applicable standards, realistic demand and measures that can be put in place to manage and control parking at the site. Each of these factors is discussed in further detail following.

PARKING STANDARDS

Apartment Guidelines

According to the "Sustainable Urban Housing: Design Standards for New Apartments" (December 2020), the bicycle parking requirement states a minimum of 1 cycle storage per bedroom should be provided. Visitor cycle parking shall be provided at 1 space per 2 residential units.

The "Sustainable Urban Housing: Design Standards for New Apartments" (December 2020) defines three types of urban areas:

- **Central/Accessible Urban** - In larger scale and higher density developments, comprising wholly of apartments in more central locations that are well served by public transport, the default policy is for car parking provision to be minimised, substantially reduced or wholly eliminated in certain circumstances (15 minutes' walk of city centre/employment location, 10 minutes of rail, 5 minutes of high-frequency bus services (10 min peak hour frequency);
- **Intermediate Urban Locations** - suburban/urban locations served by public transport or close to town centres or employment areas and particularly for housing schemes with more than 45 dwellings per hectare net (18 per acre), planning authorities must consider a reduced overall car parking standard and apply an appropriate maximum car parking standard;
- **Peripheral/Less Accessible Urban Locations** - one car parking space per unit, together with an element of visitor parking, such as one space for every 3-4 apartments, should generally be required

The site boundary is not within walking distance of a large urban centre. The local bus services 44B & 114 operate during peak hours and every 30 mins respectively and provide connections to nearby urban centres. Neither bus route currently provides connections to the city centre. It is noted that the BusConnects plan for the area includes the introduction of bus services 86, 87, 88 and L33. Although these services will provide connections to the city centre, they are not expected to be "high frequency". The proposed site is located within a 1.9km walk (27 min) from the Luas stop at Glencairn.

Intermediate urban locations are generally defined by the following:

- Sites within or close to i.e., within reasonable walking distance (i.e., up to 10 minutes or 800-1000m), of principal town or suburban centres or employment locations, that may include hospitals and third-level institutions;
- Sites within walking distance (i.e., between 10-15 minutes or 1000-1500m) of high-capacity urban public transport stops or within reasonable walking distance (i.e., between 5-10 minutes or up to 1000m) of high-frequency urban bus services or where such services can be provided;
- Sites within easy walking distance (i.e., up to 5 minutes or 400-500m) of reasonably frequent urban bus services.

The Blackglen site is within 1900m of the Luas line. This is slightly further than the recommended 1500m. However, since the site is located within the catchment area of the Section 49 Luas Development Contribution Scheme, the proximate Glencairn and Sandyford Luas stops, and the existing bus stops, it is deemed appropriate to classify the site as an *Intermediate Urban Location*. This can be further motivated due to the proximity of the site to the Beacon Hospital and Sandyford Business Park, both of which provide significant employment opportunities, with the latter containing more than 500 no. companies.

The standards state that for development in an intermediate location, particularly for housing schemed with more than 45 dwellings per hectare net, planning authorities must consider a reduced overall car parking standard and apply an appropriate maximum car parking standard. The guidelines do not provide a specific standard for this location, rather just to consider a reduced provision.

Furthermore, as mentioned previously, for bicycle parking there is a requirement of 1 long-term space (resident) per bedroom and 1 short-term (visitor) space per 2 residential units. This equates to a total requirement of **597 long-term spaces** and **180 short-term spaces.**

DLR Development Plan 2022 - 2028

The Dun Laoghaire Rathdown Development 2022 – 2028, Chapter 12, states that the required parking is based on the location of the development. Four parking zones are defined:

- Parking Zone 1: Comprises the Major Town Centre areas of Dún Laoghaire and Dundrum together with the Blackrock District Centre area;
- Parking Zone 2: This zone generally includes areas, which are within specified walking bands/catchments;
- Parking Zone 3: This zone generally comprises the remainder of the County, excluding rural areas;
- Parking Zone 4: This zone comprises the rural areas within the County.

As part of the development plan, a supplementary map is provided (Map T2) which shows the Parking Zones. From this map, it is shown that the development will be located within Zone 3.

The criteria for Apartments for Zone 3 state:

- 1 space per 1-bed unit,

- 1 space per 2-bed unit,
- 2 spaces per 3+ bed unit, and
- 1 space per 10 apartments.

The development consists of the following split between apartments:

- 123 no. 1-bed apartments,
- 224 no. 2-bed apartments, and
- 13 no. 3-bed apartments.

Based on the above, there is a requirement for 409 car parking spaces for the residential component of the development. It is noted that these parking standards represent a maximum.

In addition, there is a requirement of 1 parking space per 40 m^2 for the creche. This would equate to a further requirement of 10 no. car parking spaces for this aspect.

Thus, to be in line with the latest Development Plan Standards, a total of **419 no. car parking spaces** would be required.

The Development Plan also gives guidance on the number of motorcycle parking spaces required. The document stipulates a minimum of four or more spaces per 100 car parking spaces. Since there is a requirement of 419 no. car parking spaces, this equates to a minimum requirement of **17 no. motorcycle parking spaces**.

Standards for Cycle Parking and associated Cycling Facilities for New Developments

The Standards for Cycle Parking and associated Cycling Facilities for New Developments published by DLR in January 2018 provide guidance on the requirement for cycle parking.

The standards state that for apartments, there is a requirement of 1 long stay (resident) parking space per 1 unit. There is also a requirement of 1 short stay (visitor) parking space per 5 units.

This equates to a requirement of **360 no. long-stay (resident) spaces** and **72 no. short stay (visitor) spaces**.

CAR PARKING PROVISION

The following car parking is provided by the development:

Table 10: Car Parking provided by the Development

Block/Parking Type	Car Parking		
	No. Units	Normal Spaces	DAC Spaces (incl)
Block A1+A2 - Podium	42	29	3
Block B1+B2 - Podium	69	33	2
Block B3+B4 – Podium/Basement	62	72	2
Block C1,2,3 – Podium/Basement	187	185	8
Surface Parking	-	100	10
Total	**360**	**419**	**26 (5%)**

The provided car parking meets the requirement of the latest DLR County Development Plan 2022 – 2028.

Furthermore, as per the requirement of the Development Plan, residential developments require a minimum of one car parking space per five car parking spaces to be equipped with one fully functional EV Charing Point. The development will provide a total of 80 no. spaces with EV functionality to meet this requirement.

The development will also provide for 19 no. motorcycle parking spaces to be in line with the requirements as per the Development Plan.

CYCLE PARKING PROVISION

The following cycle parking is provided by the development:

Table 11: Bicycle Parking provided by the Development

Block/Parking Type	Bicycle Parking		
	No. Units	Long Term (Resident)	Short Term (Visitor)
Block A1+A2 - Podium	42	80	-
Block B1+B2 - Podium	69	80	-
Block B3+B4 – Podium/Basement	62	164	-
Block C1,2,3 – Podium/Basement	187	416	-
Surface Parking	-	-	230
Total	**360**	**740**	**230**

The provided cycle parking exceeds the requirements of both the Apartment Guidelines and the latest DLR County Development Plan 2022 – 2028.

Safe and secure long-term parking will be provided for residents, while short-term parking will be provided in the form of Sheffield stands.

CAR SHARING

Traditionally, car parking has been provided within Dublin to primarily facilitate a storage role. This is on the basis that a car is not used on a regular basis such as for commuting and is instead required for infrequent trips such as bulky shopping trips which could not be facilitated through public transport or weekend, off-peak recreational trips. This is considered to be an especially inefficient use of space, particularly in the context of the current housing crisis.

One of the key proposals within the Mobility Management Plan for the site is the potential for the provision of car club vehicles. This will be based on a survey of residents to establish if such a demand exists and, if so, subsequently engage with a car club operator with a view to setting up a station for one or more car club vehicles on-site.

This is in line with the *Guidelines for Planning Authorities, Design Standards for New Apartments* which state:

"*As well as showing that a site is sufficiently well located in relation to employment, amenities and services, it is important that access to a car-sharing club or other non-car based modes of transport are available and/or can be provided to meet the needs of residents, whether as part of the proposed development or otherwise. 'Car free' development is permissible and if developed, must be fully communicated as part of subsequent apartment sales and marketing processes*".

Car club services are very simple to use, with licensed and registered users able to book a vehicle through convenient means such as a phone app. Fuel, tax, insurance, cleaning and maintenance costs are all typically included as part of the overall package which is a further incentive for users to switch from private car ownership as the overall cost of owning a car relative to the amount of use is not as attractive in many instances.

GoCar is an example of such an operator who is a well-established and experienced car club operator in Dublin. GoCar has carried out a survey of their existing users to show the effectiveness of such a service, with the key results summarised as follows:

- 86% of GoCar use was for personal use with 14% for business use;
- 59% of GoCar users have used the service to replace a personal vehicle;
- 69% of users cite convenience as the biggest advantage of GoCar;
- 30% of users cite insurance costs as the biggest issue with owning a car while 26% cite maintenance and fuel costs as the biggest issue;
- Each GoCar takes 14 cars off Dublin streets;
- The top uses of GoCar are:
    - Day trips;
    - Family taxi;
    - Big shopping trips.
- The average GoCar is used for just 1 hour a day.

Thus, such a facility would have numerous benefits over the current parking provision model, including:

- Reducing the need for car ownership and thereby reducing the potential for unnecessary travel by car;
- Maintaining access to travel by car to satisfy infrequent, unique trips as outlined previously;
- Reducing the space required for car parking provision and associated cost which has an associated positive impact on unit affordability;
- Reducing costs associated with car use as long-term tax, insurance and maintenance costs associated with car ownership (estimated at €10,849.92 by AA Ireland) are replaced with significantly lower, short-term costs consolidated into one payment;
- Facilitating more environmentally friendly car travel as 10% of the GoCar fleet consists of electric vehicles, with this share set to increase in the future.

Car clubs also have the added bonus of not contributing to long-term commuting by car. As the vehicles must be returned from the point of origin, i.e. the development site, the cost associated with using them on a daily basis for commuting purposes means it would not be a realistic option.

CARGO BICYCLES AND WORKSHOP

The development will provide a Cargo Bike service, as well as an on-site bicycle workshop. The Cargo Bike service will be highlighted to residents with associated information on how to register, how the system operates and the cost of use. The bike workshop, which includes facilities such as air pumps and repair tools will be available for use by a resident of the development. This emphasis on cycling and sustainable transport should assist in reducing car usage in the development.

To meet any potential demand for Cargo Bicycles, the development will provide 1 no. Cargo Bicycle space per 20 no. residential units. There is also scope to further increase the number of Cargo Bicycle spaces in lieu of excess bicycle parking spaces, should the management company identify this need in future.

MOBILITY MANAGEMENT PLAN

A Mobility Management Plan has been prepared and submitted under separate cover as part of this application. The plan set out a series of objectives which relate to facilitating and encouraging travel by sustainable means. The plan includes details of a combination of hard and soft measures included in the development design and proposed to be put in place for its operation to achieve the stated objectives.

The plan will be a living document, continually updated in light of the experience gained through its operation in conjunction with residents and the Local Authority to ensure the maximum benefit is achieved.

6. POTENTIAL IMPACT OF DEVELOPMENT CONSTRUCTION

It is difficult to assess the exact quantum of traffic that will be generated during the construction period. However, a few preliminary estimates have been made based on the extent of excavation, type of development and estimated phasing. These are summarised as follows:

- 30 no. private vehicles per day from staff and site visitors i.e. 60 no. vehicle movements;
- 25 no. light goods vehicles per day from subcontract staff i.e. 50 no. vehicle movements;
- 100 no. heavy goods vehicles per day during peak excavation process i.e. 200 no. vehicle movements;
- 40 no. heavy goods vehicles per day outside of the peak excavation periods i.e. 80 no. vehicle movements.

When estimating the potential impact of the construction stage, several factors have been taken into consideration as follows:

- The peak traffic hours have been defined as 08:00-09:00 and 17:00-18:00. The normal permitted construction working hours are 08:00 to 19:00 on a weekday. As a result, staff travelling in private vehicles will arrive and depart the site outside of the peak traffic hours;
- The excavation period is considered to represent the peak of HGV movements at 100 per day, based on 10 vehicles per hour. The assessment has considered this volume of traffic as it represents the worst-case scenario;
- Heavy excavation and delivery vehicles travelling to and from the site will be spread across the course of the working day and efforts will be made to limit the number of arrivals and departures during the peak traffic hours where possible. However, for the purposes of this assessment a worst-case scenario is assumed where no such restrictions are in place and 10 no. HGVs are allowed during peak hours;
- The majority of contractor vehicles are expected to arrive and depart just before and after the site opening and closing hours respectively,

with a small number, spread across the course of the day. However, in the interest of a conservative assessment, all have been assumed to arrive in the A.M. peak hour and depart in the P.M. peak hour.

Taking the above into consideration, the estimated construction vehicle movements relative to the operational vehicle movements are set out in Table 12. Please note that vehicle movements are a summation of arrivals and departures e.g. 10 no. vehicles arriving and 5 no. vehicles departing equates to 15 no. vehicle movements.

Table 12: Construction vs. Operational Vehicle Movements

Time Period	Construction Stage	Operational Stage
08:00 – 09:00	45	89
17:00 – 18:00	45	103
Daily	310	907

As can be seen, the peak hour vehicle movements for construction vehicles will be less than that of the operational vehicle numbers, despite a conservative assessment with respect to construction traffic. Daily construction vehicle movements are notably less than the operational stage movements. Thus, taking into consideration, the temporary nature of construction activity and the detailed analysis of the operational stage in the following section, a bespoke detailed analysis of the construction stage has not been deemed necessary.

This stage of the development is considered in more detail in the Construction and Environmental Management Plan and Construction & Demolition Waste Management Plan which will be prepared by the assigned contractor.

7. POTENTIAL IMPACT OF DEVELOPMENT OPERATION

To assess the actual impact of the operational development on the local road network, three different scenarios have been analysed as follows:

- *Base Year (2019)* – The current performance of the local road network;
- *Year of Opening (2024)* – The performance of the local road network during the Year of Opening;
- *Design Year (2039)* – The performance of the local road network during the Design Year.

The future year assessments considered the following scenarios:

- *Year of Opening: Do Nothing* – Allowing for only normal background traffic growth;
- *Year of Opening: Do Something* – Allowing for normal background traffic growth and the additional traffic generated by the proposed development;
- *Design Year: Do Nothing* – Allowing for only normal background traffic growth and no other development;
- *Design Year: Do Something* – Allowing for normal background traffic growth and the additional traffic generated by the proposed development;

The junction analysis was carried out using Junctions 9 and TRANSYT and the link capacities for the Year of Opening and the Design Year were assessed based on the same methodology outlined earlier in this report.

BASE YEAR (2019)

A summary of the analysis results for each scenario at the Year of Opening can be seen in the tables following, thereby allowing the true impact of the proposed development to be assessed. The associated model output files can be found in Appendix C of this report.

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When considering the results, the following should be considered:

- The RFC values represent the maximum experienced by the respective arm of the junction;
- Where new junctions are to be assessed the Do Nothing scenario is not considered as they do not form part of the Do Nothing scenario;
- Where a signalised junction is modelled the software has been allowed to optimise the signal plan to show the most efficient operation of the junction;
- Results of junction capacity are displayed in RFC or Degree of Saturation (DOS), both terms are interchangeable and identify the reserve capacity of a junction i.e. 100% DOS indicates no reserve capacity.
- All queue lengths shown represent the average experienced by the respective arm in Passenger Car Units (PCUs). A Passenger Car Unit is a measure used primarily to assess junction capacity, for modelling purposes. Different vehicles are assigned different values, according to the space they take up. A car has a value of 1 and larger vehicles will have higher values.

Junction 1

Table 13: Junction 1 – 2019 Peak Hour Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Grange Road	59	9.75	63	11.59
Kellystown Road	63	10.34	66	10.15
Harold's Grange Road	24	2.66	23	2.87
College Road	72	11.07	28	3.02

The results show that Junction 1 currently operates at a relatively high degree of saturation, albeit some spare capacity is available. Especially on College Road in the morning peak, and Grange Road and Kellystown Road in the afternoon peak.

Junction 2

Table 14: Junction 2 – 2019 Peak Hour Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Harold's Grange Road	-	-	-	-
Ticknock Park	3	0	3	0
Blackglen Road	2	0	1	0

This junction has ample capacity available for future growth.

Junction 3

Table 15: Junction 3 – 2019 Peak Hour Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Blackglen Road West	5	0.1	6	0.1
Blackglen Road East	-	-	-	-
Woodside Road	15	0.4	9	0.2

Like Junction 2, this junction also operates at very low demand, with sufficient capacity available.

Junction 4

Table 16: Junction 4 – 2019 Peak Hour Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Sandyford Road	14	2.95	53	3.31
Hillcrest Road	16	4.43	38	4.81
Enniskerry Road	46	4.90	28	4.59
Blackglen Road	49	4.89	16	4.35

This junction has sufficient capacity available, especially with right-turn lanes and phasing. Queues in general are acceptable.

Junction 5

Table 17: Junction 5 – 2019 Peak Hour Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Kilgobbin Road North	15	1.83	23	3.74
Leopardstown Road	9	2.17	30	5.79
Kilgobbin Road	24	3.07	13	2.04
Hillcrest Road	29	4.13	16	2.17

Junction 5 is a large junction with signalised slip lanes and right-turn lanes. This junction has ample capacity available, with short queues.

YEAR OF OPENING (2024)

As noted previously, the assessment considers the Do Nothing and Do Something scenarios. The latter is established by adding the traffic estimated to be generated by the proposed development to the pre-Covid, future year traffic flows estimated previously and is shown in the following:

- *Diagram 13: 2024 A.M. Peak Hour Flows – Do Something;*
- *Diagram 14: 2024 P.M. Peak Hour Flows – Do Something;*
- *Diagram 15: 2024 AADT – Do Something;*

Prior to the analysis of the individual junctions, the main links in the network have been assessed for the Horizon Year Do Something scenario, with the results shown in Table 18.

Table 18: 2024 Do Something Scenario Link RFC Values

Link	Width (m)	Link Capacity (veh/hr)	A.M. Peak (veh/hr)	RFC (%)	P.M. Peak (veh/hr)	RFC (%)
Grange Road	6.0	1020	120	12%	138	14%
Kellystown Road	5.0	900	24	3%	30	4%
R113	7.0	1260	554	44%	481	39%
Woodside Road	5.0	900	56	7%	61	7%
R117	7.0	1260	536	43%	667	53%
Kilgobbin Road	8.0	1590	615	39%	518	33%

The results show that the local links continue to operate within capacity during both peak hours.

A summary of the analysis results for each scenario at the Year of Opening can be seen in the tables following, thereby allowing the true impact of the proposed development to be assessed. The associated model output files can be found in Appendix C of this report.

When considering the results, the following should be taken into account:

- The RFC values represent the maximum experienced by the respective arm of the junction;
- Where new junctions are to be assessed the Do Nothing scenario is not considered as they do not form part of the Do Nothing scenario;
- Where a signalised junction is modelled the software has been allowed to optimise the signal plan to show the most efficient operation of the junction;
- Results of junction capacity are displayed in RFC or Degree of Saturation (DOS), both terms are interchangeable and identify the reserve capacity of a junction i.e. 100% DOS indicates no reserve capacity.
- All queue lengths shown represent the average experienced by the respective arm in Passenger Car Units (PCUs). A Passenger Car Unit is a measure used primarily to assess junction capacity, for modelling purposes. Different vehicles are assigned different values, according to

the space they take up. A car has a value of 1 and larger vehicles will have higher values.

Junction 1

Table 19: Junction 1 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Grange Road	65	11.01	69	13.22
Kellystown Road	69	11.94	72	11.61
Harold's Grange Road	26	2.96	26	3.17
College Road	79	12.89	30	3.30

Table 20: Junction 1 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Grange Road	67	11.39	69	13.71
Kellystown Road	71	12.52	72	12.10
Harold's Grange Road	28	3.05	25	3.24
College Road	77	12.71	30	3.44

The results show a slight increase in both DOS and queuing in the Do Something when compared to the Do Nothing. The junction operates within capacity with a maximum DOS value of 79% and a maximum queue length of 12.89 PCU, both occurring on College Road during the morning peak.

Junction 2

Table 21: Junction 2 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Harold's Grange Road	-	-	-	-
Ticknock Park	4	0	3	0
Blackglen Road	2	0	1	0

Table 22: Junction 2 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Harold's Grange Road	-	-	-	-
Ticknock Park	4	0	3	0
Blackglen Road	2	0	1	0

The results show the junction operates with extremely low RFC values and negligible queuing.

Junction 3

Table 23: Junction 3 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Blackglen Road West	16	0.5	11	0.3
Blackglen Road East	-	-	-	-
Woodside Road	6	0.1	7	0.1

Table 24: Junction 3 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Blackglen Road West	17	0.5	11	0.3
Blackglen Road East	-	-	-	-
Woodside Road	6	0.1	7	0.1

The results show that the junction operates well within capacity with the development in place, with almost negligible increases in RFC values and queue lengths relative to the Do Nothing Scenario.

Junction 4

Table 25: Junction 4 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Sandyford Road	28	2.95	63	3.41
Hillcrest Road	38	4.45	66	4.93
Enniskerry Road	66	4.93	54	4.64
Blackglen Road	71	5.15	26	4.39

Table 26: Junction 4 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Sandyford Road	30	2.96	63	3.41
Hillcrest Road	36	4.45	71	5.15
Enniskerry Road	74	5.28	55	4.67
Blackglen Road	72	5.21	28	4.40

The results show that the junction operates with ample spare capacity and acceptable queue lengths. The results show only minor increases in RFC values and queue lengths relative to the Do Nothing Scenario.

Junction 5

Table 27: Junction 5 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Kilgobbin Road North	47	1.99	64	4.63
Leopardstown Road	10	2.34	61	6.48
Kilgobbin Road	26	3.10	48	2.20
Hillcrest Road	31	4.49	33	2.33

Table 28: Junction 5 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Kilgobbin Road North	49	2.07	63	4.63
Leopardstown Road	54	2.34	62	6.81
Kilgobbin Road	47	3.10	53	2.36
Hillcrest Road	43	5.08	35	2.45

The results show the junction operates with ample spare capacity and short queue lengths.

Junction 6 (Development Access)

Table 29: Junction 6 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Blackglen Road West	-	-	-	-
Blackglen Road East	3	0	7	0.1
Development Access	16	0.2	11	0.1

The development access operates at very low RFC values and short queue lengths during the opening year, as a stop-controlled T-junction. The access junction will not require any additional lanes, such as right-turning lanes in the opening year. It will function as a standard priority-controlled T-junction.

DESIGN YEAR (2039)

The Do Something traffic flows for the Design Year have been established using the same methodology outlined for the Year of Opening and can be seen in the following:

- *Diagram 16: 2039 A.M. Peak Hour Flows – Do Something;*
- *Diagram 17: 2039 P.M. Peak Hour Flows – Do Something;*
- *Diagram 18: 2039 AADT – Do Something.*

As before, prior to the analysis of the individual junctions, the main links in the network have been assessed for the Design Year Do Something scenario, with the results shown in Table 30.

Table 30: 2039 Do Something Scenario Link RFC Values

Link	Width (m)	Link Capacity (veh/hr)	A.M. Peak (veh/hr)	RFC (%)	P.M. Peak (veh/hr)	RFC (%)
Grange Road	6.0	1020	140	14%	160	16%
Kellystown Road	5.0	900	28	4%	35	4%
R113	7.0	1260	643	52%	562	45%
Woodside Road	5.0	900	65	8%	73	9%
R117	7.0	1260	625	50%	778	62%
Kilgobbin Road	8.0	1590	716	46%	603	38%

The results show that the local links continue to operate within capacity limits with a maximum RFC value of 62% experienced during the PM peak.

When considering the below results, the considerations outlined for the Year of Opening results continue to apply.

Junction 1

Table 31: Junction 1 – 2039 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Grange Road	77	14.08	82	17.25
Kellystown Road	78	14.87	81	14.58
Harold's Grange Road	32	3.52	31	3.76
College Road	88	16.74	34	3.90

Table 32: Junction 1 – 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Grange Road	79	14.57	83	17.94
Kellystown Road	80	15.53	83	15.09
Harold's Grange Road	33	3.59	31	3.87
College Road	87	16.30	35	4.00

The results show a slight increase in both DOS and queuing in the Do Something when compared to the Do Nothing. The junction operates within capacity with a maximum RFC value of 87% and a maximum queue length of 17.94 PCU. This occurs on College Road (DOS) and Grange Road (Queue) during the afternoon peak. The results show that this junction will approach capacity during the design year, even without the additional trips generated by the development. It might be necessary to investigate the addition of right-turning lanes at this junction in the future.

Junction 2

Table 33: Junction 2 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Harold's Grange Road	-	-	-	-
Ticknock Park	5	0.1	4	0
Blackglen Road	3	0	2	0

Table 34: Junction 2 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Harold's Grange Road	-	-	-	-
Ticknock Park	5	0.1	4	0
Blackglen Road	3	0	2	0

The results show that the junction operates well within capacity with the development in place, with only minor increases in RFC values and queue lengths relative to the Do Nothing Scenario.

Junction 3

Table 35: Junction 3 – 2039 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Blackglen Road West	21	0.5	15	0.5
Blackglen Road East	-	-	-	-
Woodside Road	7	0.1	9	0.1

Table 36: Junction 3 – 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Blackglen Road West	22	0.7	15	0.5
Blackglen Road East	-	-	-	-
Woodside Road	7	0.1	11	0.2

The results show that the junction operates within the capacity for both the Do Something and Do Maximum scenarios, with only minor increases in RFC values and queue lengths relative to the Do Nothing Scenario.

Junction 4

Table 37: Junction 4 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Sandyford Road	33	2.98	74	3.86
Hillcrest Road	43	4.50	76	5.46
Enniskerry Road	78	5.62	62	4.84
Blackglen Road	81	5.93	30	4.41

Table 38: Junction 4 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Sandyford Road	33	2.98	75	3.86
Hillcrest Road	44	4.52	81	5.94
Enniskerry Road	79	5.71	64	4.89
Blackglen Road	86	6.80	32	4.42

The results show that by the Design Year, the junction will still have sufficient capacity to accommodate the background traffic, as well as the development trips.

Junction 5

Table 39: Junction 5 – 2039 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Kilgobbin Road North	55	2.42	69	5.34
Leopardstown Road	62	2.92	71	8.00
Kilgobbin Road	55	3.22	58	2.71
Hillcrest Road	75	5.95	40	3.01

Table 40: Junction 5 – 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Kilgobbin Road North	56	2.51	73	5.35
Leopardstown Road	65	2.92	74	8.22
Kilgobbin Road	55	3.22	60	2.86
Hillcrest Road	78	6.41	41	3.02

The results show the junction operates with relatively low RFC values and short queuing for all scenarios considered, during the design year.

Junction 6 (Development Access)

Table 41: Junction 6 – 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	*Queue*	*DOS*	*Queue*
Blackglen Road West	-	-	-	-
Blackglen Road East	4	0	8	0.2
Development Access	18	0.2	13	0.1

The development access will continue to operate with extremely low RFC values and negligible queuing for all scenarios analysed as a stop-controlled T-junction. Like the Opening Year, the access will not require any additional

lanes, such as right-turning lanes during the Design Year. It will function as a standard priority-controlled T-junction.

SUMMARY

The result of the overall assessment shows that the local road network is capable of catering for the additional traffic associated with the proposed residential development without significant negative impact.

The proposed development site access junction is shown to work well using a priority T-junction layout, even during the design year.

In general, all junctions have sufficient capacity to accommodate the traffic, even up to the design year of 2039. Some queue lengths become longer, especially during the design year, however, the predicted 2039 traffic flows for all scenarios should be considered in the context of the following:

- The assessment has allowed for background traffic growth in accordance with the TII growth factors. This invariably results in a degree of double counting which is not possible to precisely quantify and subsequently adjust for. As a result, the predicted traffic flows are very conservative and are likely to not be realised in reality;
- TII growth factors are influenced by the long-term impact of Covid 19 which will result in both decreased economic growth and changes to commuting patterns. This means traffic growth is very unlikely to proceed as previously projected by TII and as allowed for as part of this assessment.

ENGINEERS IRELAND
cpd ACCREDITED EMPLOYER
OCSC
O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers

8. DO NOTHING SCENARIO

The do nothing scenario would involve leaving the subject site in its current undeveloped state. This would have a negative impact on the overall development of the area, particularly given the current housing shortage, while simultaneously showing no real benefit in transportation terms.

The local transport network has been shown to experience no notable negative impact as a result of a development of the type planned.

9. REMEDIAL/MITIGATION MEASURES

The assessment has shown no issues are created by the inclusion of the proposed development meaning no measures are required beyond those set out as part of the proposed development.

10. MONITORING

While it has been demonstrated that the proposed development has little impact on the operation of the local network, it is nevertheless recommended that the local area should be monitored in terms of transportation efficiencies in the future.

Of slight concern is Junction 4's queue lengths, though these are noted to not be caused by the proposed development. Given the relatively significant period in question, the conservative nature of the assessment and the considerable uncertainty about how traffic flows will change across such a period, it is not considered appropriate to put in place mitigation measures at present. Rather, it is recommended that this junction should be monitored.

Wian Marais BE (US), BE (Hons) (UP), Professional Engineer (ECSA)
Civil Engineer
O'Connor Sutton Cronin & Associates

APPENDIX A: TRAFFIC SURVEY DATA

ENGINEERS IRELAND
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Multidisciplinary
Consulting Engineers

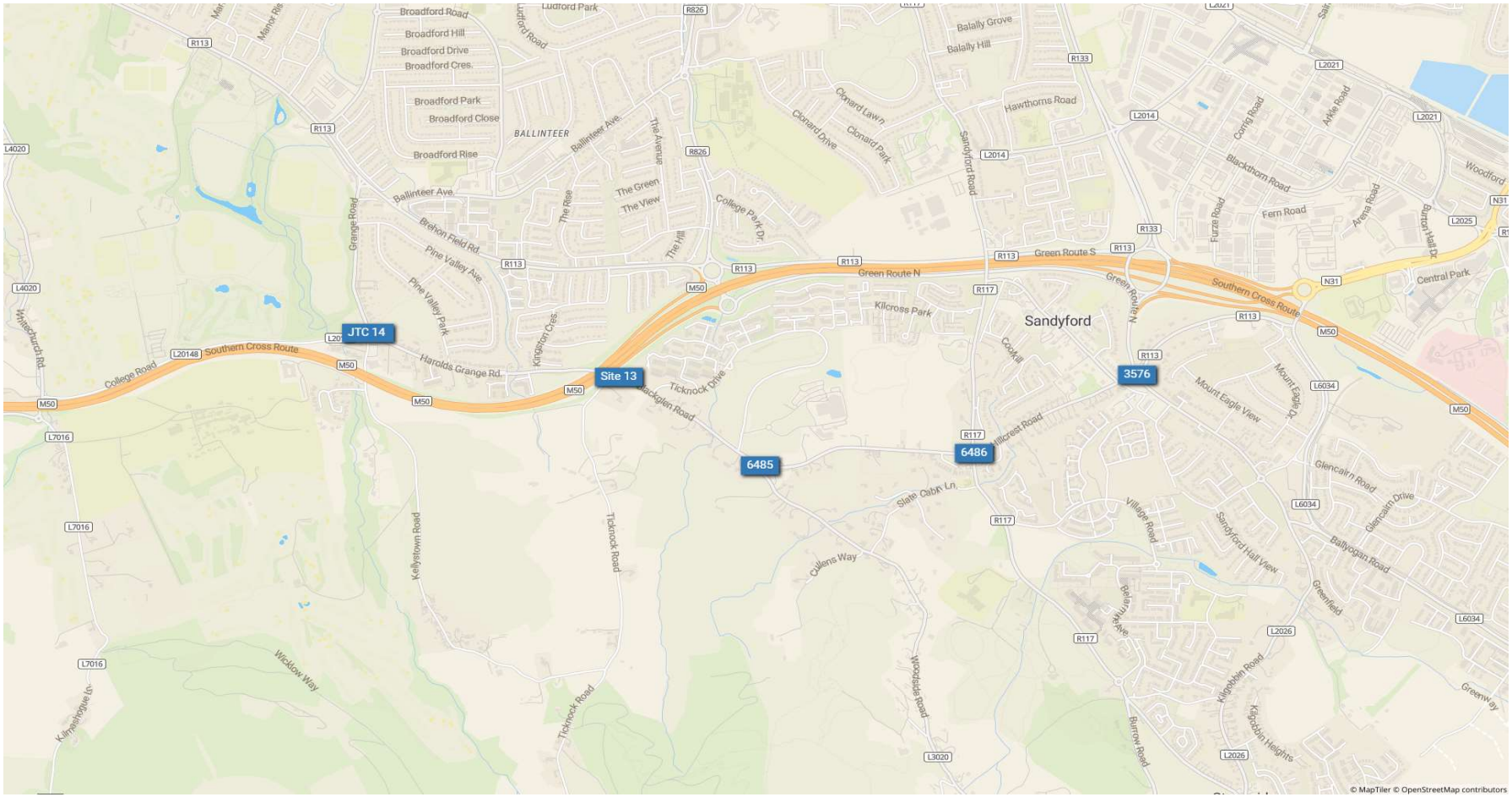
Data Analysis Services
Traffic-Transportation- Commercial-Innovation

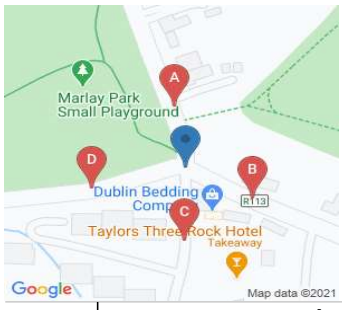
HDR 21 043 South Dublin

with compliments

IDASO

Survey Name: HDR 21 043 South Dublin
Date: Tue 28 Mar 2017 — Thu 07 Nov 2019





IDASO

Survey Name: HDR 21 043 South Dublin
Site: JTC 14
Location: Kellystown Rd / Harolds Grange Rd / College Rd
Date: Tue 28-Mar-2017

	A => A										A => B												
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR
07:00	0	0	0	0	0	0	0	0	0	0	0	0	17	0	2	0	0	0	19	19	0	0	8
07:15	0	0	0	0	0	0	0	0	0	0	2	0	19	0	1	1	0	0	23	21.9	0	0	13
07:30	0	0	0	0	0	0	0	0	0	0	0	0	31	0	5	0	0	0	36	36	1	0	13
07:45	0	0	0	0	0	0	0	0	0	0	0	0	48	0	7	1	1	0	57	58.8	0	0	12
H/TOT	0	0	0	0	0	0	0	0	0	0	2	0	115	0	15	2	1	0	135	135.7	1	0	46
08:00	0	0	0	0	0	0	0	0	0	0	0	0	32	0	4	1	0	0	37	37.5	0	0	10
08:15	0	0	0	0	0	0	0	0	0	0	0	1	59	0	7	0	0	0	67	66.4	0	0	10
08:30	0	0	0	0	0	0	0	0	0	0	1	0	67	1	1	0	0	0	70	69.2	0	0	8
08:45	0	0	0	0	0	0	0	0	0	0	0	1	51	2	2	0	0	0	56	55.4	0	0	9
H/TOT	0	0	0	0	0	0	0	0	0	0	1	2	209	3	14	1	0	0	230	228.5	0	0	37
09:00	0	0	0	0	0	0	0	0	0	0	0	0	39	0	3	0	1	0	43	44.3	0	0	18
09:15	0	0	0	0	0	0	0	0	0	0	2	1	31	1	7	2	0	0	44	42.8	0	0	12
09:30	0	0	0	0	0	0	0	0	0	0	0	0	34	1	3	1	1	0	40	41.8	0	0	12
09:45	0	0	0	0	0	0	0	0	0	0	0	1	34	2	4	0	0	0	41	40.4	0	0	8
H/TOT	0	0	0	0	0	0	0	0	0	0	2	2	138	4	17	3	2	0	168	169.3	0	0	50
10:00	0	0	0	0	0	0	0	0	0	0	1	0	25	0	2	1	0	0	29	28.7	0	0	6
10:15	0	0	0	0	0	0	0	0	0	0	0	0	21	1	3	0	0	0	25	25	0	0	6
10:30	0	0	0	0	0	0	0	0	0	0	1	0	28	0	4	2	0	0	35	35.2	0	0	10
10:45	0	0	0	0	0	0	0	0	0	0	0	0	25	2	3	1	1	0	32	33.8	0	0	6
H/TOT	0	0	0	0	0	0	0	0	0	0	2	0	99	3	12	4	1	0	121	122.7	0	0	28
11:00	0	0	0	0	0	0	0	0	0	0	0	0	33	0	2	0	0	0	35	35	0	0	13
11:15	0	0	0	0	0	0	0	0	0	0	1	0	24	1	2	2	0	0	30	30.2	0	0	8
11:30	0	0	0	0	0	0	0	0	0	0	0	1	30	1	4	0	0	0	36	35.4	0	0	11
11:45	0	0	0	0	0	0	0	0	0	0	1	2	31	0	6	0	0	0	40	38	0	0	12
H/TOT	0	0	0	0	0	0	0	0	0	0	2	3	118	2	14	2	0	0	141	138.6	0	0	44
12:00	0	0	0	0	0	0	0	0	0	0	0	0	21	2	3	1	0	0	27	27.5	0	1	11
12:15	0	0	0	0	0	0	0	0	0	0	0	0	40	0	3	0	1	0	44	45.3	0	0	13
12:30	0	0	0	0	0	0	0	0	0	0	0	0	33	0	5	1	0	0	39	39.5	0	0	8
12:45	0	0	0	0	0	0	0	0	0	0	1	0	49	1	4	1	0	0	56	55.7	2	1	10
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	143	3	15	3	1	0	166	168	2	2	42
13:00	0	0	0	0	0	0	0	0	0	0	1	0	35	0	5	0	0	0	41	40.2	0	0	9
13:15	0	0	0	0	0	0	0	0	0	0	0	0	42	2	3	1	0	0	48	48.5	0	0	11
13:30	0	0	0	0	0	0	0	0	0	0	0	2	38	2	2	0	0	1	45	43.8	0	0	9
13:45	0	0	0	0	0	0	0	0	0	0	0	0	45	0	6	0	1	0	52	53.3	0	0	19
H/TOT	0	0	0	0	0	0	0	0	0	0	1	2	160	4	16	1	1	1	186	185.8	0	0	48
14:00	0	0	0	0	0	0	0	0	0	0	0	1	42	1	1	1	0	0	46	45.9	0	0	14
14:15	0	0	0	0	0	0	0	0	0	0	0	0	50	0	1	2	0	0	53	54	0	0	8
14:30	0	0	0	0	0	0	0	0	0	0	0	0	39	1	3	3	0	0	46	47.5	0	0	21
14:45	0	0	0	0	0	0	0	0	0	0	0	0	43	1	1	0	0	0	45	45	0	0	12
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	174	3	6	6	0	0	190	192.4	0	0	55
15:00	0	0	0	0	0	0	0	0	0	0	0	0	47	4	5	1	0	0	57	57.5	0	0	12
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15:30	0	0	0	0	0	0	0	0	0	0	0	0	29	0	6	1	0	0	36	36.5	0	0	12
15:45	0	0	0	0	0	0	0	0	0	0	1	0	55	1	6	1	0	0	64	63.7	0	0	10
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	179	5	21	6	0	0	212	214.2	0	0	50
16:00	0	0	0	0	0	0	0	0	0	0	0	1	44	1	10	0	0	0	56	55.4	0	0	13
16:15	0	0	0	0	0	0	0	0	0	0	0	1	46	1	2	2	0	0	52	52.4	0	0	11
16:30	0	0	0	0	0	0	0	0	0	0	0	0	48	0	9	0	0	0	57	57	0	0	12
16:45	0	0	0	0	0	0	0	0	0	0	1	1	47	1	7	0	0	0	57	55.6	0	0	14
H/TOT	0	0	0	0	0	0	0	0	0	0	1	3	185	3	28	2	0	0	222	220.4	0	0	50
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17:15	0	0	0	0	0	0	0	0	0	0	0	0	59	1	5	0	0	0	65	65	0	0	17
17:30	0	0	0	0	0	0	0	0	0	0	1	1	64	0	7	2	1	0	76	76.9	1	0	21
17:45	0	0	0	0	0	0	0	0	0	0	1	0	62	1	6	0	0	0	70	69.2	0	0	19
H/TOT	0	0	0	0	0	0	0	0	0	0	2	1	255	2	25	2	1	0	288	288.1	1	0	78
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18:15	0	0	0	0	0	0	0	0	0	0	0	0	82	3	4	1	0	0	90	90.5	1	0	15
18:30	0	0	0	0	0	0	0	0	0	0	2	0	58	1	3	0	0	0	64	62.4	0	0	17
18:45	0	0	0	0	0	0	0	0	0	0	3	0	65	1	2	0	0	0	71	68.6	4	0	25
H/TOT	0	0	0	0	0	0	0	0	0	0	5	0	274	6	15	1	0	0	301	297.5	6	0	74
12 TOT	0	0	0	0	0	0	0	0	0	0	20	14	2049	38	198	33	7	1	2360	2361.2	10	2	602

A => C							A => D										B => A						
TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2
0	0	0	0	0	8	8	0	0	2	0	0	0	0	0	2	2	0	1	18	0	5	2	0
1	1	0	0	0	15	15	0	0	0	0	0	0	0	1	1	1	2	0	26	0	1	1	0
1	1	0	0	0	16	15.2	0	0	1	0	0	0	0	0	1	1	1	0	33	0	1	1	0
2	0	0	0	0	14	14	0	0	8	0	1	1	0	0	10	10.5	2	3	45	0	5	0	0
4	2	0	0	0	53	52.2	0	0	11	0	1	1	0	1	14	14.5	5	4	122	0	12	4	0
0	1	0	1	0	12	13.3	0	0	23	0	2	0	0	1	26	26	1	0	57	0	6	1	1
1	1	0	0	0	12	12	0	0	23	0	1	0	0	0	24	24	0	0	79	0	2	3	0
0	1	0	0	0	9	9	0	0	11	0	0	0	0	0	11	11	1	0	48	1	5	2	0
0	4	0	0	0	13	13	0	0	27	0	0	0	0	0	27	27	2	0	68	3	2	1	0
1	7	0	1	0	46	47.3	0	0	84	0	3	0	0	1	88	88	4	0	252	4	15	7	1
0	0	0	0	0	18	18	0	0	9	0	0	0	0	0	9	9	0	0	42	1	1	1	0
0	1	0	0	0	13	13	0	0	10	0	0	0	0	0	10	10	0	0	45	0	3	0	0
0	0	0	0	0	12	12	0	0	13	0	1	0	0	0	14	14	0	0	31	1	4	1	0
0	1	0	0	0	9	9	0	0	12	1	0	0	0	0	13	13	0	0	40	1	4	0	0
0	2	0	0	0	52	52	0	0	44	1	1	0	0	0	46	46	0	0	158	3	12	2	0
0	2	0	0	0	8	8	0	0	9	0	0	0	0	0	9	9	1	0	28	0	3	3	0
2	1	0	0	0	9	9	1	0	13	0	0	0	0	0	14	13.2	0	2	31	1	4	0	0
0	2	0	0	0	12	12	0	0	14	0	1	0	0	0	15	15	2	0	23	0	3	2	0
1	0	0	0	0	7	7	0	0	11	0	0	0	0	0	11	11	0	0	24	0	5	1	0
3	5	0	0	0	36	36	1	0	47	0	1	0	0	0	49	48.2	3	2	106	1	15	6	0
0	2	0	0	0	15	15	0	0	19	0	0	1	0	0	20	20.5	0	0	33	0	5	0	0
1	1	0	0	0	10	10	0	0	12	1	0	0	0	0	13	13	0	0	29	0	2	2	1
1	0	0	0	0	12	12	0	0	11	0	3	2	0	0	16	17	0	1	24	1	2	0	0
0	0	1	0	0	13	13.5	0	0	19	0	1	1	0	0	21	21.5	1	0	37	0	4	1	0
2	3	1	0	0	50	50.5	0	0	61	1	4	4	0	0	70	72	1	1	123	1	13	3	1
0	1	0	0	0	13	12.4	0	0	12	0	0	0	0	0	12	12	0	0	32	3	6	2	0
2	1	1	0	0	17	17.5	0	0	11	0	0	0	0	0	11	11	1	0	46	1	3	2	0
0	1	0	0	0	9	9	0	0	10	1	2	0	0	0	13	13	0	0	26	0	2	1	0
0	1	0	0	0	14	11.8	0	0	9	1	1	0	0	0	11	11	1	0	41	1	4	2	0
2	4	1	0	0	53	50.7	0	0	42	2	3	0	0	0	47	47	2	0	145	5	15	7	0
0	2	2	0	0	13	14	0	0	8	0	2	0	0	0	10	10	0	0	51	0	5	2	0
0	0	0	0	0	11	11	0	0	14	0	1	0	0	0	15	15	0	0	37	0	1	1	0
1	1	0	0	0	11	11	0	0	11	0	2	0	1	0	14	15.3	0	0	41	0	3	1	0
0	1	0	0	0	20	20	0	0	14	0	0	0	0	0	14	14	0	1	45	2	7	0	0
1	4	2	0	0	55	56	0	0	47	0	5	0	1	0	53	54.3	0	1	174	2	16	4	0
0	3	0	0	0	17	17	0	0	17	0	1	0	0	0	18	18	0	0	39	0	6	0	1
1	0	0	0	0	9	9	0	0	11	0	0	0	0	0	11	11	0	0	45	2	5	2	0
0	0	0	0	0	21	21	0	0	12	0	0	0	0	0	12	12	0	0	39	0	2	1	0
2	2	0	0	0	16	16	0	0	11	0	1	0	0	1	13	13	0	0	47	0	6	0	0
3	5	0	0	0	63	63	0	0	51	0	2	0	0	1	54	54	0	0	170	2	19	3	1
0	3	0	0	0	15	15	0	0	14	0	1	1	0	0	16	16.5	0	0	55	0	4	1	0
1	1	0	0	0	18	18	0	0	9	0	1	0	0	0	10	10	0	1	38	0	4	0	0
0	0	1	0	0	13	13.5	0	0	20	0	1	0	0	0	21	21	0	1	53	0	1	1	0
0	0	0	0	0	10	10	0	0	17	0	0	0	0	0	17	17	0	1	55	2	3	1	0
1	4	1	0	0	56	56.5	0	0	60	0	3	1	0	0	64	64.5	0	3	201	2	12	3	0
0	1	0	1	0	15	16.3	0	0	18	0	1	0	0	0	19	19	0	0	42	2	5	0	0
1	2	0	0	0	14	14	0	0	9	0	1	0	0	0	10	10	0	1	42	3	4	0	1
0	1	0	0	0	13	13	0	0	17	0	3	0	0	0	20	20	0	0	42	1	7	1	0
0	0	0	0	0	14	14	0	0	12	0	0	0	0	0	12	12	1	0	52	0	7	1	0
1	4	0	1	0	56	57.3	0	0	56	0	5	0	0	0	61	61	1	1	178	6	23	2	1
0	3	0	0	0	24	24	0	0	19	0	1	0	0	0	20	20	0	0	46	0	9	0	1
0	0	0	0	0	17	17	0	0	16	0	0	0	0	0	16	16	2	1	39	0	4	1	0
0	1	0	0	0	23	22.2	0	0	9	0	2	0	0	0	11	11	1	0	48	0	1	1	0
0	1	0	0	0	20	20	0	0	21	2	0	0	0	0	23	23	1	1	38	1	4	0	0
0	5	0	0	0	84	83.2	0	0	65	2	3	0	0	0	70	70	4	2	171	1	18	2	1
1	1	0	0	0	20	19.2	0	0	25	1	0	0	0	0	26	26	1	0	41	1	3	0	0
0	1	1	0	0	18	17.7	4	0	17	0	0	0	0	0	21	17.8	1	0	41	1	4	1	0
1	1	0	0	0	19	19	2	0	17	0	0	0	0	0	19	17.4	0	1	44	1	0	0	0
0	1	0	0	1	31	27.8	0	0	15	0	1	0	0	0	16	16	2	0	44	0	2	0	0
2	4	1	0	1	88	83.7	6	0	74	1	1	0	0	0	82	77.2	4	1	170	3	9	1	0
20	49	6	2	1	692	688.4	7	0	642	7	32	6	1	3	698	696.7	24	15	1970	30	179	44	5

			B => B										B => C									
'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C
0	26	26.4	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	1
0	30	28.9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0
0	36	35.7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1
0	55	51.6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0
0	147	142.6	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	2
0	66	67	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7	7	0
0	84	85.5	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	3	2.2	0
0	57	57.2	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6	0
0	76	74.9	0	0	0	0	0	0	0	0	0	0	0	0	4	1	1	0	0	0	6	6	1
0	283	284.6	0	0	0	0	0	0	0	0	0	0	1	0	17	1	3	0	0	0	22	21.2	1
0	45	45.5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3	1
0	48	48	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	6	6.5	1
0	37	37.5	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4	2
0	45	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1
0	175	176	0	0	0	0	0	0	0	0	0	0	0	0	10	0	3	1	0	0	14	14.5	5
0	35	35.7	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	3
0	38	36.8	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4	1
0	30	29.4	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	4	4	0
1	31	31.5	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9	9	0
1	134	133.4	0	0	0	0	0	0	0	0	0	0	0	0	18	1	1	0	0	0	20	20	4
0	38	38	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	3
0	34	36.3	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0
0	28	27.4	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0
0	43	42.7	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	3	0
0	143	144.4	0	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	15	15	3
0	43	44	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	1
0	53	53.2	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	1
0	29	29.5	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0
0	49	49.2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0
0	174	175.9	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	15	15	2
0	58	59	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0
0	39	39.5	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0
0	45	45.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0
0	55	54.4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0
0	197	198.4	0	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	0	12	12	0
0	46	47.3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	1
0	54	55	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4	0
0	42	42.5	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	4	4	0
0	53	53	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0
0	195	197.8	0	0	0	0	0	0	0	0	0	0	0	0	9	1	2	0	0	0	12	12	1
0	60	60.5	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0
0	43	42.4	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0
0	56	55.9	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0
0	62	61.9	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0
0	221	220.7	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	11	0
0	49	49	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0
0	51	51.7	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0
0	51	51.5	0	0	0	0	0	0	0	0	0	0	0	1	5	0	1	0	0	0	7	6.4	0
1	62	61.7	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6	0
1	213	213.9	0	0	0	0	0	0	0	0	0	0	0	1	16	0	2	0	0	0	19	18.4	0
0	56	57.3	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0
0	47	45.3	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	0
0	51	50.7	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	0
0	45	43.6	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	7
0	199	196.9	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20	20	7
0	46	45.2	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0
0	48	47.7	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	3
0	46	45.4	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5	5	1
0	48	46.4	0	0	0	0	0	0	0	0	0	0	1	0	3	1	1	0	0	0	6	5.2	2
0	188	184.7	0	0	0	0	0	0	0	0	0	0	1	0	15	2	1	0	0	0	19	18.2	6
2	2269	2269.3	0	0	0	0	0	0	0	0	0	0	2	1	161	6	13	1	0	0	184	182.3	31

B => D									C => A									C => B					
M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV
0	2	0	1	0	0	0	4	3.2	2	0	4	0	0	1	0	0	7	5.9	0	0	1	0	0
0	4	0	2	0	0	0	6	6	0	0	13	0	2	0	0	0	15	15	0	0	2	0	1
0	7	0	0	0	0	0	8	7.2	1	0	19	2	0	0	0	0	22	21.2	0	0	4	0	0
0	17	0	0	0	0	0	17	17	1	0	16	3	1	0	0	0	21	20.2	0	0	5	0	0
0	30	0	3	0	0	0	35	33.4	4	0	52	5	3	1	0	0	65	62.3	0	0	12	0	1
0	29	0	2	0	0	0	31	31	2	0	12	0	1	0	0	0	15	13.4	0	0	5	0	1
0	19	0	0	0	0	0	19	19	0	0	9	1	2	0	1	0	13	14.3	0	0	8	0	1
0	8	0	2	0	0	0	10	10	1	1	23	0	3	0	0	0	28	26.6	0	0	7	0	0
0	24	0	0	0	0	0	25	24.2	0	1	14	0	1	0	0	0	16	15.4	0	0	6	1	0
0	80	0	4	0	0	0	85	84.2	3	2	58	1	7	0	1	0	72	69.7	0	0	26	1	2
0	18	0	0	0	0	1	20	19.2	1	0	12	0	3	0	0	0	16	15.2	0	0	3	0	0
0	11	0	0	1	0	0	13	12.7	0	0	10	1	2	0	0	0	13	13	0	0	3	0	0
0	17	0	0	0	0	0	19	17.4	0	0	17	0	0	1	0	0	18	18.5	0	0	4	0	1
0	13	0	2	0	0	0	16	15.2	0	1	9	0	2	0	0	0	12	11.4	0	0	2	0	1
0	59	0	2	1	0	1	68	64.5	1	1	48	1	7	1	0	0	59	58.1	0	0	12	0	2
0	9	0	0	0	0	0	12	9.6	0	0	4	0	0	0	0	0	4	4	0	0	2	0	1
0	6	0	0	0	0	0	7	6.2	0	0	4	0	1	0	0	0	5	5	0	0	4	0	1
0	6	0	3	0	0	0	9	9	0	0	5	1	1	0	0	0	7	7	0	0	1	0	0
0	9	0	3	0	0	0	12	12	0	0	8	0	3	0	0	0	11	11	0	0	2	2	0
0	30	0	6	0	0	0	40	36.8	0	0	21	1	5	0	0	0	27	27	0	0	9	2	2
0	16	0	1	1	0	0	21	19.1	0	0	10	0	0	0	0	0	10	10	0	0	2	0	0
0	14	0	0	0	0	0	14	14	0	0	9	0	0	0	0	0	9	9	0	0	0	0	0
0	6	0	0	0	0	0	6	6	0	0	7	2	0	0	0	0	9	9	0	0	3	0	1
0	14	0	2	0	0	0	16	16	0	0	6	1	0	0	0	0	7	7	0	0	2	0	0
0	50	0	3	1	0	0	57	55.1	0	0	32	3	0	0	0	0	35	35	0	0	7	0	1
0	14	0	2	1	0	0	18	17.7	0	0	12	0	0	1	0	0	13	13.5	0	0	2	0	0
0	10	0	0	0	0	0	11	10.2	0	1	7	0	1	0	0	0	9	8.4	0	0	2	0	0
0	7	0	0	1	0	0	8	8.5	0	0	19	0	1	0	0	0	20	20	0	0	7	0	0
0	14	0	0	0	0	0	14	14	0	0	15	0	3	0	0	0	18	18	0	0	3	0	0
0	45	0	2	2	0	0	51	50.4	0	1	53	0	5	1	0	0	60	59.9	0	0	14	0	0
1	11	0	0	0	0	0	12	11.4	0	0	8	0	0	1	0	0	9	9.5	0	0	4	0	0
0	8	0	1	1	1	0	11	12.8	0	0	9	0	1	0	0	0	10	10	0	0	8	0	0
0	10	0	0	0	0	0	10	10	0	0	13	1	1	0	0	0	15	15	0	0	2	0	0
0	7	0	1	0	0	0	8	8	0	0	11	1	0	0	0	0	12	12	0	0	4	0	0
1	36	0	2	1	1	0	41	42.2	0	0	41	2	2	1	0	0	46	46.5	0	0	18	0	0
0	8	0	1	0	0	0	10	9.2	0	0	11	1	2	0	0	0	14	14	0	0	2	0	0
0	12	0	0	2	0	0	14	15	0	0	17	1	1	1	0	0	20	20.5	1	0	3	0	1
0	8	0	1	0	0	0	9	9	0	0	16	1	0	0	0	0	17	17	0	0	3	0	0
0	9	0	1	0	0	0	10	10	0	0	14	1	0	0	0	0	15	15	0	0	2	0	0
0	37	0	3	2	0	0	43	43.2	0	0	58	4	3	1	0	0	66	66.5	1	0	10	0	1
0	8	0	0	0	0	0	8	8	0	0	11	1	3	0	0	0	15	15	0	0	6	0	1
0	8	0	2	1	0	0	11	11.5	0	0	10	0	1	0	0	0	11	11	0	0	2	0	0
0	13	0	1	0	0	0	14	14	0	1	20	0	1	0	0	0	22	21.4	0	0	3	0	0
1	18	1	0	0	0	0	20	19.4	0	0	9	0	0	1	0	0	10	10.5	0	0	1	0	0
1	47	1	3	1	0	0	53	52.9	0	1	50	1	5	1	0	0	58	57.9	0	0	12	0	1
0	12	0	0	0	0	1	13	13	0	0	22	0	1	0	0	0	23	23	0	0	6	0	1
0	15	1	5	1	0	0	22	22.5	0	0	14	0	0	0	0	0	14	14	0	0	3	0	1
0	24	0	1	1	0	0	26	26.5	0	0	16	0	0	0	0	0	16	16	0	0	4	0	0
0	18	1	4	1	0	0	24	24.5	0	0	8	0	2	0	0	0	10	10	0	0	7	0	0
0	69	2	10	3	0	1	85	86.5	0	0	60	0	3	0	0	0	63	63	0	0	20	0	2
0	29	0	4	0	0	0	33	33	0	0	20	0	1	0	0	0	21	21	0	0	8	0	0
0	36	0	6	0	0	0	42	42	0	0	24	0	2	0	1	0	27	28.3	0	0	3	0	0
0	30	1	6	0	0	0	37	37	0	0	14	0	2	0	0	0	16	16	1	0	7	0	1
0	28	1	2	0	0	0	38	32.4	0	0	21	0	0	0	0	0	21	21	0	0	3	0	1
0	123	2	18	0	0	0	150	144.4	0	0	79	0	5	0	1	0	85	86.3	1	0	21	0	2
0	27	1	3	0	0	0	31	31	0	0	26	1	0	0	0	0	27	27	0	0	4	0	0
0	29	0	2	0	0	0	34	31.6	0	0	19	0	1	0	0	0	20	20	0	0	5	0	0
0	18	0	1	0	0	0	20	19.2	0	0	13	1	0	0	0	0	14	14	0	0	5	0	1
0	24	1	2	0	0	0	29	27.4	0	0	14	0	0	0	0	0	14	14	1	0	2	0	0
0	98	2	8	0	0	0	114	109.2	0	0	72	2	1	0	0	0	75	75	1	0	16	0	1
2	704	7	64	11	1	2	822	802.8	8	5	624	20	46	6	2	0	711	707.2	3	0	177	3	15

					C => C										C => D								
OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3
0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
0	0	0	29	29	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12
0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	0	12
0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	6	0	2	0	0	0	8
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
1	0	0	8	8.5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
1	0	0	15	15.5	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7
0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	3	0	2	0	0	0	5
0	0	0	18	18	0	0	0	0	0	0	0	0	0	0	0	0	6	0	3	0	0	0	9
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
0	0	0	5	4.2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
0	0	0	12	11.2	0	0	0	0	0	0	0	0	0	0	0	0	8	1	1	0	0	0	10
0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
0	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	13
0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
0	0	0	22	22	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7
0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	6
0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	3
0	0	0	9	8.2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
0	0	0	24	23.2	0	0	0	0	0	0	0	0	0	0	1	0	11	0	3	0	0	0	15
0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	4
0	0	0	3	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	18	17.2	0	0	0	0	0	0	0	0	0	0	4	0	5	0	1	0	0	0	10
1	0	0	199	197.1	0	0	0	0	0	0	0	0	0	0	5	0	87	2	13	0	0	0	107

	D => A										D => B												
PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR
0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	1	0	0	8	8.5	0	0	1
0	0	0	5	0	0	0	0	0	5	5	1	0	8	0	2	0	0	0	11	10.2	0	0	2
1	0	0	9	0	0	0	0	0	9	9	1	0	20	0	3	0	0	0	24	23.2	0	0	2
2	0	0	8	0	1	0	0	0	9	9	0	0	41	0	3	0	0	0	44	44	0	0	2
3	0	0	22	0	1	0	0	0	23	23	2	0	75	0	9	1	0	0	87	85.9	0	0	7
4	1	0	24	0	0	1	0	0	26	25.7	0	0	45	0	3	0	0	0	48	48	0	0	1
1	0	0	44	0	1	0	0	0	45	45	0	0	36	0	9	0	0	0	45	45	0	0	3
2	1	0	55	0	0	0	0	0	56	55.2	0	0	42	0	10	0	0	1	53	53	0	0	5
5	0	0	35	0	1	0	0	0	36	36	0	0	39	0	4	1	0	0	44	44.5	0	0	4
12	2	0	158	0	2	1	0	0	163	161.9	0	0	162	0	26	1	0	1	190	190.5	0	0	13
4	1	0	13	0	1	0	0	0	15	14.2	0	0	35	0	4	0	0	0	39	39	0	0	6
3	0	0	4	0	0	0	0	0	4	4	0	0	16	0	2	0	0	0	18	18	0	0	2
3	0	0	4	0	1	0	0	0	5	5	2	0	8	0	0	0	0	0	10	8.4	0	0	8
2	0	0	9	0	0	0	0	0	9	9	1	0	17	1	3	1	0	0	23	22.7	0	0	3
12	1	0	30	0	2	0	0	0	33	32.2	3	0	76	1	9	1	0	0	90	88.1	0	0	19
0	0	0	8	1	0	0	0	0	9	9	1	0	5	0	2	0	0	0	8	7.2	0	0	1
1	0	0	3	0	3	0	0	0	6	6	0	0	13	0	0	0	0	0	13	13	0	0	1
0	1	0	5	0	0	0	0	0	6	5.2	0	0	3	0	0	0	0	0	3	3	0	0	0
0	1	0	6	0	1	0	0	0	8	7.2	2	0	9	0	0	2	0	0	13	12.4	0	0	2
1	2	0	22	1	4	0	0	0	29	27.4	3	0	30	0	2	2	0	0	37	35.6	0	0	4
2	1	0	8	0	0	0	0	0	9	8.2	1	0	7	0	0	0	0	0	8	7.2	0	0	1
1	0	0	14	0	0	1	0	1	16	16.5	0	0	8	0	0	0	0	0	8	8	0	0	3
2	0	0	8	0	1	0	0	0	9	9	0	0	12	1	0	0	0	0	13	13	0	0	3
3	0	0	16	0	1	0	0	0	17	17	0	0	5	0	0	0	0	0	5	5	0	0	1
8	1	0	46	0	2	1	0	1	51	50.7	1	0	32	1	0	0	0	0	34	33.2	0	0	8
1	0	0	21	0	1	1	0	0	23	23.5	0	0	12	0	1	0	0	0	13	13	1	0	1
2	0	0	16	0	0	0	0	0	16	16	0	0	7	0	0	0	0	0	7	7	0	0	4
2	0	0	12	0	0	0	1	0	13	14.3	0	0	4	0	0	1	0	0	5	5.5	0	0	2
2	0	0	21	1	0	0	0	0	22	22	0	0	14	0	1	0	0	0	15	15	0	0	3
7	0	0	70	1	1	1	1	0	74	75.8	0	0	37	0	2	1	0	0	40	40.5	1	0	10
1	0	0	13	0	0	0	0	0	13	13	0	0	14	0	0	0	0	0	14	14	0	0	4
2	0	0	18	0	1	0	0	0	19	19	0	0	14	0	0	0	0	0	14	14	0	0	1
1	0	0	6	0	1	0	0	0	7	7	0	0	11	0	0	0	0	0	11	11	0	0	0
5	0	0	21	0	3	0	0	0	24	24	0	0	14	0	1	0	0	0	15	15	0	0	0
9	0	0	58	0	5	0	0	0	63	63	0	0	53	0	1	0	0	0	54	54	0	0	5
5	0	0	23	0	0	0	0	0	23	23	0	0	17	0	0	0	0	0	17	17	0	0	5
1	0	0	18	1	1	0	0	0	20	20	0	0	14	0	3	1	0	0	18	18.5	0	0	3
2	0	0	16	1	0	0	0	0	17	17	0	0	9	0	1	0	0	0	10	10	0	0	1
2	0	0	14	0	1	0	1	0	16	17.3	0	0	12	0	0	0	0	0	12	12	0	0	4
10	0	0	71	2	2	0	1	0	76	77.3	0	0	52	0	4	1	0	0	57	57.5	0	0	13
3	1	0	9	0	0	0	0	0	10	9.2	0	0	11	0	0	0	0	0	11	11	0	0	1
4	1	0	15	0	0	0	0	0	16	15.2	0	0	11	0	2	0	0	0	13	13	0	0	4
2	0	0	17	1	0	0	0	0	18	18	0	0	10	0	0	0	0	1	11	11	0	0	3
4	0	0	12	0	0	0	0	0	12	12	0	0	14	0	4	0	0	0	18	18	0	0	0
13	2	0	53	1	0	0	0	0	56	54.4	0	0	46	0	6	0	0	1	53	53	0	0	8
0	0	0	13	0	0	0	0	2	15	15	0	0	14	1	2	1	0	0	18	18.5	0	0	3
3	0	0	11	0	0	1	0	0	12	12.5	0	0	15	0	1	0	0	0	16	16	0	0	2
2	0	0	17	0	0	0	1	0	18	19.3	1	0	16	0	1	0	0	0	18	17.2	0	0	2
2	0	1	18	1	0	0	0	0	20	19.4	0	0	17	1	0	0	0	0	18	18	0	0	0
7	0	1	59	1	0	1	1	2	65	66.2	1	0	62	2	4	1	0	0	70	69.7	0	0	7
6	0	0	14	0	0	0	0	0	14	14	0	0	15	0	1	1	0	0	17	17.5	0	0	3
2.2	0	0	15	0	0	0	0	0	15	15	0	0	14	0	0	1	0	0	15	15.5	0	0	1
2	0	0	9	0	0	0	0	0	9	9	0	0	10	2	2	0	0	0	14	14	0	0	2
4	0	0	16	0	0	0	0	0	16	16	0	0	13	0	0	0	0	0	13	13	0	0	0
14.2	0	0	54	0	0	0	0	0	54	54	0	0	52	2	3	2	0	0	59	60	0	0	6
4	1	0	18	2	0	0	0	0	21	20.2	0	0	17	1	1	0	0	0	19	19	0	0	4
1.2	0	0	19	0	0	0	0	0	19	19	0	0	24	0	1	0	0	0	25	25	0	0	0
1.6	0	1	16	0	0	0	0	0	17	16.4	11	0	8	0	0	0	0	0	19	10.2	0	0	4
0	0	0	10	0	0	0	0	0	10	10	0	0	11	1	0	0	0	0	12	12	0	0	3
6.8	1	1	63	2	0	0	0	0	67	65.6	11	0	60	2	2	0	0	0	75	66.2	0	0	11
103	9	2	706	8	19	4	3	3	754	751.5	21	0	737	8	68	10	0	2	846	834.2	1	0	111

D => C							D => D									
TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU
0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2	1.2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	12	11.2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0
0	11	0	0	0	123	122.2	0	0	0	0	0	0	0	0	0	0

IDASO

Survey Name: HDR 21 043 South Dublin
Site: Site 13
Location: Blackglen Rd / Ticknock Rd
Date: Thu 07-Nov-2019

	A => A										A => B												
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR
07:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	13
07:15	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	1	0	19
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	31
07:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	0	0	44
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	9	0	2	0	0	0	11	11	2	0	107
08:00	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	1	0	52
08:15	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	0	79
08:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	71
08:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	60
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16	16	1	0	262
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
09:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	2.5	0	0	53
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	63
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	2.5	0	1	208
10:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	37
10:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	6	6	0	0	33
10:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	35
10:45	0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	0	0	0	5	5	0	0	30
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	10	1	4	0	0	0	15	15	0	0	135
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	38
11:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4	4	0	0	37
11:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	32
11:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	3.3	0	0	32
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	1	1	8	9.3	0	0	139
12:00	0	0	1	0	0	0	0	0	1	1	0	0	4	0	0	0	0	0	4	4	0	0	40
12:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	42
12:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	1	0	39
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
H/TOT	0	0	1	0	0	0	0	0	1	1	0	0	8	0	0	0	0	0	8	8	1	0	155
13:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	0	44
13:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6	6	0	0	45
13:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	42
13:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	29
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	11	0	2	0	0	0	13	13	0	0	160
14:00	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	47
14:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	49
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
14:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5	5	0	0	37
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	0	12	12	0	0	191
15:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	2.5	0	0	54
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2	0	0	46
15:30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	1	0	0	7	7.5	0	0	48
15:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	68
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	11	0	3	2	0	0	16	17	0	0	216
16:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	1	1	49
16:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	79
16:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	89
16:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	117
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	1	1	334
17:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	2	0	0	0	6	6	0	0	121
17:15	0	0	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	0	8	8	0	0	84
17:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	0	0	79
17:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	1	1	81
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	20	0	3	0	0	0	23	23	1	1	365
18:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	1	64
18:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	63
18:30	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	4	3.2	1	0	59
18:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	1	62
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	11	0	0	0	0	0	12	11.2	1	2	248
12 TOT	0	0	1	0	0	0	0	0	1	1	1	0	121	1	16	3	1	1	144	146	7	5	2520

A => C							B => A										B => B							
TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2
0	3	0	0	0	16	16	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0
0	2	0	0	1	23	22.2	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0
1	5	0	0	0	38	37.2	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0
2	4	1	0	0	51	51.5	0	0	5	0	1	0	0	0	6	6	0	0	0	0	0	0	0
3	14	1	0	1	128	126.9	0	0	9	0	2	0	0	0	11	11	0	0	0	0	0	0	0
1	5	0	0	0	59	58.2	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0
0	4	0	0	0	83	83	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0
1	3	0	0	1	76	76	0	0	8	0	0	0	0	0	8	8	0	0	0	0	0	0	0
2	4	1	0	0	67	67.5	1	0	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0
4	16	1	0	1	285	284.7	1	0	12	0	0	0	0	0	13	12.2	0	0	0	0	0	0	0
0	5	2	0	0	58	59	0	0	5	0	0	0	0	0	5	5	0	0	0	0	0	0	0
2	3	0	0	0	58	58	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0
2	3	2	0	0	71	71.4	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0
0	5	1	0	1	48	48.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0
4	16	5	0	1	235	236.9	0	0	12	0	0	0	0	0	12	12	0	0	0	0	0	0	0
0	2	1	1	1	42	43.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	34	34	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0
1	6	0	0	1	43	43	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2	5	1	0	0	38	38.5	0	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0
4	13	2	1	2	157	159.3	0	0	1	0	3	0	0	0	4	4	0	0	0	0	0	0	0
2	5	0	0	0	45	45	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0
0	7	3	0	1	48	49.5	0	0	3	0	0	0	0	1	4	4	0	0	0	0	0	0	0
2	7	1	0	1	43	43.5	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0
0	2	0	0	0	34	34	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4	21	4	0	2	170	172	0	0	8	0	1	0	0	1	10	10	0	0	0	0	0	0	0
0	4	1	0	0	45	45.5	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0
5	4	0	0	0	51	51	0	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0
1	3	1	0	0	45	44.7	0	0	7	0	0	0	0	0	7	7	0	0	0	0	0	0	0
0	4	2	0	0	40	41	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0
6	15	4	0	0	181	182.2	0	0	10	0	0	0	1	0	11	12.3	0	0	0	0	0	0	0
0	4	0	0	1	49	49	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0
1	3	3	0	0	52	53.5	0	0	2	0	2	0	0	0	4	4	0	0	0	0	0	0	0
0	3	1	0	0	46	46.5	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0
1	3	0	0	1	34	34	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0
2	13	4	0	2	181	183	0	0	8	0	4	0	0	0	12	12	0	0	0	0	0	0	0
1	9	0	0	1	58	58	0	0	3	0	0	1	0	0	4	4.5	0	0	0	0	0	0	0
0	6	0	0	0	55	55	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0
0	4	0	0	0	62	62	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0
0	3	1	0	0	41	41.5	0	0	1	0	1	1	0	0	3	3.5	0	0	0	0	0	0	0
1	22	1	0	1	216	216.5	0	0	7	0	1	2	0	0	10	11	0	0	0	0	0	0	0
0	3	1	0	0	58	58.5	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0
2	6	0	1	0	55	56.3	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0
0	5	0	1	0	54	55.3	0	0	3	0	2	0	0	1	6	6	0	0	0	0	0	0	0
0	5	0	0	1	74	74	0	0	3	0	0	1	0	0	4	4.5	0	0	0	0	0	0	0
2	19	1	2	1	241	244.1	0	0	11	0	3	1	0	1	16	16.5	0	0	0	0	0	0	0
1	3	0	0	1	56	54.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	5	0	0	0	84	84	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0
4	12	0	0	0	105	105	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0
1	20	1	1	0	140	141.8	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0
6	40	1	1	1	385	385.4	0	0	7	0	2	0	0	0	9	9	0	0	0	0	0	0	0
1	16	0	0	0	138	138	0	0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0
0	12	0	0	0	96	96	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0
0	4	0	0	0	83	83	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0
0	2	1	0	1	87	86.1	0	0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0
1	34	1	0	1	404	403.1	0	0	8	0	1	0	0	0	9	9	0	0	0	0	0	0	0
0	1	0	0	0	66	65.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	63	63	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0
0	3	0	0	0	63	62.2	0	0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0
0	0	0	0	0	63	62.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	4	0	0	0	255	253	0	0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0
37	227	25	4	13	2838	2847.1	1	0	96	0	18	3	1	2	121	123	0	0	0	0	0	0	0

			B => C										C => A									
'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	2	1	0	0	22	22.5	0
0	0	0	0	0	1	0	0	2	0	0	3	4	0	0	37	0	2	0	0	1	40	40	0
0	0	0	0	0	0	0	0	4	0	0	4	6	0	0	41	1	3	0	1	1	47	48.3	0
0	0	0	0	0	0	0	0	2	0	0	2	3	1	1	75	1	2	1	0	0	81	80.1	0
0	0	0	0	0	1	0	0	8	0	0	9	13	1	1	172	2	9	2	1	2	190	190.9	0
0	0	0	0	0	3	0	1	0	0	0	4	4	0	0	86	0	12	0	1	0	99	100.3	0
0	0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	83	0	2	0	1	0	86	87.3	0
0	0	0	0	0	1	0	0	0	1	0	2	3.3	2	1	97	3	5	1	0	0	109	107.3	0
0	0	0	0	0	2	0	0	0	0	0	2	2	0	1	105	0	12	1	0	2	121	120.9	0
0	0	0	0	0	6	0	1	1	1	0	9	10.8	2	2	371	3	31	2	2	2	415	415.8	0
0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	79	2	12	2	0	1	97	97.4	0
0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	117	1	10	1	0	0	129	129.5	0
0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	56	3	5	2	0	1	67	68	0
0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	46	2	2	3	0	0	53	54.5	0
0	0	0	0	0	3	0	2	0	0	0	5	5	0	1	298	8	29	8	0	2	346	349.4	0
0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	39	1	3	0	0	0	43	43	0
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0	0	0	0	0	2	0	0	1	0	0	3	3.5	0	0	30	0	9	2	0	0	41	42	0
0	0	0	0	0	3	0	1	1	0	0	5	5.5	0	0	128	7	18	2	0	1	156	157	0
0	0	0	0	0	4	0	1	0	0	0	5	5	0	0	42	1	4	1	0	0	48	48.5	0
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0	0	0	0	0	3	0	1	1	0	0	5	5.5	0	0	27	1	9	0	0	0	37	37	0
0	0	0	0	0	4	0	0	0	1	0	5	6.3	0	0	46	1	4	2	0	0	53	54	0
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0	0	0	0	0	11	0	2	1	1	0	15	16.8	0	0	166	4	20	2	0	0	192	193	0
0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	53	1	2	2	0	0	58	59	0
0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	35	1	4	2	0	1	43	44	0
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0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	42	1	4	0	0	0	47	47	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	1	6	0	0	1	59	59	0
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0	0	0	0	0	5	0	1	0	0	0	6	6	0	0	195	2	16	1	0	1	215	215.5	0
0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	58	1	6	0	0	0	65	65	0
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0	0	0	0	0	2	0	1	0	0	0	3	3	0	0	52	0	6	0	0	1	59	59	0
0	0	0	0	0	2	0	2	0	0	0	4	4	0	0	53	0	10	0	0	1	64	64	0
0	0	0	0	0	10	0	3	0	0	0	13	13	0	0	221	4	26	1	0	3	255	255.5	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	0	8	0	0	1	72	72	0
0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	58	1	9	2	0	0	70	71	0
0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	69	2	4	0	0	0	75	75	0
0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	62	4	7	0	0	0	73	73	0
0	0	0	0	0	3	0	1	0	0	0	4	4	0	0	252	7	28	2	0	1	290	291	0
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0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	48	0	2	0	0	0	50	50	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	72	0	5	0	0	0	78	77.2	0
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	58	0	5	1	0	0	65	64.7	0
0	0	0	0	0	1	0	1	0	0	0	2	2	0	0	61	0	5	0	0	0	66	66	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	0	5	0	0	0	60	60	0
0	0	0	0	0	1	0	1	0	0	0	2	2	2	0	246	0	20	1	0	0	269	267.9	0
0	0	0	0	0	65	2	15	12	2	0	96	104.6	5	5	2635	43	244	27	4	14	2977	2988.7	0

C => B									C => C									
M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU
0	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	4	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	3	0	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	11	0	2	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0
0	1	0	1	0	1	0	3	4.3	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	4	0	1	0	1	0	6	7.3	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	3	0	0	1	0	0	4	4.5	0	0	0	0	0	0	0	0	0	0
0	7	0	1	1	0	0	9	9.5	0	0	0	0	0	0	0	0	0	0
0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	4	0	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
0	4	0	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0	0
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0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	7	0	2	0	1	0	10	11.3	0	0	0	0	0	0	0	0	0	0
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0	1	0	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0
0	4	0	0	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	3	0	0	3	4.5	0	0	0	0	0	0	0	0	0	0
0	1	0	1	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0	0
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0	1	0	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0
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0	4	0	2	1	0	0	7	7.5	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	1	0	1	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0	0
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0	6	0	1	1	0	1	9	9.5	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0	0
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0	1	0	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0	0
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0	2	0	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
0	4	0	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	2	0	0	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
0	4	0	0	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0	0
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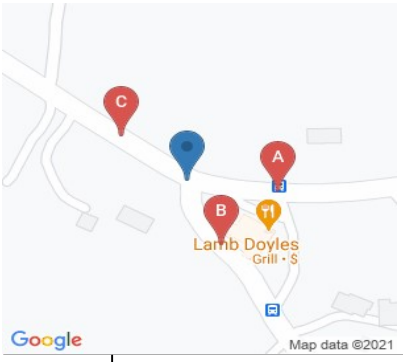


IDASO

Survey Name: HDR 21 043 South Dublin
Site: 6485
Location: R113 Blackglen Road/Woodside Road/R113 Blackgen Road
Date: Tue 18-Jun-2019

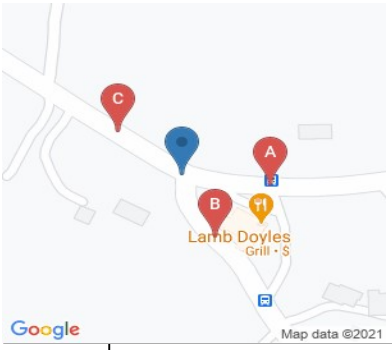
	A => A										A => B								
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
07:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
08:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**
08:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**
08:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**
08:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
09:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	3
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
09:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
09:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
10:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
11:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5
11:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
11:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
11:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
12:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
12:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
12:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
12:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5
13:00	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
13:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
14:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
15:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
15:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3
15:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4
15:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	6
16:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3
16:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
16:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8
17:00	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6
17:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**0**	**0**	**1**	**6**
17:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**7**
17:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**6**	**0**	**1**	**0**	**0**	**0**	**9**
18:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**
18:15	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5
18:30	0	0	0	0	0	0	0	0	0	0	0	1	3	1	0	0	0	0	5
18:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	4
12 TOT	0	0	0	0	0	0	0	0	0	0	2	2	111	3	14	2	0	4	138

	A => C										B => A								
PCU	**P/C**	**M/C**	**CAR**	**TAXI**	**LGV**	**OGV1**	**OGV2**	**'SV(BUS**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**TAXI**	**LGV**	**OGV1**	**OGV2**	**'SV(BUS**	**TOT**
0	1	0	14	0	4	0	0	1	20	19.2	0	0	2	0	1	1	1	0	5
0	2	0	26	0	4	1	0	0	33	31.9	0	0	1	0	1	0	0	1	3
1	2	0	31	0	4	1	0	0	38	36.9	0	0	2	0	0	0	0	0	2
1	**0**	**1**	**47**	**1**	**4**	**0**	**1**	**0**	**54**	**54.7**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**
1	**0**	**0**	**48**	**0**	**2**	**0**	**0**	**0**	**50**	**50**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2	**0**	**1**	**48**	**0**	**4**	**0**	**0**	**1**	**54**	**53.4**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**1**	**5**
2	**1**	**0**	**53**	**1**	**3**	**2**	**0**	**0**	**60**	**60.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2	0	0	42	2	4	1	0	0	49	49.5	0	0	2	0	2	0	0	0	4
3	0	0	69	1	2	1	0	0	73	73.5	0	0	5	0	0	0	0	0	5
1.5	5	0	53	4	5	1	0	0	68	64.5	0	0	2	0	0	0	0	0	2
1	1	0	56	2	7	0	0	1	67	66.2	0	0	3	0	0	0	0	1	4
2	0	0	46	0	6	0	0	0	52	52	0	0	3	0	0	0	0	0	3
2	0	0	45	1	1	3	0	0	50	51.5	0	0	1	0	0	1	0	0	2
1	1	0	45	2	7	2	0	2	59	59.2	0	0	0	1	1	1	0	0	3
0	2	0	38	1	7	1	1	1	51	51.2	0	0	0	0	0	0	0	0	0
4	0	0	56	0	2	2	0	0	60	61	0	0	2	0	0	0	0	0	2
5	0	0	44	1	4	1	0	0	50	50.5	0	0	2	0	0	0	0	0	2
3	0	0	46	3	6	0	0	0	55	55	0	0	1	0	0	0	0	0	1
3	0	0	37	1	7	0	0	0	45	45	0	0	3	1	0	0	0	0	4
4	0	0	47	1	5	2	0	1	56	57	0	0	0	0	0	0	0	0	0
1	1	0	46	2	7	0	0	0	56	55.2	0	0	0	0	0	0	0	0	0
2	2	0	49	2	4	2	0	1	60	59.4	0	0	0	0	0	0	0	0	0
2	0	0	57	0	11	2	0	0	70	71	0	0	0	0	0	0	0	0	0
5	0	0	52	1	2	0	0	0	55	55	0	0	0	0	0	0	0	0	0
7	2	0	54	1	5	1	0	0	63	61.9	0	0	5	0	0	0	0	0	5
0	0	0	50	1	5	1	0	1	58	58.5	0	0	2	0	0	0	0	0	2
2	0	0	52	2	2	0	0	1	57	57	0	0	1	0	0	0	0	0	1
3	0	0	64	1	5	1	0	0	71	71.5	1	0	3	0	0	0	0	0	4
0	0	0	55	0	3	1	0	0	59	59.5	0	0	2	0	0	1	0	0	3
0	1	0	46	1	2	2	0	1	53	53.2	0	0	2	0	1	0	0	0	3
1	0	0	68	3	4	1	0	0	76	76.5	0	0	2	0	0	0	0	0	2
3	1	0	76	2	4	1	0	1	85	84.7	0	0	2	0	0	0	0	0	2
3	0	1	70	1	8	0	0	0	80	79.4	0	0	3	0	0	0	0	0	3
3	0	0	71	0	5	1	0	1	78	78.5	0	0	4	0	0	0	0	0	4
4	0	2	76	1	13	0	1	0	93	93.1	0	0	1	0	0	0	0	0	1
6	3	0	68	0	8	1	0	0	80	78.1	0	1	0	0	0	0	0	0	1
3.5	0	0	69	1	9	0	0	0	79	79	0	0	1	0	1	0	0	0	2
3	1	2	82	2	6	1	0	0	94	92.5	0	0	0	0	0	0	0	0	0
1	0	0	93	1	11	6	0	1	112	115	0	0	2	0	0	0	0	0	2
8	0	1	80	1	8	2	0	0	92	92.4	0	0	0	0	1	0	0	0	1
6	3	0	91	0	6	0	0	0	100	97.6	0	0	0	0	0	0	0	0	0
5.2	**2**	**1**	**84**	**1**	**6**	**1**	**0**	**1**	**96**	**94.3**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**3**
7	**1**	**1**	**83**	**2**	**5**	**3**	**0**	**0**	**95**	**95.1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**2**
7.6	**0**	**4**	**97**	**1**	**2**	**4**	**0**	**0**	**108**	**107.6**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**
1	**4**	**0**	**90**	**0**	**5**	**1**	**0**	**0**	**100**	**97.3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**
5	3	1	76	0	4	0	0	1	85	82	0	0	1	1	0	0	0	1	3
4.4	2	1	82	0	4	1	0	0	90	88.3	0	0	0	0	0	0	0	0	0
4	2	0	74	3	2	0	0	0	81	79.4	0	0	0	0	0	0	0	0	0
136.2	43	16	2846	51	244	51	3	16	3270	3255.4	1	1	72	3	9	5	1	4	96

	B => B										B => C								
PCU	**P/C**	**M/C**	**CAR**	**TAXI**	**LGV**	**OGV1**	**OGV2**	**'SV(BUS**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**TAXI**	**LGV**	**OGV1**	**OGV2**	**'SV(BUS**	**TOT**
6.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	1	0	2	0	1	0	0	0	4
2	0	0	0	0	0	0	0	0	0	0	1	0	3	0	2	0	0	0	6
2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**3**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**2**	**0**	**0**	**0**	**7**
5	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**5**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**3**	**1**	**0**	**0**	**10**
4	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7
5	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	1	0	0	7
2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
4	0	0	0	0	0	0	0	0	0	0	1	0	6	0	1	0	0	0	8
3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3
2.5	0	0	0	0	0	0	0	0	0	0	1	0	5	0	1	0	0	0	7
3.5	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
2	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	4
1	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6
4	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	1	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	2	0	0	0	5
5	0	0	0	0	0	0	0	0	0	0	1	0	3	0	2	0	1	0	7
2	0	0	0	0	0	0	0	0	0	0	0	1	7	0	0	0	0	0	8
1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3
3.2	0	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	0	5
3.5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3	0	0	0	0	0	0	0	0	0	0	2	0	7	0	1	0	0	0	10
2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5
2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	4
0.4	0	0	0	0	0	0	0	0	0	0	1	0	6	0	1	0	0	0	8
2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	2	1	0	0	6
0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
2	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	3
1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	1	0	0	0	8
3.5	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**4**
2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**1**	**0**	**0**	**0**	**6**
2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**5**
1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**6**
3	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	8
0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	4	1	4	0	0	0	0	0	9
98.4	0	0	0	0	0	0	0	0	0	0	28	3	167	3	27	5	1	0	234

	C => A										C => B								
PCU	**P/C**	**M/C**	**CAR**	**TAXI**	**LGV**	**OGV1**	**OGV2**	**SV(BUS**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**TAXI**	**LGV**	**OGV1**	**OGV2**	**SV(BUS**	**TOT**
0	1	0	53	1	2	0	0	1	58	57.2	0	0	0	0	0	0	0	0	0
3.2	4	0	93	0	10	2	0	0	109	106.8	0	0	0	0	0	0	0	0	0
5.2	1	0	100	1	8	0	0	0	110	109.2	0	0	3	0	0	0	0	0	3
3	**0**	**1**	**113**	**1**	**10**	**1**	**0**	**1**	**127**	**126.9**	**1**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**8**
6.2	**3**	**3**	**137**	**2**	**10**	**1**	**0**	**0**	**156**	**152.3**	**2**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**5**
5	**1**	**2**	**128**	**3**	**4**	**0**	**0**	**1**	**139**	**137**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**11**
10.5	**1**	**2**	**145**	**3**	**8**	**1**	**0**	**1**	**161**	**159.5**	**0**	**0**	**15**	**0**	**1**	**1**	**0**	**0**	**17**
7	1	1	107	2	3	1	0	0	115	114.1	0	0	13	0	0	0	0	0	13
7.5	0	1	80	3	7	0	0	0	91	90.4	0	0	1	0	0	0	0	0	1
2	0	1	59	3	6	0	0	0	69	68.4	0	0	0	0	1	0	0	0	1
7.2	2	0	52	0	5	1	0	1	61	59.9	0	0	1	0	0	0	0	0	1
3	6	0	52	1	5	1	0	0	65	60.7	0	0	2	0	0	0	0	0	2
6.2	0	0	58	2	6	1	0	1	68	68.5	2	0	4	0	0	0	0	0	6
4	0	0	47	0	4	0	0	1	52	52	0	0	1	0	1	0	0	0	2
2	1	0	49	2	6	1	0	1	60	59.7	0	0	0	0	0	0	0	0	0
2	4	0	34	3	8	0	0	0	49	45.8	0	0	2	0	2	0	0	0	4
3.2	0	0	49	1	4	1	0	0	55	55.5	0	0	4	0	0	0	0	0	4
6	1	0	44	2	8	2	0	0	57	57.2	0	0	3	0	0	0	0	0	3
2	0	0	36	0	3	3	0	1	43	44.5	0	0	3	1	0	0	0	0	4
3.2	1	0	66	1	4	2	0	0	74	74.2	0	0	7	0	0	0	0	0	7
0	1	0	48	0	0	1	0	0	50	49.7	0	0	6	0	2	0	0	0	8
3.4	0	0	63	1	5	1	0	1	71	71.5	0	1	4	0	1	0	0	0	6
3.4	0	0	47	0	5	1	0	1	54	54.5	0	0	2	0	1	0	0	0	3
5	1	0	58	2	1	2	0	0	64	64.2	0	0	6	1	0	0	0	0	7
7.5	0	0	61	3	4	1	0	0	69	69.5	0	0	3	0	1	1	0	0	5
7.4	0	0	50	4	3	1	1	2	61	62.8	0	0	9	0	0	1	0	0	10
3.5	0	1	55	0	7	1	0	1	65	64.9	0	0	3	0	1	0	0	0	4
4.2	1	0	51	0	7	1	0	1	61	60.7	0	0	6	0	1	1	0	0	8
1	0	0	71	2	8	1	0	0	82	82.5	0	0	4	0	0	0	0	0	4
8.4	0	0	60	0	7	0	0	1	68	68	0	0	6	0	4	0	0	0	10
5	1	0	54	0	4	1	0	0	60	59.7	0	0	4	0	2	0	0	0	6
3	1	0	52	2	2	0	1	0	58	58.5	0	0	4	0	0	0	0	0	4
3	0	0	50	3	2	0	0	1	56	56	0	1	3	0	1	0	0	0	5
1	1	3	47	0	3	1	1	1	57	56.2	0	0	5	0	0	0	0	0	5
4.5	1	0	37	2	6	1	0	1	48	47.7	0	0	4	0	1	0	0	0	5
7.2	1	0	55	1	4	0	0	0	61	60.2	0	0	5	0	0	0	0	0	5
6.5	0	1	56	1	8	1	0	0	67	66.9	0	0	4	0	0	0	0	0	4
5	0	0	63	2	2	1	0	0	68	68.5	0	1	0	0	1	0	0	0	2
2.2	1	0	72	1	5	0	1	0	80	80.5	0	0	4	1	2	0	0	0	7
3	1	0	85	2	8	3	0	1	100	100.7	0	0	5	0	2	0	0	0	7
8	1	0	62	0	10	0	0	0	73	72.2	2	0	3	1	1	0	0	0	7
2.4	**1**	**0**	**61**	**3**	**5**	**0**	**0**	**0**	**70**	**69.2**	**0**	**0**	**2**	**0**	**2**	**1**	**0**	**0**	**5**
6	**4**	**0**	**82**	**3**	**7**	**0**	**0**	**1**	**97**	**93.8**	**2**	**0**	**5**	**0**	**2**	**1**	**0**	**0**	**10**
4.2	**2**	**0**	**73**	**1**	**7**	**1**	**0**	**0**	**84**	**82.9**	**2**	**0**	**5**	**1**	**1**	**0**	**0**	**0**	**9**
5.4	**1**	**0**	**90**	**0**	**4**	**1**	**0**	**0**	**96**	**95.7**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**11**
4.8	1	0	54	1	2	0	0	0	58	57.2	3	1	7	0	0	0	0	0	11
5	2	1	66	1	4	0	0	1	75	72.8	0	1	5	0	1	0	0	0	7
5.2	1	0	83	3	2	0	0	0	89	88.2	0	0	4	0	2	0	0	0	6
213.6	50	17	3208	69	253	38	4	22	3661	3635	14	5	209	5	34	6	0	0	273

	C => C									
PCU	**P/C**	**M/C**	**CAR**	**TAXI**	**LGV**	**OGV1**	**OGV2**	**'SV(BUS**	**TOT**	**PCU**
0	0	0	1	0	0	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0
3	0	0	1	0	0	0	0	0	1	1
7.2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
3.4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
11	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
17.5	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
4.4	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0
5.4	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
5.5	0	0	0	0	0	0	0	0	0	0
10.5	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
8.5	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
4.4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
1.4	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
5.4	0	0	0	0	0	0	0	0	0	0
5.5	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8.9	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7.4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
11	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8	0	0	0	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
261.8	0	0	2	0	0	0	0	0	2	2



IDASO

Survey Name: HDR 21 043 South Dublin
Site: 6485
Location: R113 Blackglen Road/Woodside Road/R113 Blackgen Road
Date: Tue 18-Jun-2019

	A => A										A => B									
TIME	**P/C**	**M/C**	**CAR**	**TAXI**	**LGV**	**OGV1**	**OGV2**	**'SV(BUS**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**TAXI**	**LGV**	**OGV1**	**OGV2**	**'SV(BUS**	**TOT**
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
07:45	0	0	0	0	0	0	0	0	**0**	**0**	0	0	0	0	0	0	0	2	**2**
08:00	0	0	0	0	0	0	0	0	**0**	**0**	0	0	1	0	0	0	0	0	**1**
08:15	0	0	0	0	0	0	0	0	**0**	**0**	0	0	2	0	0	0	0	0	**2**
08:30	0	0	0	0	0	0	0	0	**0**	**0**	0	0	2	0	0	0	0	0	**2**
08:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
09:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	4
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5	0	0	1.5
09:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
09:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
10:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
11:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5
11:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
11:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
11:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
12:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
12:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
12:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
12:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	5
13:00	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	7
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
13:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
14:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
15:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
15:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3
15:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	4
15:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	2	7
16:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1.5	0	0	3.5
16:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
16:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8
17:00	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	0	6
17:15	0	0	0	0	0	0	0	0	**0**	**0**	0.2	0	4	0	0	0	0	2	**6.2**
17:30	0	0	0	0	0	0	0	0	**0**	**0**	0	0	7	0	0	0	0	0	**7**
17:45	0	0	0	0	0	0	0	0	**0**	**0**	0.2	0.4	6	0	1	0	0	0	**7.6**
18:00	0	0	0	0	0	0	0	0	**0**	**0**	0	0	1	0	0	0	0	0	**1**
18:15	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5
18:30	0	0	0	0	0	0	0	0	0	0	0	0.4	3	1	0	0	0	0	4.4
18:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	4
12 TOT	0	0	0	0	0	0	0	0	0	0	0.4	0.8	111	3	14	3	0	8	140.2

P/C	M/C	CAR	TAXI	LGV	OGV 1	OGV 2	PSV
0.2	0.4	1	1	1	1.5	2.3	2

	A => C										B => A									
PCU	**P/C**	**M/C**	**CAR**	**TAXI**	**LGV**	**OGV1**	**OGV2**	**'SV(BUS**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**TAXI**	**LGV**	**OGV1**	**OGV2**	**'SV(BUS**	**TOT**	**PCU**
0	0.2	0	14	0	4	0	0	2	20.2	20.04	0	0	2	0	1	1.5	2.3	0	6.8	10.54
0	0.4	0	26	0	4	1.5	0	0	31.9	32.33	0	0	1	0	1	0	0	2	4	4
1	0.4	0	31	0	4	1.5	0	0	36.9	37.33	0	0	2	0	0	0	0	0	2	2
2	0	0.4	47	1	4	0	2.3	0	**54.7**	**57.45**	0	0	2	0	0	0	0	0	**2**	**2**
1	0	0	48	0	2	0	0	0	**50**	**50**	0	0	0	0	0	0	0	0	**0**	**0**
2	0	0.4	48	0	4	0	0	2	**54.4**	**54.16**	0	0	4	0	0	0	0	2	**6**	**6**
2	0.2	0	53	1	3	3	0	0	**60.2**	**61.54**	0	0	0	0	0	0	0	0	**0**	**0**
2	0	0	42	2	4	1.5	0	0	49.5	50.25	0	0	2	0	2	0	0	0	4	4
4	0	0	69	1	2	1.5	0	0	73.5	74.25	0	0	5	0	0	0	0	0	5	5
2.25	1	0	53	4	5	1.5	0	0	64.5	64.45	0	0	2	0	0	0	0	0	2	2
1	0.2	0	56	2	7	0	0	2	67.2	67.04	0	0	3	0	0	0	0	2	5	5
2	0	0	46	0	6	0	0	0	52	52	0	0	3	0	0	0	0	0	3	3
2	0	0	45	1	1	4.5	0	0	51.5	53.75	0	0	1	0	0	1.5	0	0	2.5	3.25
1	0.2	0	45	2	7	3	0	4	61.2	62.54	0	0	0	1	1	1.5	0	0	3.5	4.25
0	0.4	0	38	1	7	1.5	2.3	2	52.2	55.62	0	0	0	0	0	0	0	0	0	0
4	0	0	56	0	2	3	0	0	61	62.5	0	0	2	0	0	0	0	0	2	2
5	0	0	44	1	4	1.5	0	0	50.5	51.25	0	0	2	0	0	0	0	0	2	2
3	0	0	46	3	6	0	0	0	55	55	0	0	1	0	0	0	0	0	1	1
3	0	0	37	1	7	0	0	0	45	45	0	0	3	1	0	0	0	0	4	4
4	0	0	47	1	5	3	0	2	58	59.5	0	0	0	0	0	0	0	0	0	0
1	0.2	0	46	2	7	0	0	0	55.2	55.04	0	0	0	0	0	0	0	0	0	0
2	0.4	0	49	2	4	3	0	2	60.4	61.58	0	0	0	0	0	0	0	0	0	0
2	0	0	57	0	11	3	0	0	71	72.5	0	0	0	0	0	0	0	0	0	0
5	0	0	52	1	2	0	0	0	55	55	0	0	0	0	0	0	0	0	0	0
7	0.4	0	54	1	5	1.5	0	0	61.9	62.33	0	0	5	0	0	0	0	0	5	5
0	0	0	50	1	5	1.5	0	2	59.5	60.25	0	0	2	0	0	0	0	0	2	2
2	0	0	52	2	2	0	0	2	58	58	0	0	1	0	0	0	0	0	1	1
3	0	0	64	1	5	1.5	0	0	71.5	72.25	0.2	0	3	0	0	0	0	0	3.2	3.04
0	0	0	55	0	3	1.5	0	0	59.5	60.25	0	0	2	0	0	1.5	0	0	3.5	4.25
0	0.2	0	46	1	2	3	0	2	54.2	55.54	0	0	2	0	1	0	0	0	3	3
1	0	0	68	3	4	1.5	0	0	76.5	77.25	0	0	2	0	0	0	0	0	2	2
3	0.2	0	76	2	4	1.5	0	2	85.7	86.29	0	0	2	0	0	0	0	0	2	2
3	0	0.4	70	1	8	0	0	0	79.4	79.16	0	0	3	0	0	0	0	0	3	3
3	0	0	71	0	5	1.5	0	2	79.5	80.25	0	0	4	0	0	0	0	0	4	4
4	0	0.8	76	1	13	0	2.3	0	93.1	95.61	0	0	1	0	0	0	0	0	1	1
7	0.6	0	68	0	8	1.5	0	0	78.1	78.37	0	0.4	0	0	0	0	0	0	0.4	0.16
4.25	0	0	69	1	9	0	0	0	79	79	0	0	1	0	1	0	0	0	2	2
3	0.2	0.8	82	2	6	1.5	0	0	92.5	92.61	0	0	0	0	0	0	0	0	0	0
1	0	0	93	1	11	9	0	2	116	120.5	0	0	2	0	0	0	0	0	2	2
8	0	0.4	80	1	8	3	0	0	92.4	93.66	0	0	0	0	1	0	0	0	1	1
6	0.6	0	91	0	6	0	0	0	97.6	97.12	0	0	0	0	0	0	0	0	0	0
6.04	0.4	0.4	84	1	6	1.5	0	2	**95.3**	**95.49**	0	0	2	0	0	1.5	0	0	**3.5**	**4.25**
7	0.2	0.4	83	2	5	4.5	0	0	**95.1**	**96.95**	0	0	1	0	1	0	0	0	**2**	**2**
7.2	0	1.6	97	1	2	6	0	0	**107.6**	**109.6**	0	0	2	0	0	0	0	0	**2**	**2**
1	0.8	0	90	0	5	1.5	0	0	**97.3**	**97.41**	0	0	1	0	0	0	0	0	**1**	**1**
5	0.6	0.4	76	0	4	0	0	2	83	82.28	0	0	1	1	0	0	0	2	4	4
4.16	0.4	0.4	82	0	4	1.5	0	0	88.3	88.49	0	0	0	0	0	0	0	0	0	0
4	0.4	0	74	3	2	0	0	0	79.4	79.08	0	0	0	0	0	0	0	0	0	0
140.9	8.6	6.4	2846	51	244	76.5	6.9	32	3271.4	3307.9	0.2	0.4	72	3	9	7.5	2.3	8	102.4	108.74

B => B											B => C										
P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU		P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C
0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0.2
0	0	0	0	0	0	0	0	0	0		0.2	0	2	0	1	0	0	0	3.2	3.04	0.8
0	0	0	0	0	0	0	0	0	0		0.2	0	3	0	2	0	0	0	5.2	5.04	0.2
0	0	0	0	0	0	0	0	**0**	**0**		0	0	3	0	0	0	0	0	**3**	**3**	0
0	0	0	0	0	0	0	0	**0**	**0**		0.2	0	4	0	2	0	0	0	**6.2**	**6.04**	0.6
0	0	0	0	0	0	0	0	**0**	**0**		0	0	5	0	0	0	0	0	**5**	**5**	0.2
0	0	0	0	0	0	0	0	**0**	**0**		0	0	6	0	3	1.5	0	0	**10.5**	**11.25**	0.2
0	0	0	0	0	0	0	0	0	0		0	0	6	0	1	0	0	0	7	7	0.2
0	0	0	0	0	0	0	0	0	0		0	0	6	0	0	1.5	0	0	7.5	8.25	0
0	0	0	0	0	0	0	0	0	0		0	0	2	0	0	0	0	0	2	2	0
0	0	0	0	0	0	0	0	0	0		0.2	0	6	0	1	0	0	0	7.2	7.04	0.4
0	0	0	0	0	0	0	0	0	0		0	0	2	0	1	0	0	0	3	3	1.2
0	0	0	0	0	0	0	0	0	0		0.2	0	5	0	1	0	0	0	6.2	6.04	0
0	0	0	0	0	0	0	0	0	0		0	0	4	0	0	0	0	0	4	4	0
0	0	0	0	0	0	0	0	0	0		0	0	2	0	0	0	0	0	2	2	0.2
0	0	0	0	0	0	0	0	0	0		0	0	0	0	2	0	0	0	2	2	0.8
0	0	0	0	0	0	0	0	0	0		0.2	0	3	0	0	0	0	0	3.2	3.04	0
0	0	0	0	0	0	0	0	0	0		0	0	6	0	0	0	0	0	6	6	0.2
0	0	0	0	0	0	0	0	0	0		0	0	2	0	0	0	0	0	2	2	0
0	0	0	0	0	0	0	0	0	0		0.2	0	2	0	1	0	0	0	3.2	3.04	0.2
0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0.2
0	0	0	0	0	0	0	0	0	0		0.4	0	2	0	1	0	0	0	3.4	3.08	0
0	0	0	0	0	0	0	0	0	0		0.4	0	3	0	0	0	0	0	3.4	3.08	0
0	0	0	0	0	0	0	0	0	0		0	0	3	0	2	0	0	0	5	5	0.2
0	0	0	0	0	0	0	0	0	0		0.2	0	3	0	2	0	2.3	0	7.5	10.33	0
0	0	0	0	0	0	0	0	0	0		0	0.4	7	0	0	0	0	0	7.4	7.16	0
0	0	0	0	0	0	0	0	0	0		0	0	2	0	0	1.5	0	0	3.5	4.25	0
0	0	0	0	0	0	0	0	0	0		0.2	0	4	0	0	0	0	0	4.2	4.04	0.2
0	0	0	0	0	0	0	0	0	0		0	0	1	0	0	0	0	0	1	1	0
0	0	0	0	0	0	0	0	0	0		0.4	0	7	0	1	0	0	0	8.4	8.08	0
0	0	0	0	0	0	0	0	0	0		0	0	4	0	1	0	0	0	5	5	0.2
0	0	0	0	0	0	0	0	0	0		0	0	3	0	0	0	0	0	3	3	0.2
0	0	0	0	0	0	0	0	0	0		0	0	3	0	0	0	0	0	3	3	0
0	0	0	0	0	0	0	0	0	0		0	0	1	0	0	0	0	0	1	1	0.2
0	0	0	0	0	0	0	0	0	0		0	0	3	0	0	1.5	0	0	4.5	5.25	0.2
0	0	0	0	0	0	0	0	0	0		0.2	0	6	0	1	0	0	0	7.2	7.04	0.2
0	0	0	0	0	0	0	0	0	0		0	0	3	0	2	1.5	0	0	6.5	7.25	0
0	0	0	0	0	0	0	0	0	0		0	0	5	0	0	0	0	0	5	5	0
0	0	0	0	0	0	0	0	0	0		0.2	0	2	0	0	0	0	0	2.2	2.04	0.2
0	0	0	0	0	0	0	0	0	0		0	0	3	0	0	0	0	0	3	3	0.2
0	0	0	0	0	0	0	0	0	0		0	0	6	1	1	0	0	0	8	8	0.2
0	0	0	0	0	0	0	0	**0**	**0**		0.4	0	2	0	0	0	0	0	**2.4**	**2.08**	0.2
0	0	0	0	0	0	0	0	**0**	**0**		0	0	4	1	1	0	0	0	**6**	**6**	0.8
0	0	0	0	0	0	0	0	**0**	**0**		0.2	0	4	0	0	0	0	0	**4.2**	**4.04**	0.4
0	0	0	0	0	0	0	0	**0**	**0**		0	0.4	5	0	0	0	0	0	**5.4**	**5.16**	0.2
0	0	0	0	0	0	0	0	0	0		0.8	0	4	0	0	0	0	0	4.8	4.16	0.2
0	0	0	0	0	0	0	0	0	0		0	0	4	1	0	0	0	0	5	5	0.4
0	0	0	0	0	0	0	0	0	0		0.8	0.4	4	0	0	0	0	0	5.2	4.32	0.2
0	0	0	0	0	0	0	0	0	0		5.6	1.2	167	3	27	7.5	2.3	0	213.6	215.14	10

C => A									C => B									
M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C
0	53	1	2	0	0	2	58.2	58.04	0	0	0	0	0	0	0	0	0	0	0	0
0	93	0	10	3	0	0	106.8	107.66	0	0	0	0	0	0	0	0	0	0	0	0
0	100	1	8	0	0	0	109.2	109.04	0	0	3	0	0	0	0	0	3	3	0	0
0.4	113	1	10	1.5	0	2	**127.9**	**128.4**	0.2	0	7	0	0	0	0	0	**7.2**	**7.04**	0	0
1.2	137	2	10	1.5	0	0	**152.3**	**151.9**	0.4	0	3	0	0	0	0	0	**3.4**	**3.08**	0	0
0.8	128	3	4	0	0	2	**138**	**137.4**	0	0	11	0	0	0	0	0	**11**	**11**	0	0
0.8	145	3	8	1.5	0	2	**160.5**	**160.6**	0	0	15	0	1	1.5	0	0	**17.5**	**18.25**	0	0
0.4	107	2	3	1.5	0	0	114.1	114.45	0	0	13	0	0	0	0	0	13	13	0	0
0.4	80	3	7	0	0	0	90.4	90.16	0	0	1	0	0	0	0	0	1	1	0	0
0.4	59	3	6	0	0	0	68.4	68.16	0	0	0	0	1	0	0	0	1	1	0	0
0	52	0	5	1.5	0	2	60.9	61.33	0	0	1	0	0	0	0	0	1	1	0	0
0	52	1	5	1.5	0	0	60.7	60.49	0	0	2	0	0	0	0	0	2	2	0	0
0	58	2	6	1.5	0	2	69.5	70.25	0.4	0	4	0	0	0	0	0	4.4	4.08	0	0
0	47	0	4	0	0	2	53	53	0	0	1	0	1	0	0	0	2	2	0	0
0	49	2	6	1.5	0	2	60.7	61.29	0	0	0	0	0	0	0	0	0	0	0	0
0	34	3	8	0	0	0	45.8	45.16	0	0	2	0	2	0	0	0	4	4	0	0
0	49	1	4	1.5	0	0	55.5	56.25	0	0	4	0	0	0	0	0	4	4	0	0
0	44	2	8	3	0	0	57.2	58.54	0	0	3	0	0	0	0	0	3	3	0	0
0	36	0	3	4.5	0	2	45.5	47.75	0	0	3	1	0	0	0	0	4	4	0	0
0	66	1	4	3	0	0	74.2	75.54	0	0	7	0	0	0	0	0	7	7	0	0
0	48	0	0	1.5	0	0	49.7	50.29	0	0	6	0	2	0	0	0	8	8	0	0
0	63	1	5	1.5	0	2	72.5	73.25	0	0.4	4	0	1	0	0	0	5.4	5.16	0	0
0	47	0	5	1.5	0	2	55.5	56.25	0	0	2	0	1	0	0	0	3	3	0	0
0	58	2	1	3	0	0	64.2	65.54	0	0	6	1	0	0	0	0	7	7	0	0
0	61	3	4	1.5	0	0	69.5	70.25	0	0	3	0	1	1.5	0	0	5.5	6.25	0	0
0	50	4	3	1.5	2.3	4	64.8	68.54	0	0	9	0	0	1.5	0	0	10.5	11.25	0	0
0.4	55	0	7	1.5	0	2	65.9	66.41	0	0	3	0	1	0	0	0	4	4	0	0
0	51	0	7	1.5	0	2	61.7	62.29	0	0	6	0	1	1.5	0	0	8.5	9.25	0	0
0	71	2	8	1.5	0	0	82.5	83.25	0	0	4	0	0	0	0	0	4	4	0	0
0	60	0	7	0	0	2	69	69	0	0	6	0	4	0	0	0	10	10	0	0
0	54	0	4	1.5	0	0	59.7	60.29	0	0	4	0	2	0	0	0	6	6	0	0
0	52	2	2	0	2.3	0	58.5	61.33	0	0	4	0	0	0	0	0	4	4	0	0
0	50	3	2	0	0	2	57	57	0	0.4	3	0	1	0	0	0	4.4	4.16	0	0
1.2	47	0	3	1.5	2.3	2	57.2	60.06	0	0	5	0	0	0	0	0	5	5	0	0
0	37	2	6	1.5	0	2	48.7	49.29	0	0	4	0	1	0	0	0	5	5	0	0
0	55	1	4	0	0	0	60.2	60.04	0	0	5	0	0	0	0	0	5	5	0	0
0.4	56	1	8	1.5	0	0	66.9	67.41	0	0	4	0	0	0	0	0	4	4	0	0
0	63	2	2	1.5	0	0	68.5	69.25	0	0.4	0	0	1	0	0	0	1.4	1.16	0	0
0	72	1	5	0	2.3	0	80.5	83.33	0	0	4	1	2	0	0	0	7	7	0	0
0	85	2	8	4.5	0	2	101.7	103.79	0	0	5	0	2	0	0	0	7	7	0	0
0	62	0	10	0	0	0	72.2	72.04	0.4	0	3	1	1	0	0	0	5.4	5.08	0	0
0	61	3	5	0	0	0	**69.2**	**69.04**	0	0	2	0	2	1.5	0	0	**5.5**	**6.25**	0	0
0	82	3	7	0	0	2	**94.8**	**94.16**	0.4	0	5	0	2	1.5	0	0	**8.9**	**9.33**	0	0
0	73	1	7	1.5	0	0	**82.9**	**83.33**	0.4	0	5	1	1	0	0	0	**7.4**	**7.08**	0	0
0	90	0	4	1.5	0	0	**95.7**	**96.29**	0	0	11	0	0	0	0	0	**11**	**11**	0	0
0	54	1	2	0	0	0	57.2	57.04	0.6	0.4	7	0	0	0	0	0	8	7.28	0	0
0.4	66	1	4	0	0	2	73.8	73.24	0	0.4	5	0	1	0	0	0	6.4	6.16	0	0
0	83	3	2	0	0	0	88.2	88.04	0	0	4	0	2	0	0	0	6	6	0	0
6.8	3208	69	253	57	9.2	44	3657	3685.4	2.8	2	209	5	34	9	0	0	261.8	262.86	0	0

C => C							
CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU
1	0	0	0	0	0	1	1
0	0	0	0	0	0	0	0
1	0	0	0	0	0	1	1
0	0	0	0	0	0	**0**	**0**
0	0	0	0	0	0	**0**	**0**
0	0	0	0	0	0	**0**	**0**
0	0	0	0	0	0	**0**	**0**
0	0	0	0	0	0	0	0

IDASO

Survey Name: HDR 21 043 South Dublin
Site: 6486
Location: Enniskerry Road/Hillcrest Road/Enniskerry Road/Blackglen Road
Date: Tue 18-Jun-2019

	A => A										A => B												
TIME	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR
07:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	0	6
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
07:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3	1	0	17
07:45	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	1	0	0	6	5.9	1	0	19
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	7	0	1	1	0	0	10	9.9	3	0	51
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	17
08:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	3	0	33
08:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	1	1	47
08:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	3	1	42
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	8	2	139
09:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	3	0	36
09:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3	1	0	25
09:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	1	0	26
09:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	1	2	26
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	10	0	2	0	0	0	12	12	6	2	113
10:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	3	0	23
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	34
10:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	1	0	22
10:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	4	0	27
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	9	0	106
11:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	26
11:15	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	6	2	0	43
11:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	1	0	34
11:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	54
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	10	0	1	0	0	0	11	11	3	0	157
12:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2	1	0	32
12:15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0	42
12:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3	2	0	44
12:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	1	0	33
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	11	0	2	0	0	0	13	13	4	0	151
13:00	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	1	0	58
13:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	2	0	54
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
13:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	0	55
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7	7	4	0	215
14:00	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3	2.4	2	0	42
14:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	63
14:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	0	49
14:45	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	1.4	1	0	70
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	7	0	0	0	0	0	9	7.8	3	0	224
15:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	2	1	38
15:15	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	5	0	33
15:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	1	1	56
15:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3	0	0	65
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12	12	8	2	192
16:00	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	5	3	0	47
16:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3	3	2	0	39
16:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	3	1	73
16:45	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	6	0	73
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	12	0	1	0	0	0	13	13	14	1	232
17:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	5	1	84
17:15	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4	5	0	83
17:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	15	0	80
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	1	81
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	8	39	2	328
18:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.2	18	5	67
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	21	0	75
18:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.4	10	1	95
18:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	15	0	76
H/TOT	0	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	0	0	5	3.6	64	6	313
12 TOT	0	0	0	0	0	0	0	0	0	0	1	4	96	1	7	1	0	0	110	107.3	165	15	2221

A => C							A => D										B => A						
TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2
1	3	0	0	0	11	10.2	0	0	4	0	0	0	0	1	5	5	0	0	2	0	0	0	0
0	2	1	0	0	12	12.5	1	0	6	0	0	0	0	0	7	6.2	0	0	1	0	0	0	0
1	3	1	0	0	23	22.7	0	0	6	0	0	1	0	0	7	7.5	0	0	1	0	0	0	0
0	4	0	1	1	26	26.5	0	0	6	0	1	0	0	1	8	8	0	0	3	0	0	0	0
2	12	2	1	1	72	71.9	1	0	22	0	1	1	0	2	27	26.7	0	0	7	0	0	0	0
1	0	0	0	0	19	18.2	0	0	10	0	0	0	0	1	11	11	0	0	2	0	0	0	0
0	0	0	0	0	36	33.6	1	1	16	0	0	0	0	0	18	16.6	0	0	2	0	0	0	0
1	0	2	1	0	53	53.9	0	0	14	0	1	1	0	0	16	16.5	1	0	2	0	0	0	0
1	0	3	0	0	50	48.5	1	0	14	0	0	2	0	1	18	18.2	0	0	1	0	0	0	0
3	0	5	1	0	158	154.2	2	1	54	0	1	3	0	2	63	62.3	1	0	7	0	0	0	0
0	1	1	0	0	41	39.1	0	0	20	0	0	1	0	0	21	21.5	0	0	3	0	1	0	0
2	1	4	0	0	33	34.2	1	0	12	1	1	0	0	0	15	14.2	0	0	1	0	0	0	0
0	0	0	0	0	27	26.2	0	0	12	0	2	0	0	1	15	15	0	0	0	0	0	0	0
0	2	0	0	1	32	30	0	0	6	0	2	0	0	0	8	8	1	0	0	0	0	0	0
2	4	5	0	1	133	129.5	1	0	50	1	5	1	0	1	59	58.7	1	0	4	0	1	0	0
0	0	0	1	0	27	25.9	0	0	10	0	0	2	0	0	12	13	0	0	2	0	0	0	0
1	3	2	0	0	41	41.2	0	0	11	2	2	0	0	1	16	16	0	0	1	0	0	0	0
1	2	1	0	0	27	26.7	0	0	13	0	3	0	0	1	17	17	0	0	2	0	0	0	0
2	2	0	0	0	35	31.8	0	0	16	1	0	1	0	0	18	18.5	0	0	2	0	0	0	0
4	7	3	1	0	130	125.6	0	0	50	3	5	3	0	2	63	64.5	0	0	7	0	0	0	0
1	4	4	0	0	35	37	0	0	14	0	1	0	0	0	15	15	0	0	1	1	0	0	0
1	2	0	0	0	48	46.4	0	0	22	0	0	0	0	0	22	22	0	0	0	0	0	0	0
1	4	3	0	0	43	43.7	0	0	12	0	1	0	0	0	13	13	0	0	2	0	0	0	0
1	3	0	1	0	59	60.3	0	0	17	0	0	0	0	1	18	18	0	0	4	0	1	1	0
4	13	7	1	0	185	187.4	0	0	65	0	2	0	0	1	68	68	0	0	7	1	1	1	0
0	3	4	0	0	40	41.2	0	0	14	1	1	0	0	0	16	16	0	0	4	0	0	0	0
1	2	3	1	0	49	51.8	0	0	17	0	2	0	0	1	20	20	0	0	3	0	0	0	0
0	2	0	1	0	49	48.7	0	0	11	0	2	2	0	0	15	16	0	0	2	0	2	0	0
1	3	2	0	0	40	40.2	0	0	15	0	0	0	0	0	15	15	0	1	3	1	0	0	0
2	10	9	2	0	178	181.9	0	0	57	1	5	2	0	1	66	67	0	1	12	1	2	0	0
1	3	0	1	0	64	64.5	1	0	15	0	2	1	0	0	19	18.7	1	0	2	0	1	0	0
0	4	1	0	0	61	59.9	1	0	17	0	1	0	0	0	19	18.2	0	0	3	0	1	0	0
2	3	2	2	0	57	60.6	0	0	12	3	1	1	0	1	18	18.5	0	0	2	0	0	0	0
2	3	1	2	0	64	66.3	1	0	26	1	0	0	0	0	28	27.2	0	0	2	0	1	0	0
5	13	4	5	0	246	251.3	3	0	70	4	4	2	0	1	84	82.6	1	0	9	0	3	0	0
1	2	2	0	0	49	48.4	0	0	18	0	1	0	0	0	19	19	0	0	0	0	0	0	0
0	6	1	1	1	72	73.8	0	0	15	1	0	1	0	1	18	18.5	0	0	2	0	0	0	0
1	3	1	0	0	54	54.5	0	0	13	3	1	0	0	0	17	17	0	0	1	0	0	0	0
1	4	2	0	0	78	78.2	0	0	16	2	0	1	0	0	19	19.5	0	0	4	0	0	0	0
3	15	6	1	1	253	254.9	0	0	62	6	2	2	0	1	73	74	0	0	7	0	0	0	0
1	4	0	0	0	46	43.8	0	0	15	0	3	0	0	0	18	18	0	0	1	0	0	0	0
1	3	2	0	0	44	41	0	0	10	0	2	0	0	1	13	13	0	0	1	0	0	0	0
1	0	0	1	0	60	59.9	0	0	17	0	3	0	0	0	20	20	0	0	4	0	0	0	0
0	5	0	0	1	71	71	2	0	13	0	5	0	0	1	21	19.4	0	0	6	0	0	0	0
3	12	2	1	1	221	215.7	2	0	55	0	13	0	0	2	72	70.4	0	0	12	0	0	0	0
0	4	0	0	0	54	51.6	0	0	22	0	1	0	0	0	23	23	0	0	1	0	0	0	0
0	8	2	0	0	51	50.4	0	0	31	0	0	0	0	0	31	31	0	0	0	0	0	0	0
1	1	1	1	1	82	80.8	0	0	24	0	3	1	0	1	29	29.5	1	0	1	0	0	0	0
3	3	0	1	0	86	82.5	0	0	33	0	1	0	0	0	34	34	1	0	2	0	1	0	0
4	16	3	2	1	273	265.3	0	0	110	0	5	1	0	1	117	117.5	2	0	4	0	1	0	0
2	4	1	0	0	97	92.9	2	0	36	0	4	0	0	0	42	40.4	0	0	3	0	1	0	0
1	7	0	0	0	96	92	2	0	27	1	2	1	0	2	35	33.9	0	0	3	0	1	0	0
0	2	0	0	0	97	85	0	1	32	1	0	1	0	0	35	34.9	0	0	0	0	0	0	0
0	2	1	1	0	100	90	1	0	44	1	0	2	0	0	48	48.2	0	0	1	0	0	0	0
3	15	2	1	0	390	359.9	5	1	139	3	6	4	0	2	160	157.4	0	0	7	0	2	0	0
1	4	0	0	0	95	77.6	1	1	28	0	2	0	0	0	32	30.6	1	0	2	0	0	0	0
0	2	0	1	0	99	83.5	1	1	27	0	1	0	0	1	31	29.6	0	0	1	0	0	0	0
0	2	0	0	0	108	99.4	1	0	33	1	0	0	0	0	35	34.2	0	0	0	0	0	0	0
3	1	1	0	0	96	84.5	0	0	30	0	0	0	0	0	30	30	0	0	1	0	0	0	0
4	9	1	1	0	398	345	3	2	118	1	3	0	0	1	128	124.4	1	0	4	0	0	0	0
39	126	49	17	5	2637	2542.6	17	4	852	19	52	19	0	17	980	973.5	6	1	87	2	10	1	0

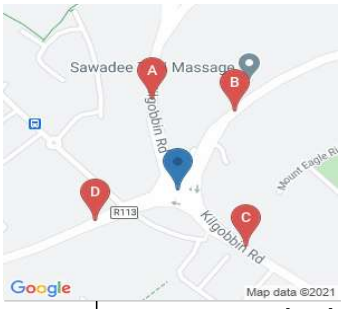
			B => B										B => C									
'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C
0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	6	0	0	0	8	8	1
0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	12	1	6	0	0	0	19	19	0
0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	13	1	8	0	0	0	22	22	0
0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	12	0	7	0	0	0	19	19	0
0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	39	2	27	0	0	0	68	68	1
0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	26	2	1	0	0	0	29	29	0
0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	30	0	4	1	0	0	35	35.5	0
0	3	2.2	0	0	0	0	0	0	0	0	0	0	0	0	25	1	2	0	0	0	28	28	1
0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	40	2	5	0	1	0	50	49.9	0
0	8	7.2	0	0	0	0	0	0	0	0	0	0	1	1	121	5	12	1	1	0	142	142.4	1
0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	26	2	4	0	0	0	32	32	0
0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	15	0	1	0	0	0	16	16	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	1	3	0	0	0	18	18	0
0	1	0.2	0	0	0	0	0	0	0	0	0	0	0	0	24	2	6	0	0	0	32	32	0
0	6	5.2	0	0	0	0	0	0	0	0	0	0	0	0	79	5	14	0	0	0	98	98	4
0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	15	0	2	0	0	0	17	17	0
0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	15	15	0
0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	12	1	1	1	0	0	15	15.5	0
0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	13	0	3	0	0	0	16	16	0
0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	54	2	6	1	0	0	63	63.5	0
0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	10	0	3	0	0	0	13	13	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	3	0	0	0	14	14	0
0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	21	0	1	1	0	0	23	23.5	0
0	6	6.5	0	0	0	0	0	0	0	0	0	0	1	0	14	0	0	0	0	0	15	14.2	0
0	10	10.5	0	0	0	0	0	0	0	0	0	0	1	0	56	0	7	1	0	0	65	64.7	0
0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	13	0	2	0	0	0	15	15	0
0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	22	1	4	0	0	0	27	27	0
0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	23	2	4	0	0	0	29	29	0
0	5	4.4	0	0	0	0	0	0	0	0	0	0	0	0	25	1	5	0	0	0	31	31	0
0	16	15.4	0	0	0	0	0	0	0	0	0	0	0	0	83	4	15	0	0	0	102	102	0
0	4	3.2	0	0	0	0	0	0	0	0	0	0	0	0	28	0	1	0	0	0	29	29	1
0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	37	1	4	2	0	0	44	45	0
0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	36	4	6	0	0	0	46	46	0
0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	34	2	2	0	0	0	38	38	0
0	13	12.2	0	0	0	0	0	0	0	0	0	0	0	0	135	7	13	2	0	0	157	158	1
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	31	0	5	1	0	0	38	37.7	0
0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	22	1	1	1	0	0	25	25.5	0
0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	20	1	4	2	0	0	28	28.2	0
0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	24	0	6	1	0	0	31	31.5	1
0	7	7	0	0	0	0	0	0	0	0	0	0	2	0	97	2	16	5	0	0	122	122.9	1
0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	17	1	4	0	0	0	22	22	0
0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	29	0	2	0	0	0	31	31	0
0	4	4	0	0	0	0	0	0	0	0	0	0	1	1	26	2	3	0	0	0	33	31.6	0
0	6	6	0	0	0	0	0	0	0	0	0	0	1	0	31	0	0	0	0	0	32	31.2	0
0	12	12	0	0	0	0	0	0	0	0	0	0	2	1	103	3	9	0	0	0	118	115.8	0
0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	31	1	1	0	0	0	33	33	0
0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	53	0	3	0	0	0	58	56.4	1
0	2	1.2	0	0	0	0	0	0	0	0	0	0	0	1	37	0	7	0	0	0	45	44.4	0
0	4	3.2	0	0	0	0	0	0	0	0	0	0	1	1	53	3	0	0	0	0	58	56.6	2
0	7	5.4	0	0	0	0	0	0	0	0	0	0	3	2	174	4	11	0	0	0	194	190.4	3
0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	59	0	3	0	0	0	62	62	0
0	4	4	0	0	0	0	0	0	0	0	0	0	0	3	42	1	1	1	0	0	48	46.7	1
0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	48	2	0	0	0	0	52	50.6	1
0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	65	0	1	0	0	0	66	66	2
0	9	9	0	0	0	0	0	0	0	0	0	0	1	4	214	3	5	1	0	0	228	225.3	4
0	3	2.2	0	0	0	0	0	0	0	0	0	0	1	0	70	0	0	0	0	0	71	70.2	3
0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	58	0	3	0	0	0	62	61.4	2
0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	61	1	3	0	0	0	72	67.2	1
0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	44	1	1	0	0	0	48	46.8	1
0	5	4.2	0	0	0	0	0	0	0	0	0	0	4	7	233	2	7	0	0	0	253	245.6	7
0	107	102.1	0	0	0	0	0	0	0	0	0	0	14	15	1388	39	142	11	1	0	1610	1596.6	22

B => D									C => A									C => B				
M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV
0	4	1	2	0	0	0	8	7.2	6	1	54	1	5	0	0	0	67	61.6	0	0	42	2	1
0	10	0	1	0	0	0	11	11	9	1	62	0	6	2	0	0	80	73.2	0	1	41	0	1
0	16	1	1	0	0	0	18	18	13	0	87	0	3	0	0	0	103	92.6	0	1	58	2	2
0	22	1	2	0	0	0	25	25	13	0	70	1	2	0	0	1	87	76.6	0	3	48	0	3
0	52	3	6	0	0	0	62	61.2	41	2	273	2	16	2	0	1	337	304	0	5	189	4	7
0	20	0	0	0	0	0	20	20	10	0	73	3	2	0	0	0	88	80	1	2	42	1	4
0	24	0	3	0	0	0	27	27	14	0	62	1	0	0	0	1	78	66.8	0	1	41	1	2
0	21	0	1	0	0	0	23	22.2	13	0	81	0	2	0	0	0	96	85.6	0	0	43	0	1
0	25	1	2	0	0	0	28	28	12	3	49	1	2	1	1	0	69	59.4	1	1	27	2	2
0	90	1	6	0	0	0	98	97.2	49	3	265	5	6	1	1	1	331	291.8	2	4	153	4	9
0	35	1	3	0	0	0	39	39	5	1	63	3	3	0	0	0	75	70.4	2	0	37	0	0
0	16	1	0	2	0	0	23	20.8	6	2	77	0	3	3	2	0	93	91.1	1	0	30	0	2
0	27	3	3	0	0	0	33	33	2	0	47	0	5	0	0	0	54	52.4	0	1	29	1	3
0	27	0	4	0	0	0	31	31	0	2	48	0	7	0	0	0	57	55.8	0	0	18	0	4
0	105	5	10	2	0	0	126	123.8	13	5	235	3	18	3	2	0	279	269.7	3	1	114	1	9
0	14	1	0	2	0	0	17	18	0	0	39	2	1	2	1	1	46	48.3	1	0	26	1	2
0	20	1	6	0	0	1	28	28	4	0	31	1	3	0	0	0	39	35.8	0	0	18	0	1
0	17	1	2	1	0	0	21	21.5	2	1	39	2	2	1	0	0	47	45.3	0	0	16	0	0
0	35	0	2	0	0	0	37	37	1	0	34	0	1	2	1	0	39	40.5	0	0	14	0	2
0	86	3	10	3	0	1	103	104.5	7	1	143	5	7	5	2	1	171	169.9	1	0	74	1	5
1	15	0	2	1	0	0	19	18.9	2	0	39	1	5	2	0	0	49	48.4	0	0	27	1	2
0	17	1	3	0	0	0	21	21	0	0	33	0	2	3	0	0	38	39.5	0	0	20	1	6
0	21	1	3	0	0	0	25	25	1	0	29	1	3	1	0	0	35	34.7	1	0	15	0	2
0	26	0	3	0	0	0	29	29	1	0	39	1	3	2	0	1	47	47.2	0	0	13	0	4
1	79	2	11	1	0	0	94	93.9	4	0	140	3	13	8	0	1	169	169.8	1	0	75	2	14
0	23	1	4	0	0	0	28	28	1	0	45	0	3	0	0	0	49	48.2	0	0	27	0	2
0	21	0	3	2	0	0	26	27	1	0	37	0	4	3	0	0	45	45.7	0	0	17	0	3
0	25	0	5	0	0	0	30	30	5	0	42	0	6	2	1	0	56	54.3	2	0	16	0	5
0	23	1	1	0	0	0	25	25	4	0	42	1	2	1	0	0	50	47.3	0	0	24	1	1
0	92	2	13	2	0	0	109	110	11	0	166	1	15	6	1	0	200	195.5	2	0	84	1	11
0	28	2	4	1	0	0	36	35.7	1	0	29	1	6	3	0	0	40	40.7	0	0	24	1	2
0	15	0	1	0	0	0	16	16	10	0	48	0	0	1	2	0	61	56.1	2	0	22	1	1
0	18	0	1	0	0	0	19	19	1	0	44	0	3	3	1	1	53	55	0	1	17	0	2
0	27	0	3	0	0	0	30	30	4	1	60	1	5	0	1	0	72	69.5	0	0	18	1	3
0	88	2	9	1	0	0	101	100.7	16	1	181	2	14	7	4	1	226	221.3	2	1	81	3	8
0	21	0	2	0	0	0	23	23	1	0	35	0	1	2	1	1	41	42.5	0	0	20	1	4
0	18	0	1	0	0	0	19	19	0	0	45	1	4	0	1	0	51	52.3	0	0	30	1	4
0	31	0	1	0	0	0	32	32	2	1	62	1	2	0	0	0	68	65.8	0	0	27	1	2
0	23	2	0	0	0	0	26	25.2	0	0	46	1	1	2	1	0	51	53.3	0	0	31	0	9
0	93	2	4	0	0	0	100	99.2	3	1	188	3	8	4	3	1	211	213.9	0	0	108	3	19
1	40	1	1	0	0	0	43	42.4	1	0	33	4	2	1	2	0	43	45.3	0	0	20	0	0
0	39	1	4	0	0	0	44	44	0	0	25	1	4	2	0	1	33	34	0	0	14	1	1
0	37	1	6	0	0	0	44	44	0	0	51	1	6	0	1	0	59	60.3	0	0	20	1	3
0	42	0	1	1	0	0	44	44.5	3	0	40	4	3	0	1	0	51	49.9	0	0	21	0	4
1	158	3	12	1	0	0	175	174.9	4	0	149	10	15	3	4	1	186	189.5	0	0	75	2	8
1	38	1	2	1	0	0	43	42.9	2	1	36	0	3	0	1	0	43	42.1	0	0	26	1	7
1	34	0	3	0	0	0	39	37.6	1	0	28	4	1	0	0	1	35	34.2	0	0	32	0	8
0	49	1	4	2	0	0	56	57	1	0	47	0	1	1	0	0	50	49.7	0	0	22	0	4
0	35	0	4	0	0	0	41	39.4	2	0	30	3	2	0	0	0	37	35.4	0	0	13	0	4
2	156	2	13	3	0	0	179	176.9	6	1	141	7	7	1	1	1	165	161.4	0	0	93	1	23
0	48	0	5	0	0	0	53	53	0	1	47	2	3	1	0	1	55	54.9	0	0	18	0	5
1	34	2	4	0	0	0	42	40.6	2	1	44	3	1	0	0	0	51	48.8	0	0	14	0	1
0	45	0	2	0	0	0	48	47.2	1	0	43	1	1	0	0	0	46	45.2	0	0	8	0	3
3	42	0	2	0	0	0	49	45.6	5	0	45	2	3	0	0	0	55	51	0	0	20	1	0
4	169	2	13	0	0	0	192	186.4	8	2	179	8	8	1	0	1	207	199.9	0	0	60	1	9
0	50	0	3	1	0	0	57	55.1	3	0	44	0	2	0	0	0	49	46.6	1	0	18	0	1
1	34	1	2	0	0	0	40	37.8	2	0	48	1	2	0	0	0	53	51.4	1	0	19	0	0
1	41	0	2	0	0	0	45	43.6	1	4	32	4	2	1	0	0	44	41.3	1	1	9	0	2
0	33	3	1	0	0	0	38	37.2	1	1	47	1	0	0	0	1	51	49.6	0	0	16	2	2
2	158	4	8	1	0	0	180	173.7	7	5	171	6	6	1	0	1	197	188.9	3	1	62	2	5
10	1326	31	115	14	0	1	1519	1502.4	169	21	2231	55	133	42	18	10	2679	2575.6	14	12	1168	25	127

					C => C										C => D								
OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT
0	0	0	45	45	0	0	0	0	0	0	0	0	0	0	0	0	6	0	2	0	0	0	8
0	0	0	43	42.4	0	0	0	0	0	0	0	0	0	0	1	0	14	0	1	1	0	0	17
0	0	0	63	62.4	0	0	0	0	0	0	0	0	0	0	0	0	10	0	5	0	0	0	15
0	0	0	54	52.2	0	0	0	0	0	0	0	0	0	0	0	1	16	0	1	0	1	0	19
0	0	0	205	202	0	0	0	0	0	0	0	0	0	0	1	1	46	0	9	1	1	0	59
0	0	0	50	48	0	0	0	0	0	0	0	0	0	0	0	0	19	0	1	0	0	0	20
0	0	0	45	44.4	0	0	0	0	0	0	0	0	0	0	0	0	12	0	1	0	0	0	13
0	0	0	44	44	0	0	0	0	0	0	0	0	0	0	0	0	15	1	3	1	0	0	20
0	0	0	33	31.6	0	0	0	0	0	0	0	0	0	0	0	0	16	1	0	0	0	0	17
0	0	0	172	168	0	0	0	0	0	0	0	0	0	0	0	0	62	2	5	1	0	0	70
0	0	0	39	37.4	0	0	0	0	0	0	0	0	0	0	0	0	29	1	0	0	0	0	30
0	0	0	33	32.2	0	0	0	0	0	0	0	0	0	0	0	0	15	1	2	0	0	0	18
1	0	0	35	34.9	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	23
1	0	0	23	23.5	0	0	0	0	0	0	0	0	0	0	0	0	8	0	1	0	0	0	9
2	0	0	130	128	0	0	0	0	0	0	0	0	0	0	0	0	75	2	3	0	0	0	80
0	0	0	30	29.2	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	1	0	0	21
0	0	0	19	19	0	0	0	0	0	0	0	0	0	0	1	0	16	0	1	0	0	0	18
0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	13	0	2	0	1	0	16
0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	1	0	0	14
0	0	0	81	80.2	0	0	0	0	0	0	0	0	0	0	1	0	62	0	3	2	1	0	69
2	0	0	32	33	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	18
0	0	0	27	27	0	0	0	0	0	0	0	0	0	0	0	0	14	1	2	0	0	0	17
0	0	0	18	17.2	0	0	0	0	0	0	0	0	0	0	0	0	10	0	3	1	0	0	14
1	0	0	18	18.5	0	0	0	0	0	0	0	0	0	0	0	0	13	1	4	1	0	0	19
3	0	0	95	95.7	0	0	0	0	0	0	0	0	0	0	0	0	55	2	9	2	0	0	68
1	0	0	30	30.5	0	0	0	0	0	0	0	0	0	0	1	0	13	0	3	0	0	0	17
0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	2	0	11	1	1	0	0	0	15
0	0	0	23	21.4	0	0	0	0	0	0	0	0	0	0	0	0	29	0	2	0	0	0	31
0	0	0	26	26	0	0	0	0	0	0	0	0	0	0	0	0	19	0	2	0	0	0	21
1	0	0	99	97.9	0	0	0	0	0	0	0	0	0	0	3	0	72	1	8	0	0	0	84
2	0	0	29	30	0	0	0	0	0	0	0	0	0	0	0	0	17	0	2	0	0	0	19
0	0	0	26	24.4	0	0	0	0	0	0	0	0	0	0	0	0	15	0	2	0	0	0	17
0	0	0	20	19.4	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	1	0	0	27
1	0	0	23	23.5	0	0	0	0	0	0	0	0	0	0	2	0	16	0	2	1	0	0	21
3	0	0	98	97.3	0	0	0	0	0	0	0	0	0	0	2	0	74	0	6	2	0	0	84
1	0	0	26	26.5	0	0	0	0	0	0	0	0	0	0	1	0	17	0	0	0	0	0	18
1	0	0	36	36.5	0	0	0	0	0	0	0	0	0	0	0	0	16	0	1	1	0	0	18
0	0	0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	28	1	0	0	0	0	29
0	0	0	40	40	0	0	0	0	0	0	0	0	0	0	0	0	32	0	3	0	0	1	36
2	0	0	132	133	0	0	0	0	0	0	0	0	0	0	1	0	93	1	4	1	0	1	101
2	0	0	22	23	0	0	0	0	0	0	0	0	0	0	0	0	28	1	3	0	0	0	32
2	0	0	18	19	0	0	0	0	0	0	0	0	0	0	0	0	22	0	1	1	1	0	25
1	0	0	25	25.5	0	0	0	0	0	0	0	0	0	0	0	0	25	1	4	0	0	0	30
0	0	0	25	25	0	0	0	0	0	0	0	0	0	0	0	0	18	0	2	0	0	0	20
5	0	0	90	92.5	0	0	0	0	0	0	0	0	0	0	0	0	93	2	10	1	1	0	107
0	0	0	34	34	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	14
0	0	0	40	40	0	0	0	0	0	0	0	0	0	0	0	0	25	2	3	1	0	0	31
0	0	0	26	26	0	0	0	0	0	0	0	0	0	0	0	0	24	1	3	3	0	0	31
0	0	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	19	1	4	0	0	0	24
0	0	0	117	117	0	0	0	0	0	0	0	0	0	0	0	0	82	4	10	4	0	0	100
0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	17
0	0	0	15	15	0	0	0	0	0	0	0	0	0	0	1	0	24	0	0	0	0	0	25
0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	1	20	0	1	1	0	0	23
0	0	0	21	21	0	0	0	0	0	0	0	0	0	0	0	1	23	0	2	1	0	0	27
0	0	0	70	70	0	0	0	0	0	0	0	0	0	0	1	2	84	0	3	2	0	0	92
0	0	0	20	19.2	0	0	0	0	0	0	0	0	0	0	1	0	15	0	1	0	0	0	17
0	0	0	20	19.2	0	0	0	0	0	0	0	0	0	0	0	0	20	0	2	0	0	0	22
1	0	0	14	13.1	0	0	0	0	0	0	0	0	0	0	0	0	21	0	1	0	0	0	22
0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	2	0	20	0	2	0	0	0	24
1	0	0	74	71.5	0	0	0	0	0	0	0	0	0	0	3	0	76	0	6	0	0	0	85
17	0	0	1363	1353.1	0	0	0	0	0	0	0	0	0	0	12	3	874	14	76	16	3	1	999

	D => A										D => B												
PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR
8	0	0	25	1	1	0	0	1	28	28	0	0	28	0	0	1	0	0	29	29.5	1	0	2
16.7	1	0	31	0	3	0	0	1	36	35.2	1	0	50	1	6	0	0	0	58	57.2	2	0	7
15	0	0	31	0	1	0	0	0	32	32	0	0	57	0	7	1	0	0	65	65.5	1	0	8
19.7	0	0	41	1	3	0	0	1	46	46	0	1	60	0	2	1	0	0	64	63.9	0	0	15
59.4	1	0	128	2	8	0	0	3	142	141.2	1	1	195	1	15	3	0	0	216	216.1	4	0	32
20	2	1	52	1	2	0	0	0	58	55.8	0	1	62	0	6	0	0	0	69	68.4	0	0	10
13	0	0	35	1	2	0	0	0	38	38	1	3	89	1	1	0	0	0	95	92.4	1	0	23
20.5	0	0	48	1	4	0	0	2	55	55	1	2	66	1	2	1	0	0	73	71.5	0	0	17
17	1	0	39	1	3	1	0	0	45	44.7	2	0	66	2	4	1	0	0	75	73.9	0	0	20
70.5	3	1	174	4	11	1	0	2	196	193.5	4	6	283	4	13	2	0	0	312	306.2	1	0	70
30	0	0	23	0	2	0	0	0	25	25	0	1	43	2	3	0	0	0	49	48.4	0	0	18
18	0	0	11	0	3	0	0	0	14	14	0	1	42	3	3	0	0	0	49	48.4	0	0	16
23	0	0	16	1	0	0	0	2	19	19	0	0	20	0	4	1	0	0	25	25.5	2	0	15
9	0	0	11	0	3	0	0	0	14	14	0	0	31	0	0	0	0	0	31	31	2	0	17
80	0	0	61	1	8	0	0	2	72	72	0	2	136	5	10	1	0	0	154	153.3	4	0	66
21.5	0	0	13	0	1	1	0	1	16	16.5	0	0	33	1	4	1	0	0	39	39.5	3	0	18
17.2	0	0	8	0	1	0	0	0	9	9	0	0	23	0	3	0	0	0	26	26	0	0	19
17.3	0	0	18	3	3	1	0	1	26	26.5	0	0	17	0	3	0	0	0	20	20	1	0	16
14.5	2	0	9	1	2	0	0	0	14	12.4	0	0	13	0	3	0	0	0	16	16	1	0	12
70.5	2	0	48	4	7	2	0	2	65	64.4	0	0	86	1	13	1	0	0	101	101.5	5	0	65
18	0	0	14	1	2	0	0	0	17	17	1	0	19	0	2	0	0	0	22	21.2	1	0	17
17	0	0	18	0	1	1	0	0	20	20.5	1	0	21	2	2	0	0	0	26	25.2	1	0	16
14.5	0	0	9	0	0	1	0	1	11	11.5	0	0	19	0	3	1	0	0	23	23.5	0	0	14
19.5	0	0	16	1	0	1	0	0	18	18.5	1	0	17	0	2	1	0	0	21	20.7	0	0	28
69	0	0	57	2	3	3	0	1	66	67.5	3	0	76	2	9	2	0	0	92	90.6	2	0	75
16.2	0	0	14	0	0	1	0	0	15	15.5	0	0	16	1	1	1	0	0	19	19.5	1	0	16
13.4	0	0	15	0	0	0	0	1	16	16	0	0	26	0	6	0	0	0	32	32	0	0	24
31	1	0	13	0	1	0	0	1	16	15.2	0	0	18	1	4	0	0	0	23	23	0	0	16
21	1	0	14	1	0	2	0	0	18	18.2	1	0	25	1	0	0	0	0	27	26.2	0	0	18
81.6	2	0	56	1	1	3	0	2	65	64.9	1	0	85	3	11	1	0	0	101	100.7	1	0	74
19	0	0	22	1	2	0	0	0	25	25	0	0	29	1	4	1	0	0	35	35.5	0	0	20
17	0	0	12	2	0	0	0	0	14	14	0	0	19	1	2	0	0	0	22	22	0	0	20
27.5	0	0	12	1	4	2	0	1	20	21	0	0	25	0	1	0	0	0	26	26	0	0	22
19.9	0	1	15	0	3	2	0	0	21	21.4	1	0	19	0	2	1	0	1	24	23.7	1	0	20
83.4	0	1	61	4	9	4	0	1	80	81.4	1	0	92	2	9	2	0	1	107	107.2	1	0	82
17.2	0	0	11	1	3	1	0	0	16	16.5	0	0	28	3	6	1	0	0	38	38.5	0	0	24
18.5	0	0	18	0	4	0	0	1	23	23	0	0	23	0	1	0	0	0	24	24	0	0	20
29	0	0	18	0	0	0	0	0	18	18	1	0	20	0	4	1	0	0	26	25.7	0	0	25
36	0	0	11	2	0	0	0	0	13	13	1	0	24	2	1	0	0	0	28	27.2	0	0	18
100.7	0	0	58	3	7	1	0	1	70	70.5	2	0	95	5	12	2	0	0	116	115.4	0	0	87
32	0	0	14	1	0	0	0	0	15	15	0	0	29	2	2	0	0	1	34	34	0	0	13
26.8	0	0	11	1	1	0	0	1	14	14	1	2	20	0	1	0	0	0	24	22	0	1	19
30	0	0	8	0	0	0	0	1	9	9	1	0	22	0	2	1	0	0	26	25.7	0	0	12
20	0	0	9	0	0	0	0	0	9	9	1	1	25	2	2	0	0	0	31	29.6	0	0	20
108.8	0	0	42	2	1	0	0	2	47	47	3	3	96	4	7	1	0	1	115	111.3	0	1	64
14	0	0	12	1	1	0	0	0	14	14	0	0	32	0	5	0	0	0	37	37	0	0	16
31.5	0	0	11	0	1	1	0	0	13	13.5	0	0	37	2	1	1	0	0	41	41.5	0	0	19
32.5	1	0	19	1	0	0	0	0	21	20.2	0	0	28	0	3	0	0	0	31	31	0	0	22
24	0	0	24	2	1	1	0	1	29	29.5	0	0	26	1	1	0	0	0	28	28	1	0	29
102	1	0	66	4	3	2	0	1	77	77.2	0	0	123	3	10	1	0	0	137	137.5	1	0	86
17	0	0	17	0	1	0	0	0	18	18	1	0	25	0	1	0	0	0	27	26.2	0	0	32
24.2	0	0	13	2	1	0	0	0	16	16	0	0	20	0	3	0	0	0	23	23	0	0	28
22.9	0	0	22	2	1	0	0	1	26	26	0	0	23	1	1	0	0	0	25	25	4	0	38
26.9	0	0	10	0	1	0	0	0	11	11	1	0	29	0	2	1	0	0	33	32.7	1	0	29
91	0	0	62	4	4	0	0	1	71	71	2	0	97	1	7	1	0	0	108	106.9	5	0	127
16.2	0	0	26	0	3	0	0	0	29	29	1	0	34	0	0	0	0	0	35	34.2	1	0	40
22	0	0	13	0	0	0	0	0	13	13	0	0	16	2	0	0	0	0	18	18	1	0	29
22	0	0	18	0	2	0	0	1	21	21	0	0	24	1	1	0	0	0	26	26	2	0	22
22.4	0	0	24	1	0	0	0	0	25	25	0	0	24	0	1	0	0	0	25	25	1	0	35
82.6	0	0	81	1	5	0	0	1	88	88	1	0	98	3	2	0	0	0	104	103.2	5	0	126
999.5	9	2	894	32	67	16	0	19	1039	1038.6	18	12	1462	34	118	17	0	2	1663	1649.9	29	1	954

D => C							D => D									
TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	TAXI	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU
0	1	0	1	0	5	5.5	0	0	0	0	0	0	0	0	0	0
0	2	1	0	0	12	10.9	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	11	10.2	0	0	0	0	0	0	0	0	0	0
0	3	0	0	0	18	18	0	0	0	0	0	0	0	0	0	0
0	8	1	1	0	46	44.6	0	0	0	0	0	0	0	0	0	0
0	3	1	0	0	14	14.5	0	0	0	0	0	0	0	0	0	0
2	1	0	0	1	28	27.2	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	22	22	0	0	0	0	0	0	0	0	0	0
3	7	1	0	1	83	82.7	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	18	18	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	19	17.4	0	0	0	0	0	0	0	0	0	0
1	3	1	0	0	24	22.9	0	0	0	0	0	0	0	0	0	0
2	7	1	0	0	80	77.3	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	24	21.6	0	0	0	0	0	0	0	0	0	0
0	1	0	0	1	21	21	0	0	0	0	0	0	0	0	0	0
0	3	1	0	0	21	20.7	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	17	16.2	0	0	0	0	0	0	0	0	0	0
3	8	1	0	1	83	79.5	0	0	0	0	0	0	0	0	0	0
0	1	1	0	0	20	19.7	0	0	0	0	0	0	0	0	0	0
0	3	0	0	0	20	19.2	0	0	0	0	0	0	0	0	0	0
0	1	1	0	0	16	16.5	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	30	30	0	0	0	0	0	0	0	0	0	0
0	7	2	0	0	86	85.4	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	18	17.2	0	0	0	0	0	0	0	0	0	0
0	2	1	0	0	27	27.5	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0
0	1	1	0	0	20	20.5	0	0	0	0	0	0	0	0	0	0
0	4	2	0	0	81	81.2	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0
1	1	0	1	0	23	24.3	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0
0	4	0	0	0	25	24.2	0	0	0	0	0	0	0	0	0	0
2	6	0	1	0	92	92.5	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	28	28	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	25	25	0	0	0	0	0	0	0	0	0	0
0	1	0	1	0	20	21.3	0	0	0	0	0	0	0	0	0	0
2	4	0	1	0	94	95.3	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0
0	2	1	1	0	24	25.2	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	22	22	0	0	0	0	0	0	0	0	0	0
1	4	1	1	0	72	73.2	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	18	18	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0
0	1	0	1	0	24	25.3	0	0	0	0	0	0	0	0	0	0
0	6	2	0	0	38	38.2	0	0	0	0	0	0	0	0	0	0
0	10	2	1	0	100	101.5	0	0	0	0	0	0	0	0	0	0
0	8	0	0	0	40	40	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	30	30	0	0	0	0	0	0	0	0	0	0
0	3	1	0	0	46	43.3	0	0	0	0	0	0	0	0	0	0
1	5	0	0	0	36	35.2	0	0	0	0	0	0	0	0	0	0
1	18	1	0	0	152	148.5	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	42	41.7	0	0	0	0	0	0	0	0	0	0
0	2	0	0	0	32	31.2	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	26	24.4	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	38	37.2	0	0	0	0	0	0	0	0	0	0
2	4	1	0	0	138	134.5	0	0	0	0	0	0	0	0	0	0
16	87	13	5	2	1107	1096.2	0	0	0	0	0	0	0	0	0	0



IDASO

Survey Name: HDR 21 043 South Dublin
Site: 3576
Location: Leopardstown Rd / Kilgobbin Rd / Hillcrest Rd
Date: Tue 24-Jul-2018

	A => A									A => B									A => C				
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1
07:00	0	0	0	0	0	0	0	0	0	0	1	13	1	0	0	0	15	14.4	0	0	4	1	0
07:15	0	0	0	0	0	0	0	0	0	0	0	27	1	0	0	1	29	29	0	1	6	5	0
07:30	0	0	0	0	0	0	0	0	0	0	0	27	1	0	0	0	28	28	0	1	13	6	0
07:45	0	0	0	0	0	0	0	0	0	0	2	39	1	1	0	0	43	42.3	1	0	12	2	1
H/TOT	0	0	0	0	0	0	0	0	0	0	3	106	4	1	0	1	115	113.7	1	2	35	14	1
08:00	0	0	0	0	0	0	0	0	0	0	0	31	2	0	0	0	33	33	0	0	9	2	1
08:15	0	0	0	1	0	0	0	1	1	0	1	31	6	0	0	0	38	37.4	0	0	14	6	0
08:30	0	0	0	0	0	0	0	0	0	1	0	45	2	0	0	0	48	47.2	0	0	17	2	1
08:45	0	0	0	0	0	0	0	0	0	0	2	49	5	0	1	0	57	57.1	1	0	16	1	1
H/TOT	0	0	0	1	0	0	0	1	1	1	3	156	15	0	1	0	176	174.7	1	0	56	11	3
09:00	0	0	0	0	0	0	0	0	0	0	0	30	1	0	0	0	31	31	0	0	14	2	1
09:15	0	0	0	0	0	0	0	0	0	0	1	30	1	2	0	0	34	34.4	0	0	29	1	2
09:30	0	0	0	0	0	0	0	0	0	0	0	24	3	0	1	0	28	29.3	0	0	11	2	1
09:45	0	0	0	0	0	0	0	0	0	0	0	18	4	4	0	0	26	28	0	0	12	2	0
H/TOT	0	0	0	0	0	0	0	0	0	0	1	102	9	6	1	0	119	122.7	0	0	66	7	4
10:00	0	0	0	0	0	0	0	0	0	0	0	14	2	0	0	0	16	16	0	0	25	7	2
10:15	0	0	0	0	0	0	0	0	0	0	0	15	2	0	0	0	17	17	0	0	16	5	0
10:30	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	17	17	0	0	12	5	0
10:45	0	0	0	0	0	0	0	0	0	0	0	16	3	0	1	0	20	21.3	0	0	19	1	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	62	7	0	1	0	70	71.3	0	0	72	18	2
11:00	0	0	0	0	0	0	0	0	0	0	0	8	6	0	0	0	14	14	0	0	21	4	0
11:15	0	0	0	0	0	0	0	0	0	0	0	12	2	1	0	0	15	15.5	0	0	16	7	2
11:30	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11	0	0	24	4	1
11:45	0	0	0	0	0	0	0	0	0	0	1	8	2	1	0	0	12	11.9	0	0	23	3	1
H/TOT	0	0	0	0	0	0	0	0	0	0	1	39	10	2	0	0	52	52.4	0	0	84	18	4
12:00	0	0	0	0	0	0	0	0	0	0	0	18	0	2	0	0	20	21	0	0	21	1	0
12:15	0	0	0	0	0	0	0	0	0	0	0	14	2	1	0	0	17	17.5	0	0	27	6	1
12:30	0	0	0	0	0	0	0	0	0	1	0	14	1	0	0	0	16	15.2	0	0	33	3	1
12:45	0	0	0	0	0	0	0	0	0	0	0	17	4	1	0	0	22	22.5	1	1	26	4	0
H/TOT	0	0	0	0	0	0	0	0	0	1	0	63	7	4	0	0	75	76.2	1	1	107	14	2
13:00	0	0	0	0	0	0	0	0	0	0	0	17	2	0	0	0	19	19	1	0	28	7	0
13:15	0	0	0	0	0	0	0	0	0	0	0	14	3	0	1	0	18	19.3	0	0	36	4	0
13:30	0	0	0	0	0	0	0	0	0	0	0	27	3	0	0	0	30	30	0	0	20	6	0
13:45	0	0	0	0	0	0	0	0	0	0	0	15	3	0	0	0	18	18	1	0	29	1	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	73	11	0	1	0	85	86.3	2	0	113	18	0
14:00	0	0	0	0	0	0	0	0	0	0	0	15	2	1	0	0	18	18.5	0	0	29	4	0
14:15	0	0	0	0	0	0	0	0	0	0	0	21	4	1	0	0	26	26.5	0	0	31	3	0
14:30	0	0	0	0	0	0	0	0	0	1	0	13	2	1	0	0	17	16.7	0	0	27	1	1
14:45	0	0	0	0	0	0	0	0	0	0	0	18	6	0	0	0	24	24	0	0	29	8	2
H/TOT	0	0	0	0	0	0	0	0	0	1	0	67	14	3	0	0	85	85.7	0	0	116	16	3
15:00	0	0	0	0	0	0	0	0	0	0	1	12	1	0	0	0	14	13.4	2	0	22	2	0
15:15	0	0	0	0	0	0	0	0	0	0	0	19	1	0	0	0	20	20	0	0	40	2	1
15:30	0	0	0	0	0	0	0	0	0	0	0	22	4	1	0	0	27	27.5	0	0	24	3	1
15:45	0	0	0	0	0	0	0	0	0	0	0	19	3	0	0	0	22	22	0	0	42	3	0
H/TOT	0	0	0	0	0	0	0	0	0	0	1	72	9	1	0	0	83	82.9	2	0	128	10	2
16:00	0	0	0	0	0	0	0	0	0	0	0	9	5	0	0	0	14	14	0	0	31	2	0
16:15	0	0	0	0	0	0	0	0	0	0	0	13	4	0	0	0	17	17	0	2	46	7	1
16:30	0	0	0	0	0	0	0	0	0	0	0	14	2	0	0	0	16	16	3	0	34	4	0
16:45	0	0	0	0	0	0	0	0	0	0	0	22	2	0	0	0	24	24	1	0	36	4	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	58	13	0	0	0	71	71	4	2	147	17	2
17:00	0	0	0	0	0	0	0	0	0	0	1	19	0	1	0	0	21	20.9	1	0	46	5	0
17:15	0	0	0	0	0	0	0	0	0	0	0	17	2	0	0	0	19	19	1	1	63	3	0
17:30	0	0	0	0	0	0	0	0	0	0	0	23	0	1	0	0	24	24.5	2	0	62	4	0
17:45	0	0	0	0	0	0	0	0	0	0	1	16	2	0	0	1	20	19.4	3	1	61	4	0
H/TOT	0	0	0	0	0	0	0	0	0	0	2	75	4	2	0	1	84	83.8	7	2	232	16	0
18:00	0	0	0	0	0	0	0	0	0	0	0	22	1	2	0	0	25	26	4	0	54	2	0
18:15	0	0	0	0	0	0	0	0	0	1	0	18	0	0	0	0	19	18.2	13	0	74	4	0
18:30	0	0	0	0	0	0	0	0	0	0	1	25	0	1	0	0	27	26.9	7	1	47	1	1
18:45	0	0	0	0	0	0	0	0	0	1	0	25	1	0	0	0	27	26.2	0	1	41	3	0
H/TOT	0	0	0	0	0	0	0	0	0	2	1	90	2	3	0	0	98	97.3	24	2	216	10	1
12 TOT	0	0	0	1	0	0	0	1	1	5	12	963	105	22	4	2	1113	1118	42	9	1372	169	24

				A => D									B => A									
OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C
0	0	5	5	0	0	13	2	0	0	0	15	15	0	0	6	0	0	0	0	6	6	0	0
0	0	12	11.4	0	0	10	4	1	0	0	15	15.5	1	0	8	2	0	0	0	11	10.2	0	0
0	0	20	19.4	0	0	13	3	0	0	0	16	16	0	1	9	1	0	0	0	11	10.4	0	0
0	0	16	15.7	0	0	13	7	0	0	0	20	20	0	1	9	2	1	0	0	13	12.9	0	0
0	0	53	51.5	0	0	49	16	1	0	0	66	66.5	1	2	32	5	1	0	0	41	39.5	0	0
0	0	12	12.5	0	0	13	3	1	1	0	18	19.8	0	1	13	4	1	0	0	19	18.9	0	0
0	0	20	20	0	0	17	5	0	0	0	22	22	0	0	17	1	0	0	1	19	19	0	0
0	0	20	20.5	0	0	17	3	1	0	0	21	21.5	0	0	21	2	1	0	0	24	24.5	0	0
0	0	19	18.7	0	1	16	2	0	0	0	19	18.4	0	1	28	3	0	0	0	32	31.4	0	0
0	0	71	71.7	0	1	63	13	2	1	0	80	81.7	0	2	79	10	2	0	1	94	93.8	0	0
0	0	17	17.5	1	0	17	4	0	0	0	22	21.2	1	0	14	2	2	0	0	19	19.2	0	0
0	0	32	33	0	0	17	2	0	0	0	19	19	0	0	7	3	0	0	0	10	10	0	0
0	0	14	14.5	0	0	22	0	2	0	0	24	25	0	0	19	2	1	0	0	22	22.5	0	0
0	0	14	14	0	0	18	5	1	0	0	24	24.5	0	0	19	2	0	1	1	23	24.3	0	0
0	0	77	79	1	0	74	11	3	0	0	89	89.7	1	0	59	9	3	1	1	74	76	0	0
1	0	35	37.3	0	0	20	2	0	0	0	22	22	0	0	14	2	2	0	0	18	19	0	0
1	0	22	23.3	0	0	12	4	0	0	0	16	16	0	0	12	1	2	1	0	16	18.3	0	0
0	0	17	17	0	0	15	1	0	1	0	17	18.3	0	0	15	2	0	0	0	17	17	0	0
0	0	20	20	0	0	14	2	2	0	0	18	19	0	0	17	3	1	0	0	21	21.5	0	0
2	0	94	97.6	0	0	61	9	2	1	0	73	75.3	0	0	58	8	5	1	0	72	75.8	0	0
0	0	25	25	0	0	14	3	0	0	0	17	17	0	0	15	5	0	0	0	20	20	0	0
0	0	25	26	0	0	24	1	1	0	0	26	26.5	0	0	17	3	1	0	0	21	21.5	0	0
0	0	29	29.5	0	0	11	6	1	0	0	18	18.5	0	0	11	2	0	0	0	13	13	0	0
0	0	27	27.5	0	0	20	2	1	0	0	23	23.5	0	0	10	5	1	0	0	16	16.5	0	0
0	0	106	108	0	0	69	12	3	0	0	84	85.5	0	0	53	15	2	0	0	70	71	0	0
0	0	22	22	0	0	9	3	0	0	0	12	12	0	0	21	2	0	0	0	23	23	0	0
0	0	34	34.5	0	0	17	3	0	0	0	20	20	1	0	15	3	0	1	0	20	20.5	0	0
0	0	37	37.5	0	0	18	5	0	0	0	23	23	0	0	21	2	2	0	0	25	26	0	0
0	0	32	30.6	0	0	16	4	0	0	0	20	20	0	0	27	4	0	0	0	31	31	0	0
0	0	125	124.6	0	0	60	15	0	0	0	75	75	1	0	84	11	2	1	0	99	100.5	0	0
0	0	36	35.2	0	0	26	3	0	0	0	29	29	0	1	22	1	0	0	0	24	23.4	0	0
0	0	40	40	0	1	18	3	0	0	0	22	21.4	0	0	15	3	1	0	0	19	19.5	0	0
0	0	26	26	0	0	13	6	0	0	0	19	19	0	0	16	5	0	0	0	21	21	0	0
0	0	31	30.2	0	0	27	2	0	0	0	29	29	0	0	15	4	0	1	0	20	21.3	0	0
0	0	133	131.4	0	1	84	14	0	0	0	99	98.4	0	1	68	13	1	1	0	84	85.2	0	0
0	0	33	33	0	0	24	2	1	0	0	27	27.5	0	1	19	2	1	0	0	23	22.9	0	0
1	0	35	36.3	0	0	25	1	1	0	0	27	27.5	0	0	23	2	1	0	0	26	26.5	0	0
0	0	29	29.5	0	0	15	3	1	0	0	19	19.5	0	0	15	2	0	0	0	17	17	0	0
0	0	39	40	0	0	30	1	0	0	0	31	31	0	0	19	5	1	0	0	25	25.5	0	0
1	0	136	138.8	0	0	94	7	3	0	0	104	105.5	0	1	76	11	3	0	0	91	91.9	0	0
0	0	26	24.4	0	0	14	0	0	0	0	14	14	0	0	22	6	0	0	0	28	28	0	0
0	0	43	43.5	0	0	27	7	0	0	0	34	34	1	0	18	1	0	0	0	20	19.2	0	0
0	0	28	28.5	0	0	26	2	0	0	0	28	28	0	0	25	3	2	0	0	30	31	0	0
0	0	45	45	0	0	11	4	1	0	0	16	16.5	0	0	16	3	2	0	0	21	22	0	0
0	0	142	141.4	0	0	78	13	1	0	0	92	92.5	1	0	81	13	4	0	0	99	100.2	0	0
0	0	33	33	0	0	27	3	0	0	0	30	30	0	0	39	0	0	0	0	39	39	0	0
0	0	56	55.3	0	0	19	3	0	0	0	22	22	0	2	27	6	0	0	0	35	33.8	0	0
0	0	41	38.6	0	1	26	5	0	0	0	32	31.4	0	0	35	6	1	0	0	42	42.5	0	0
0	0	42	41.7	0	2	36	2	0	0	0	40	38.8	0	1	28	3	0	0	0	32	31.4	0	0
0	0	172	168.6	0	3	108	13	0	0	0	124	122.2	0	3	129	15	1	0	0	148	146.7	0	0
0	0	52	51.2	0	0	36	3	0	0	0	39	39	0	1	45	4	0	0	0	50	49.4	0	0
0	0	68	66.6	0	0	32	2	0	0	0	34	34	0	0	36	1	0	0	0	37	37	0	0
0	0	68	66.4	0	0	40	2	1	0	0	43	43.5	0	1	58	2	0	0	0	61	60.4	0	0
0	0	69	66	0	0	45	2	1	0	0	48	48.5	0	3	51	2	0	0	0	56	54.2	0	0
0	0	257	250.2	0	0	153	9	2	0	0	164	165	0	5	190	9	0	0	0	204	201	0	0
0	0	60	56.8	1	0	31	3	0	0	0	35	34.2	0	0	46	1	1	0	1	49	49.5	0	0
0	0	91	80.6	0	1	41	5	0	0	0	47	46.4	0	0	23	0	0	0	1	24	24	0	0
0	0	57	51.3	0	0	39	0	0	0	0	39	39	0	0	35	0	0	0	0	35	35	0	0
0	0	45	44.4	0	0	36	0	0	0	0	36	36	0	0	25	2	0	0	0	27	27	0	0
0	0	253	233.1	1	1	147	8	0	0	0	157	155.6	0	0	129	3	1	0	2	135	135.5	0	0
3	0	1619	1595.9	2	6	1040	140	17	2	0	1207	1212.9	4	14	1038	122	25	4	4	1211	1217.1	0	0

B => B							B => C									B => D							
CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT
0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	12	2	0	0	0	14
0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	9	4	0	0	0	14
0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	22	0	0	0	0	22
0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	14	2	1	0	0	17
0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	1	0	57	8	1	0	0	67
0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4	2	0	14	2	0	0	0	18
0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	1	0	21	3	0	0	0	25
0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	15	1	0	0	0	16
0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	28	1	0	0	0	29
0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15	3	0	78	7	0	0	0	88
0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	17	0	0	0	1	18
0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4	0	0	18	0	0	0	0	18
0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6	0	0	23	4	0	0	0	27
0	0	0	0	0	0	0	1	0	3	0	0	0	0	4	3.2	0	0	32	4	0	0	0	36
0	0	0	0	0	0	0	1	0	17	1	0	0	0	19	18.2	0	0	90	8	0	0	1	99
0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	1	1	27	2	1	0	0	32
0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3	0	0	26	1	2	0	0	29
0	0	0	0	0	0	0	0	0	3	3	0	0	0	6	6	2	0	27	5	0	0	0	34
0	0	0	0	0	0	0	0	0	3	1	1	0	0	5	5.5	0	0	27	3	1	1	0	32
0	0	0	0	0	0	0	0	0	13	5	1	0	0	19	19.5	3	1	107	11	4	1	0	127
0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	16	2	0	0	0	18
0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6	0	0	26	1	1	0	0	28
0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	26	2	0	0	0	28
0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	1	0	24	4	0	0	0	29
0	0	0	0	0	0	0	0	0	22	0	0	0	0	22	22	1	0	92	9	1	0	0	103
0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6	0	0	30	2	1	0	0	33
0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	31	4	1	0	0	36
0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11	0	0	39	6	0	0	0	45
0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8	0	1	38	2	0	0	0	41
0	0	0	0	0	0	0	0	0	28	0	0	0	0	28	28	0	1	138	14	2	0	0	155
0	0	0	0	0	0	0	1	0	12	1	0	0	0	14	13.2	1	0	43	5	0	1	0	50
0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	30	0	0	0	0	30
0	0	0	0	0	0	0	0	0	5	2	0	0	0	7	7	0	0	25	2	0	0	0	27
0	0	0	0	0	0	0	0	1	2	0	0	0	0	3	2.4	0	0	34	5	1	0	0	40
0	0	0	0	0	0	0	1	1	26	3	0	0	0	31	29.6	1	0	132	12	1	1	0	147
0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	1	33	2	0	0	0	36
0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8	2	0	34	3	0	0	0	39
0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5	0	0	34	3	1	0	0	38
0	0	0	0	0	0	0	0	0	7	1	1	0	0	9	9.5	0	1	36	2	1	0	0	40
0	0	0	0	0	0	0	0	0	22	3	1	0	0	26	26.5	2	2	137	10	2	0	0	153
0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	14	1	0	28	1	0	0	0	30
0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11	0	0	36	3	0	0	0	39
0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8	0	1	31	2	0	0	0	34
0	0	0	0	0	0	0	0	0	5	2	1	0	0	8	8.5	0	1	37	2	1	0	0	41
0	0	0	0	0	0	0	0	0	36	4	1	0	0	41	41.5	1	2	132	8	1	0	0	144
0	0	0	0	0	0	0	0	0	11	2	0	0	0	13	13	0	0	37	2	0	0	0	39
0	0	0	0	0	0	0	0	0	4	4	0	2	0	10	12.6	0	0	55	3	1	1	1	61
0	1	0	0	0	1	1	0	0	10	1	0	0	0	11	11	1	1	45	5	1	0	0	53
0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11	3	3	56	6	0	0	0	68
0	1	0	0	0	1	1	0	0	36	7	0	2	0	45	47.6	4	4	193	16	2	1	1	221
0	0	0	0	0	0	0	2	0	17	0	0	0	0	19	17.4	1	3	59	9	0	0	0	72
0	0	0	0	0	0	0	1	0	26	2	0	0	0	29	28.2	5	0	88	3	1	0	0	97
0	0	0	0	0	0	0	0	0	22	2	0	0	0	24	24	3	1	76	2	0	0	0	82
0	0	0	0	0	0	0	1	0	23	1	0	0	0	25	24.2	5	2	101	5	0	0	0	113
0	0	0	0	0	0	0	4	0	88	5	0	0	0	97	93.8	14	6	324	19	1	0	0	364
0	0	0	0	0	0	0	1	0	14	1	0	0	0	16	15.2	2	1	90	3	0	0	0	96
0	0	0	0	0	0	0	1	1	19	2	0	0	0	23	21.6	1	3	70	2	0	0	0	76
0	0	0	0	0	0	0	1	0	17	0	0	0	0	18	17.2	3	2	73	2	0	0	0	80
0	0	0	0	0	0	0	1	1	17	1	0	0	0	20	18.6	4	1	45	1	0	0	0	51
0	0	0	0	0	0	0	4	2	67	4	0	0	0	77	72.6	10	7	278	8	0	0	0	303
0	1	0	0	0	1	1	10	3	376	33	3	2	0	427	421.3	40	23	1758	130	15	3	2	1971

	C => A									C => B									C => C				
PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1
14	1	1	29	4	0	1	0	36	35.9	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0
13.2	2	0	45	10	1	0	0	58	56.9	0	0	2	0	0	0	0	2	2	0	0	0	0	0
22	6	1	63	4	0	0	0	74	68.6	0	0	2	0	0	0	0	2	2	0	0	0	0	0
17.5	6	0	73	7	0	0	0	86	81.2	1	0	3	0	0	0	0	4	3.2	0	0	0	0	0
66.7	15	2	210	25	1	1	0	254	242.6	2	0	7	0	0	0	0	9	7.4	0	0	0	0	0
16.4	9	0	48	4	0	0	0	61	53.8	2	0	2	0	0	0	0	4	2.4	0	0	0	0	0
24.2	3	0	70	6	0	0	0	79	76.6	0	0	5	1	0	0	0	6	6	0	0	0	0	0
16	4	0	84	7	0	0	0	95	91.8	0	0	6	0	0	0	0	6	6	0	0	0	0	0
29	4	1	61	3	0	0	0	69	65.2	0	0	6	0	0	0	0	6	6	0	0	0	0	0
85.6	20	1	263	20	0	0	0	304	287.4	2	0	19	1	0	0	0	22	20.4	0	0	0	0	0
18	2	0	46	3	0	0	0	51	49.4	1	0	6	1	0	0	0	8	7.2	0	0	0	0	0
18	1	0	46	7	0	0	0	54	53.2	0	0	5	0	0	0	0	5	5	0	0	0	0	0
27	2	0	38	1	0	0	0	41	39.4	0	0	3	0	0	0	0	3	3	0	0	0	0	0
36	0	0	43	5	3	0	0	51	52.5	0	0	6	1	0	0	0	7	7	0	0	0	0	0
99	5	0	173	16	3	0	0	197	194.5	1	0	20	2	0	0	0	23	22.2	0	0	0	0	0
31.1	1	1	37	3	1	0	0	43	42.1	1	0	2	1	0	0	0	4	3.2	0	0	0	0	0
30	1	0	23	3	2	0	0	29	29.2	0	0	3	0	0	0	0	3	3	0	0	0	0	0
32.4	1	0	25	5	1	1	0	33	34	0	0	3	0	0	0	0	3	3	0	0	0	0	0
33.8	0	0	22	6	1	2	0	31	34.1	0	0	7	0	0	0	0	7	7	0	0	0	0	0
127.3	3	1	107	17	5	3	0	136	139.4	1	0	15	1	0	0	0	17	16.2	0	0	0	0	0
18	0	0	35	7	1	0	0	43	43.5	0	0	1	0	0	0	0	1	1	0	0	0	0	0
28.5	0	0	28	4	2	1	0	35	37.3	0	0	5	1	0	0	0	6	6	0	0	0	0	0
28	0	0	14	3	1	0	0	18	18.5	0	0	6	0	0	0	0	6	6	0	0	0	0	0
28.2	1	0	26	1	1	0	0	29	28.7	0	0	9	0	0	0	0	9	9	0	0	0	0	0
102.7	1	0	103	15	5	1	0	125	128	0	0	21	1	0	0	0	22	22	0	0	0	0	0
33.5	0	1	32	4	1	0	0	38	37.9	0	0	6	2	0	0	0	8	8	0	0	0	0	0
36.5	1	0	32	1	1	1	0	36	37	0	0	3	0	0	0	0	3	3	0	0	0	0	0
45	0	0	24	10	0	0	0	34	34	0	0	5	0	0	0	0	5	5	0	0	0	0	0
40.4	0	0	29	5	0	0	0	34	34	0	0	2	0	0	0	0	2	2	0	0	0	0	0
155.4	1	1	117	20	2	1	0	142	142.9	0	0	16	2	0	0	0	18	18	0	0	0	0	0
50.5	0	1	24	1	0	1	0	27	27.7	0	0	2	0	0	0	0	2	2	0	0	0	0	0
30	0	0	29	4	0	0	0	33	33	0	0	2	2	0	0	0	4	4	0	0	0	0	0
27	0	0	32	1	1	0	0	34	34.5	0	0	3	1	0	0	0	4	4	0	0	0	0	0
40.5	0	0	29	7	3	0	0	39	40.5	1	0	1	2	0	0	0	4	3.2	0	0	0	0	0
148	0	1	114	13	4	1	0	133	135.7	1	0	8	5	0	0	0	14	13.2	0	0	0	0	0
35.4	0	1	23	2	1	0	0	27	26.9	0	0	5	0	0	0	0	5	5	0	0	0	0	0
37.4	0	0	23	3	1	1	0	28	29.8	0	0	6	0	0	0	0	6	6	0	0	0	0	0
38.5	0	0	26	4	2	0	0	32	33	0	0	5	0	0	0	0	5	5	0	0	0	0	0
39.9	0	0	25	4	1	1	0	31	32.8	0	0	6	0	0	0	0	6	6	0	0	0	0	0
151.2	0	1	97	13	5	2	0	118	122.5	0	0	22	0	0	0	0	22	22	0	0	0	0	0
29.2	0	0	23	9	0	0	0	32	32	0	0	2	0	0	0	0	2	2	0	0	0	0	0
39	1	0	28	3	1	0	0	33	32.7	0	0	3	0	0	0	0	3	3	0	0	0	0	0
33.4	0	0	21	3	0	0	0	24	24	0	0	4	0	0	0	0	4	4	0	0	0	0	0
40.9	0	0	20	2	0	0	0	22	22	0	0	4	1	0	0	0	5	5	0	0	0	0	0
142.5	1	0	92	17	1	0	0	111	110.7	0	0	13	1	0	0	0	14	14	0	0	0	0	0
39	0	0	20	2	0	0	0	22	22	0	0	4	0	0	0	0	4	4	0	0	0	0	0
62.8	0	0	31	4	0	0	0	35	35	1	0	6	0	0	0	0	7	6.2	0	0	0	0	0
52.1	0	0	28	7	0	1	0	36	37.3	0	0	4	0	0	0	0	4	4	0	0	0	0	0
63.8	0	0	22	3	0	0	0	25	25	0	0	3	0	0	0	0	3	3	0	0	0	0	0
217.7	0	0	101	16	0	1	0	118	119.3	1	0	17	0	0	0	0	18	17.2	0	0	0	0	0
69.4	0	0	34	1	0	0	0	35	35	0	0	5	0	0	0	0	5	5	0	0	0	0	0
93.5	2	0	24	4	0	0	0	30	28.4	0	0	3	0	0	0	0	3	3	0	0	0	0	0
79	0	0	20	1	1	0	0	22	22.5	0	0	2	0	0	0	0	2	2	0	0	0	0	0
107.8	0	1	26	3	0	0	0	30	29.4	0	0	3	0	0	0	0	3	3	0	0	0	0	0
349.7	2	1	104	9	1	0	0	117	115.3	0	0	13	0	0	0	0	13	13	0	0	0	0	0
93.8	0	0	16	6	1	0	0	23	23.5	0	0	2	0	0	0	0	2	2	0	0	0	0	0
73.4	0	0	27	1	1	0	0	29	29.5	0	0	7	0	0	0	0	7	7	0	0	0	0	0
76.4	0	0	35	1	0	0	0	36	36	0	0	3	0	0	0	0	3	3	0	0	0	0	0
47.2	0	1	26	0	0	0	0	27	26.4	0	0	4	0	0	0	0	4	4	0	0	0	0	0
290.8	0	1	104	8	2	0	0	115	115.4	0	0	16	0	0	0	0	16	16	0	0	0	0	0
1936.6	48	9	1585	189	29	10	0	1870	1853.7	8	0	187	13	0	0	0	208	201.6	0	0	0	0	0

				C => D									D => A										
OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C
0	0	0	0	0	0	10	1	0	0	0	11	11	0	0	47	3	0	0	0	50	50	0	0
0	0	0	0	0	0	12	1	0	0	0	13	13	0	0	53	4	0	0	0	57	57	1	0
0	0	0	0	0	0	15	1	0	0	1	17	17	0	1	79	7	1	0	0	88	87.9	1	0
0	0	0	0	1	0	26	1	1	0	0	29	28.7	0	2	91	5	0	0	0	98	96.8	1	0
0	0	0	0	1	0	63	4	1	0	1	70	69.7	0	3	270	19	1	0	0	293	291.7	3	0
0	0	0	0	1	0	17	3	1	0	0	22	21.7	0	0	88	5	0	0	0	93	93	3	3
0	0	0	0	1	0	17	1	1	0	0	20	19.7	0	0	79	10	0	1	0	90	91.3	0	2
0	0	0	0	0	0	21	0	1	0	1	23	23.5	0	1	84	8	0	0	0	93	92.4	3	3
0	0	0	0	3	1	27	2	0	0	0	33	30	0	0	75	8	0	0	0	83	83	6	2
0	0	0	0	5	1	82	6	3	0	1	98	94.9	0	1	326	31	0	1	0	359	359.7	12	10
0	0	0	0	2	0	24	1	0	0	0	27	25.4	0	0	45	5	0	0	0	50	50	2	1
0	0	0	0	0	0	29	2	1	0	0	32	32.5	0	0	57	6	0	0	0	63	63	1	0
0	0	0	0	0	0	23	1	0	0	0	24	24	0	0	39	6	1	0	0	46	46.5	1	1
0	0	0	0	1	0	35	0	0	0	1	37	36.2	0	0	35	3	2	0	0	40	41	0	0
0	0	0	0	3	0	111	4	1	0	1	120	118.1	0	0	176	20	3	0	0	199	200.5	4	2
0	0	0	0	0	0	24	5	0	0	0	29	29	0	0	28	3	0	0	0	31	31	0	0
0	0	0	0	0	0	24	2	1	0	0	27	27.5	0	0	31	4	0	0	0	35	35	0	0
0	0	0	0	2	0	22	3	1	0	0	28	26.9	0	0	20	3	1	0	0	24	24.5	0	0
0	0	0	0	0	0	18	1	0	0	1	20	20	0	0	25	6	2	1	0	34	36.3	1	0
0	0	0	0	2	0	88	11	2	0	1	104	103.4	0	0	104	16	3	1	0	124	126.8	1	0
0	0	0	0	0	0	13	2	0	0	0	15	15	0	0	25	6	0	0	0	31	31	0	0
0	0	0	0	1	0	29	1	0	0	0	31	30.2	0	0	26	8	0	0	1	35	35	1	0
0	0	0	0	1	1	20	1	0	0	0	23	21.6	1	0	24	5	1	0	0	31	30.7	0	0
0	0	0	0	1	1	30	3	0	0	1	36	34.6	0	0	31	3	0	0	0	34	34	0	0
0	0	0	0	3	2	92	7	0	0	1	105	101.4	1	0	106	22	1	0	1	131	130.7	1	0
0	0	0	0	1	0	31	1	1	0	0	34	33.7	0	0	30	4	1	0	0	35	35.5	1	0
0	0	0	0	0	0	24	2	0	0	0	26	26	0	0	21	5	1	0	0	27	27.5	0	0
0	0	0	0	0	0	28	1	1	0	0	30	30.5	0	0	34	6	0	0	0	40	40	0	0
0	0	0	0	3	1	23	2	0	0	1	30	27	0	1	29	5	0	0	0	35	34.4	0	0
0	0	0	0	4	1	106	6	2	0	1	120	117.2	0	1	114	20	2	0	0	137	137.4	1	0
0	0	0	0	2	0	28	0	0	0	0	30	28.4	0	0	16	5	0	0	0	21	21	1	0
0	0	0	0	0	0	14	0	0	0	0	14	14	0	1	23	4	0	0	0	28	27.4	1	0
0	0	0	0	1	0	22	3	0	0	0	26	25.2	0	1	31	4	2	0	0	38	38.4	0	0
0	0	0	0	0	0	27	1	0	0	1	29	29	0	1	27	7	0	0	0	35	34.4	0	1
0	0	0	0	3	0	91	4	0	0	1	99	96.6	0	3	97	20	2	0	0	122	121.2	2	1
0	0	0	0	1	0	22	2	0	0	0	25	24.2	0	1	21	2	2	0	0	26	26.4	3	0
0	0	0	0	0	0	27	1	0	0	0	28	28	0	1	36	4	0	0	0	41	40.4	0	0
0	0	0	0	1	0	22	4	0	0	0	27	26.2	0	2	33	7	0	0	0	42	40.8	0	0
0	0	0	0	0	0	30	0	0	0	1	31	31	0	0	24	4	0	0	0	28	28	0	0
0	0	0	0	2	0	101	7	0	0	1	111	109.4	0	4	114	17	2	0	0	137	135.6	3	0
0	0	0	0	1	0	35	2	0	0	0	38	37.2	0	0	27	3	1	0	0	31	31.5	1	0
0	0	0	0	1	0	16	1	0	0	0	18	17.2	0	0	24	2	1	0	0	27	27.5	0	0
0	0	0	0	1	0	28	1	0	0	0	30	29.2	0	0	24	4	1	0	0	29	29.5	0	0
0	0	0	0	0	0	21	0	0	0	1	22	22	0	0	32	4	0	0	0	36	36	0	0
0	0	0	0	3	0	100	4	0	0	1	108	105.6	0	0	107	13	3	0	0	123	124.5	1	0
0	0	0	0	2	0	31	2	0	0	0	35	33.4	1	0	37	8	0	0	0	46	45.2	0	1
0	0	0	0	0	0	24	1	0	0	0	25	25	0	0	25	4	0	0	0	29	29	0	1
0	0	0	0	0	0	18	1	0	0	0	19	19	0	1	24	9	1	0	0	35	34.9	0	1
0	0	0	0	1	2	20	3	0	0	1	27	25	0	0	28	2	0	0	0	30	30	0	0
0	0	0	0	3	2	93	7	0	0	1	106	102.4	1	1	114	23	1	0	0	140	139.1	0	3
0	0	0	0	0	0	34	5	0	0	0	39	39	0	0	32	7	0	0	0	39	39	1	1
0	0	0	0	2	0	33	2	0	0	0	37	35.4	0	0	13	2	0	0	0	15	15	0	0
0	0	0	0	2	0	40	1	1	0	0	44	42.9	0	0	32	3	2	0	0	37	38	0	0
0	0	0	0	1	1	40	2	0	0	1	45	43.6	0	0	15	4	0	0	0	19	19	0	0
0	0	0	0	5	1	147	10	1	0	1	165	160.9	0	0	92	16	2	0	0	110	111	1	1
0	0	0	0	1	0	35	0	0	0	0	36	35.2	0	0	26	5	1	0	0	32	32.5	1	0
0	0	0	0	1	1	29	0	0	0	0	31	29.6	0	0	36	1	0	0	0	37	37	2	0
0	0	0	0	0	0	33	2	1	0	0	36	36.5	0	0	27	1	1	0	0	29	29.5	2	0
0	0	0	0	1	0	20	2	0	0	1	24	23.2	0	0	20	3	0	0	0	23	23	0	0
0	0	0	0	3	1	117	4	1	0	1	127	124.5	0	0	109	10	2	0	0	121	122	5	0
0	0	0	0	37	8	1191	74	11	0	12	1333	1304.1	2	13	1729	227	22	2	1	1996	2000.2	34	17

D => B							D => C									D => D							
CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	'SV(BUS	TOT
10	1	1	0	0	12	12.5	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0
22	1	0	0	0	24	23.2	0	0	8	0	0	0	1	9	9	0	0	0	0	0	0	0	0
44	6	0	0	0	51	50.2	2	0	4	1	0	0	0	7	5.4	0	0	0	0	0	0	0	0
42	0	0	0	0	43	42.2	1	0	10	0	1	0	0	12	11.7	0	0	0	0	0	0	0	0
118	8	1	0	0	130	128.1	3	0	25	1	1	0	1	31	29.1	0	0	0	0	0	0	0	0
39	2	2	0	0	49	45.8	1	0	8	3	0	0	0	12	11.2	0	0	0	0	0	0	0	0
45	0	0	0	1	48	46.8	0	0	8	2	0	0	0	10	10	0	0	0	0	0	0	0	0
51	1	0	0	0	58	53.8	3	1	21	1	1	0	1	28	25.5	0	0	0	0	0	0	0	0
45	4	1	0	0	58	52.5	3	0	22	0	0	0	0	25	22.6	0	0	0	0	0	0	0	0
180	7	3	0	1	213	198.9	7	1	59	6	1	0	1	75	69.3	0	0	0	0	0	0	0	0
51	5	0	0	0	59	56.8	0	0	19	2	1	0	0	22	22.5	0	0	0	0	0	0	0	0
37	1	1	0	0	40	39.7	0	0	14	1	1	0	0	16	16.5	0	0	0	0	0	0	0	0
28	4	0	0	0	34	32.6	0	1	14	2	1	0	0	18	17.9	0	0	0	0	0	0	0	0
26	2	1	0	0	29	29.5	0	0	15	1	0	0	1	17	17	0	0	0	0	0	0	0	0
142	12	2	0	0	162	158.6	0	1	62	6	3	0	1	73	73.9	0	0	0	0	0	0	0	0
39	2	0	0	0	41	41	0	0	21	2	0	0	0	23	23	0	0	0	0	0	0	0	0
27	1	0	0	0	28	28	0	0	18	0	0	0	0	18	18	0	0	0	0	0	0	0	0
21	1	1	0	0	23	23.5	0	0	24	0	0	0	1	25	25	0	0	0	0	0	0	0	0
24	3	0	0	0	28	27.2	0	0	18	3	0	0	0	21	21	0	0	0	0	0	0	0	0
111	7	1	0	0	120	119.7	0	0	81	5	0	0	1	87	87	0	0	0	0	0	0	0	0
15	2	0	0	0	17	17	0	0	15	1	0	0	0	16	16	0	0	0	0	0	0	0	0
35	1	1	0	0	38	37.7	3	0	20	0	0	0	0	23	20.6	0	0	0	0	0	0	0	0
26	2	0	0	0	28	28	0	0	17	0	0	0	0	17	17	0	0	0	0	0	0	0	0
24	1	0	0	0	25	25	0	0	15	0	1	0	1	17	17.5	0	0	0	0	0	0	0	0
100	6	1	0	0	108	107.7	3	0	67	1	1	0	1	73	71.1	0	0	0	0	0	0	0	0
23	4	0	0	0	28	27.2	2	0	19	1	1	0	0	23	21.9	0	0	0	0	0	0	0	0
15	1	2	0	0	18	19	1	0	15	1	0	0	0	17	16.2	0	0	0	0	0	0	0	0
30	2	0	0	0	32	32	0	0	19	0	0	0	1	20	20	0	0	0	0	0	0	0	0
32	2	0	0	0	34	34	0	0	17	1	0	0	0	18	18	0	0	0	0	0	0	0	0
100	9	2	0	0	112	112.2	3	0	70	3	1	0	1	78	76.1	0	0	0	0	0	0	0	0
21	2	0	0	0	24	23.2	2	0	20	1	0	0	0	23	21.4	0	0	0	0	0	0	0	0
29	2	1	0	0	33	32.7	1	0	22	3	1	0	0	27	26.7	0	0	0	0	0	0	0	0
34	4	0	0	0	38	38	1	0	15	2	0	0	0	18	17.2	0	0	0	0	0	0	0	0
39	4	0	0	0	44	43.4	0	0	24	1	0	1	1	27	28.3	0	0	0	0	0	0	0	0
123	12	1	0	0	139	137.3	4	0	81	7	1	1	1	95	93.6	0	0	0	0	0	0	0	0
37	4	0	0	0	44	41.6	0	0	32	1	0	0	0	33	33	0	0	0	0	0	0	0	0
27	5	0	0	0	32	32	0	0	25	1	0	0	0	26	26	0	0	0	0	0	0	0	0
29	2	1	0	0	32	32.5	0	0	21	4	0	0	1	26	26	0	0	0	0	0	0	0	0
30	5	1	0	0	36	36.5	0	0	23	2	0	0	0	25	25	0	0	0	0	0	0	0	0
123	16	2	0	0	144	142.6	0	0	101	8	0	0	1	110	110	0	0	0	0	0	0	0	0
27	0	1	0	0	29	28.7	1	0	28	1	0	0	0	30	29.2	0	0	0	0	0	0	0	0
19	2	0	0	0	21	21	0	2	18	2	0	0	0	22	20.8	0	0	0	0	0	0	0	0
23	6	0	0	0	29	29	0	1	17	0	2	0	1	21	21.4	0	0	0	0	0	0	0	0
31	1	1	0	0	33	33.5	0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0
100	9	2	0	0	112	112.2	1	3	78	3	2	0	1	88	86.4	0	0	0	0	0	0	0	0
26	3	0	0	0	30	29.4	0	0	18	1	0	0	0	19	19	0	0	0	0	0	0	0	0
33	0	0	0	0	34	33.4	1	0	17	2	0	0	0	20	19.2	0	0	0	0	0	0	0	0
32	1	0	0	0	34	33.4	2	0	20	4	0	0	0	26	24.4	0	0	0	0	0	0	0	0
19	2	0	0	0	21	21	1	1	27	3	0	0	1	33	31.6	0	0	0	0	0	0	0	0
110	6	0	0	0	119	117.2	4	1	82	10	0	0	1	98	94.2	0	0	0	0	0	0	0	0
27	5	0	0	0	34	32.6	1	0	26	0	0	0	0	27	26.2	0	0	0	0	0	0	0	0
26	2	0	0	0	28	28	1	1	26	2	0	0	0	30	28.6	0	0	0	0	0	0	0	0
29	1	0	0	0	30	30	4	1	25	0	0	0	0	30	26.2	0	0	0	0	0	0	0	0
30	1	0	0	0	31	31	0	0	31	2	0	0	1	34	34	0	0	0	0	0	0	0	0
112	9	0	0	0	123	121.6	6	2	108	4	0	0	1	121	115	0	0	0	0	0	0	0	0
16	1	0	0	0	18	17.2	3	0	24	2	0	0	0	29	26.6	0	0	0	0	0	0	0	0
27	0	0	0	0	29	27.4	0	0	27	2	0	0	0	29	29	0	0	0	0	0	0	0	0
25	0	1	0	0	28	26.9	0	0	21	0	0	0	0	21	21	0	0	0	0	0	0	0	0
40	2	1	0	0	43	43.5	1	0	23	1	0	0	1	26	25.2	0	0	0	0	0	0	0	0
108	3	2	0	0	118	115	4	0	95	5	0	0	1	105	101.8	0	0	0	0	0	0	0	0
1427	104	17	0	1	1600	1571.1	35	8	909	59	10	1	12	1034	1007.5	0	0	0	0	0	0	0	0

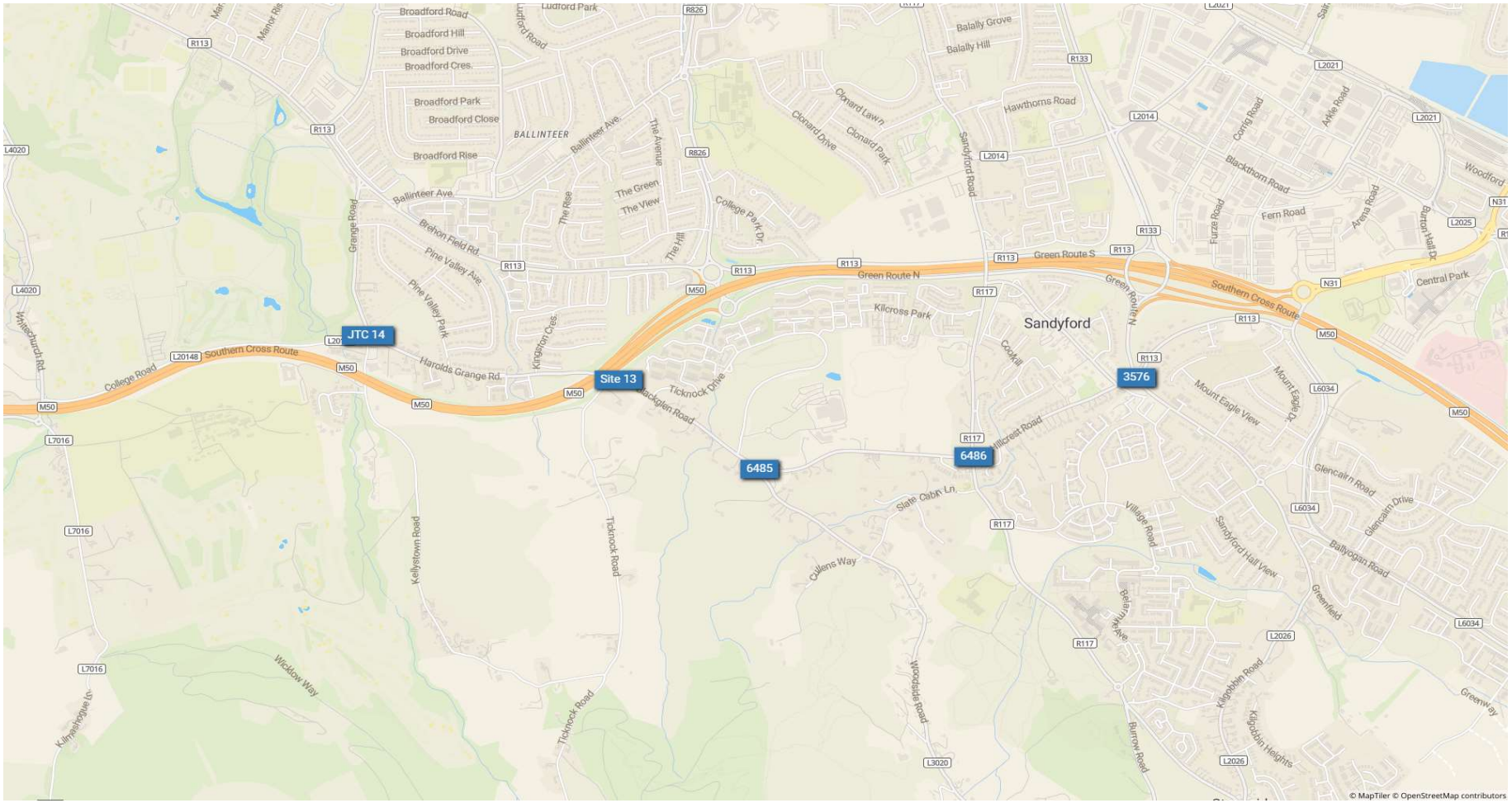
Data Analysis Services
Traffic-Transportation- Commercial-Innovation

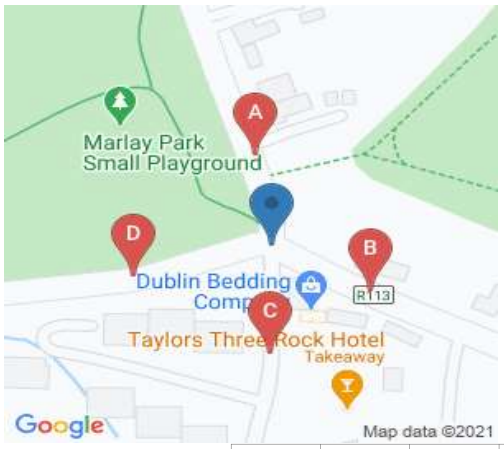
HDR 21 043 South Dublin - Queue

with compliments

IDASO

Survey Name: HDR 21 043 South Dublin - Queue
Date: Tue 28 Mar 2017 — Thu 07 Nov 2019





IDASO

Survey Name: HDR 21 043 South Dublin - Queue
Site: JTC 14
Location: Kellystown Rd / Harolds Grange Rd / College Rd
Date: Tue 28-Mar-2017

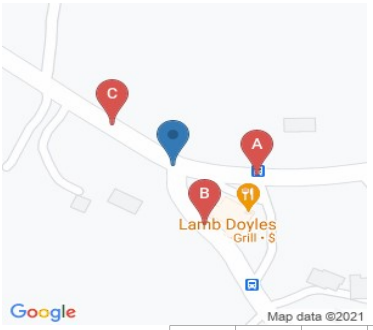
TIME	A1	B1	C1	D1
7:00	15	25	10	10
7:15	20	25	15	15
7:30	35	40	15	30
7:45	70	85	20	55
8:00	80	115+	45	70
8:15	85	105	25	110+
8:30	100+	115+	35	110+
8:45	55	115+	30	110+
9:00	50	45	20	55
9:15	50	60	15	20
9:30	50	75	25	35
9:45	35	25	5	40
10:00	55	35	10	30
10:15	45	20	10	25
10:30	45	35	10	15
10:45	30	40	20	20
11:00	50	60	20	20
11:15	30	40	10	25
11:30	35	25	10	25
11:45	50	45	15	25
12:00	45	45	25	25
12:15	40	35	25	20
12:30	85	40	30	20
12:45	60	55	20	35

TIME	A1	B1	C1	D1
13:00	45	90	10	30
13:15	60	30	30	35
13:30	35	55	10	20
13:45	75	40	25	30
14:00	40	45	25	35
14:15	50	115+	20	30
14:30	55	30	20	20
14:45	65	45	25	35
15:00	65	55	30	30
15:15	60	60	20	30
15:30	70	60	20	50
15:45	60	60	30	25
16:00	65	65	20	55
16:15	50	80	25	35
16:30	100	75	35	30
16:45	65	100	35	50
17:00	100+	115+	35	45
17:15	100+	115+	25	25
17:30	95	115+	40	20
17:45	85	75	25	45
18:00	75	115+	40	50
18:15	85	50	35	50
18:30	80	50	25	25
18:45	75	75	15	50

Queue's are measured in meters

	Cannot be seen from camera
+	Signifies queue stretches to a minimum length of x and beyond the view of the camera
#	Signifies queue stretches to the next significant junction
*	Indicates an estimated queue length due to obscured vision.
M	Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.



IDASO

Survey Name: HDR 21 043 South Dublin - Queue
Site: 6485
Location: R113 Blackglen Road/Woodside Road
Date: Tue 18-Jun-2019

TIME	A1	B1	B2	C1
7:00	0	5	0	0
7:15	0	0	5	0
7:30	0	0	0	0
7:45	0	0	0	5
8:00	0	0	0	0
8:15	0	10	15	5
8:30	0	0	0	5
8:45	0	0	0	0
9:00	0	0	5	5
9:15	0	0	5	0
9:30	0	0	15	0
9:45	0	5	5	0
10:00	0	0	10	5
10:15	0	0	10	0
10:30	0	0	0	0
10:45	0	5	5	5
11:00	0	5	10	5
11:15	0	0	0	5
11:30	0	0	0	5
11:45	0	0	0	0
12:00	0	0	0	0
12:15	0	0	0	0
12:30	0	0	0	0
12:45	0	0	0	0

TIME	A1	B1	B2	C1
13:00	0	20	0	0
13:15	0	0	5	10
13:30	0	10	0	5
13:45	0	0	5	10
14:00	0	0	10	0
14:15	0	0	5	0
14:30	0	0	5	0
14:45	0	0	5	1
15:00	0	0	5	0
15:15	0	1	0	0
15:30	0	0	15	2
15:45	0	5	0	0
16:00	0	5	0	10
16:15	0	0	0	0
16:30	0	0	0	5
16:45	0	0	0	10
17:00	0	15	0	5
17:15	0	0	10	0
17:30	0	5	10	0
17:45	0	0	5	10
18:00	0	0	0	10
18:15	0	0	15	5
18:30	0	5	0	10
18:45	0	5	0	5

Queue's are measured in meters

	Cannot be seen from camera
+	Signifies queue stretches to a minimum length of x and beyond the view of the camera
#	Signifies queue stretches to the next significant junction
*	Indicates an estimated queue length due to obscured vision.
M	Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.

IDASO

Survey Name: HDR 21 043 South Dublin - Queue
Site: 6486
Location: Enniskerry Road/Hillcrest Road/Blackglen Road
Date: Tue 18-Jun-2019

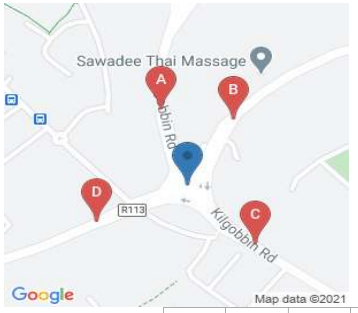
TIME	A1	A2	A3	B1	B2	C1	C2	D1	D2
7:00	5	5	15	15	5	25	30M	30	10
7:15	0	15	10	20	5	40	30M	35	15
7:30	5	25	20	25	0	55+	30M	40	10
7:45	10	20	25	45	5	55+	30M	40	10
8:00	0	15	15	45	10	55+	30M	35	25
8:15	5	30	20	60	5	55+	30M	35	30
8:30	5	35	20	65	5	55+	30M	35	25
8:45	0	40	20	65	0	50	20	40	20
9:00	5	40	20	65+	5	55+	30M	35	25
9:15	0	45	15	35	5	55+	10	35	20
9:30	5	20	15	55	0	55+	10	35	20
9:45	5	20	15	60	0	55+	20	20	15
10:00	5	15	15	20	5	55+	20+	25	15
10:15	0	40	10	30	5	55+	15	15	20
10:30	5	10	10	45	5	55+	10	25	20
10:45	5	25	35	50	5	55+	10	20	15
11:00	5	30	10	30	5	55+	15	20	15
11:15	5	25	20	25	0	55+	20	25	15
11:30	5	40	10	50	5	55+	10	15	10
11:45	5	40	10	30	10	55+	10	20	25
12:00	0	30	25	30	5	55+	15	20	20
12:15	5	20	25	35	10	55+	20+	35	15
12:30	5	50	10	35	5	55+	10	15	20
12:45	5	25	10	55	5	55+	20+	30	15

TIME	A1	A2	A3	B1	B2	C1	C2	D1	D2
13:00	5	50	20	60	5	55+	30M	35	15
13:15	0	45	35	55	10	55+	30M	30	35
13:30	0	50	20	55	0	55+	30M	25	15
13:45	0	60	15	60	5	55+	30M	30	20
14:00	5	40	20	40	0	55+	30M	30	20
14:15	5	45	40	45	5	55+	30M	25	15
14:30	0	60	20	55	5	55+	30M	25	25
14:45	5	40	15	40	5	55+	30M	35	30
15:00	5	40	15	50	5	55+	30M	25	10
15:15	5	35	15	65+	5	55+	10	25	20
15:30	0	65	30	65+	10	55+	30M	35	15
15:45	5	65	25	60	5	55+	30M	20	25
16:00	5	25	15	40	0	55+	30M	30	15
16:15	5	50	35	65+	5	55+	30M	25	25
16:30	0	70+	65	65+	5	55+	30M	25	25
16:45	5	70+	20	65+	10	55+	30M	35	35
17:00	0	70+	30	65+	10	55+	30M	30	25
17:15	5	70+	70	65+	10	55+	15	25	30
17:30	5	70+	20	65+	0	55+	15	30	30
17:45	0	70+	35	65+	10	55+	10	30	30
18:00	0	70+	15	65+	5	55+	30M	30	35
18:15	0	70+	30	65+	5	55+	15	30	25
18:30	0	70+	20	65+	5	55+	15	30	20
18:45	0	60	15	65+	5	55+	15	30	25

Queue's are measured in meters

Cannot be seen from camera
\+ Signifies queue stretches to a minimum length of x and beyond the view of the camera
\# Signifies queue stretches to the next significant junction
* Indicates an estimated queue length due to obscured vision.
M Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.



IDASO

Survey Name: HDR 21 043 South Dublin - Queue
Site: 3576
Location: Leopardstown Rd / Kilgobbin Rd / Hillcrest Rd
Date: Tue 24-Jul-2018

TIME	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
7:00	0	0	20	0	15	10	5	60+	0	5	10	5
7:15	5	15	15	0	20	15	0	60+	5	5	25	15
7:30	5	10	20	0	20	15	0	60+	10	15	30	10
7:45	10	10	25	0	20	25	0	60+	5	15	40	20
8:00	5	10	25	0	10	25	0	60+	5	30	30	15
8:15	5	25	45	0	30	30	0	60+	10	25	40	20
8:30	25	20	20	0	20	40	0	60+	10	15	80+	30
8:45	10	15	15	0	15	30	10	60+	5	30	40	25
9:00	15	25	20	0	20	15	0	60+	15	15	55	20
9:15	10	20	25	0	15	15	5	60+	20	5	25	30
9:30	5	15	30	0	15	25	0	60+	5	15	20	25
9:45	10	15	35	0	25	30	0	60+	15	10	25	25
10:00	5	40	25	5	25	20	0	60+	5	5	25	20
10:15	5	25	15	0	20	40	10	60+	5	10	15	20
10:30	0	20	30	0	30	30	5	60+	5	0	20	25
10:45	5	15	30	0	35	20	5	60+	10	5	20	20
11:00	5	15	25	0	15	15	0	60+	5	5	20	15
11:15	5	35	30	0	25	25	5	60+	15	5	25	20
11:30	0	20	25	5	15	10	0	60+	15	5	20	15
11:45	10	30	25	0	20	15	0	60+	10	10	25	30
12:00	5	20	25	0	30	35	0	60+	15	5	25	35
12:15	0	20	25	0	30	30	0	60+	10	0	25	25
12:30	0	60+	35	5	40	20	5	60+	10	10	20	35
12:45	0	25	25	0	30	30	5	60+	5	5	25	25

TIME	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3
13:00	10	30	25	5	50	25	5	60+	5	5	25	25
13:15	5	35	25	5	25	30	0	60+	5	10	35	25
13:30	5	35	25	0	25	25	0	60+	10	5	40	15
13:45	0	25	25	5	25	25	0	60+	10	10	25	35
14:00	5	40	30	0	30	15	5	60+	10	0	30	20
14:15	0	35	25	0	20	30	10	60+	15	10	20	15
14:30	5	15	25	0	45	25	5	60+	5	5	20	30
14:45	0	20	25	0	20	20	5	60+	10	10	30	20
15:00	5	20	15	0	35	20	5	60+	5	5	20	25
15:15	0	30	55	0	25	25	5	60+	5	0	20	30
15:30	0	35	35	0	15	40	5	60+	10	10	25	30
15:45	5	35	25	0	35	25	10	60+	10	10	30	25
16:00	0	25	35	0	40	40	20	60+	10	5	20	25
16:15	5	55	25	5	45	35	10	60+	5	10	25	20
16:30	5	35	25	0	35	35	10	60+	10	0	25	30
16:45	5	35	40	5	60	35	15	60+	5	10	15	30
17:00	0	60+	45	5	75+	55	10	60+	10	5	30	30
17:15	0	60+	25	15	75+	30	25	60+	10	5	10	40
17:30	15	60+	45+	5	75+	75+	15	60+	5	5	10	25
17:45	5	60+	45+	5	75+	50	20	60+	5	15	15	35
18:00	10	60+	45+	0	45	75+	30	60+	5	5	15	35
18:15	5	60+	45+	20	45	25	20	60+	10	5	20	25
18:30	10	60+	45+	5	50	40	15	60+	5	5	10	30
18:45	5	35	35	10	40	20	5	60+	5	5	25	20

Queue's are measured in meters

Cannot be seen from camera
\+ Signifies queue stretches to a minimum length of x and beyond the view of the camera
\# Signifies queue stretches to the next significant junction
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M Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.

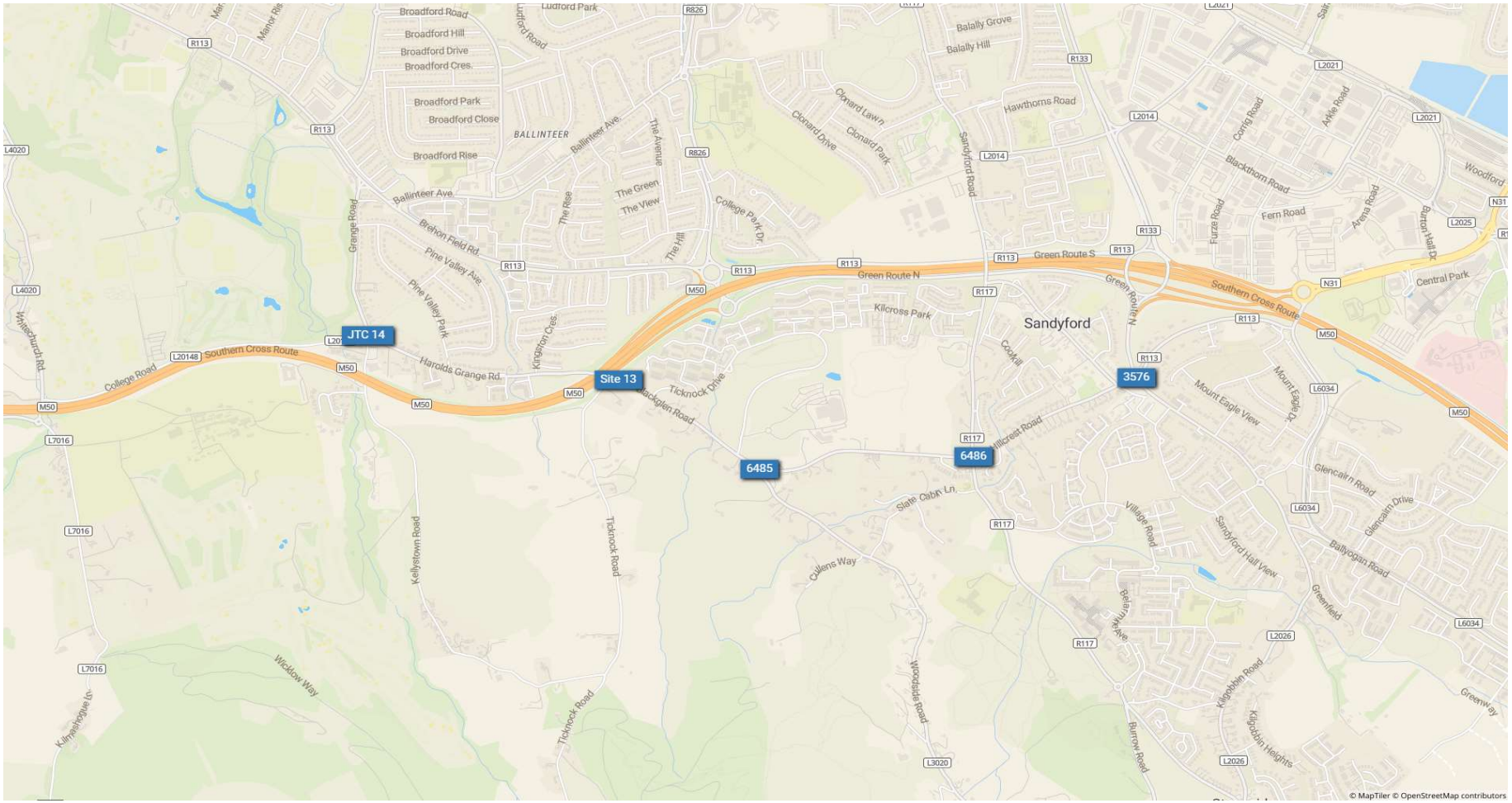
Data Analysis Services
Traffic-Transportation- Commercial-Innovation

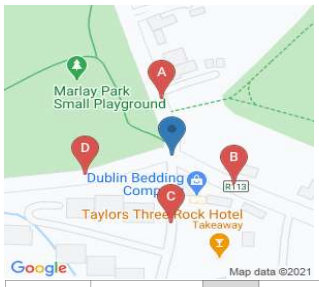
HDR 21 043 South Dublin - Pedestrians

with compliments

IDASO

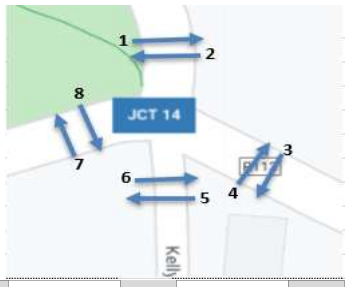
Survey Name: HDR 21 043 South Dublin - Pedestrians
Date: Tue 28 Mar 2017 — Thu 07 Nov 2019



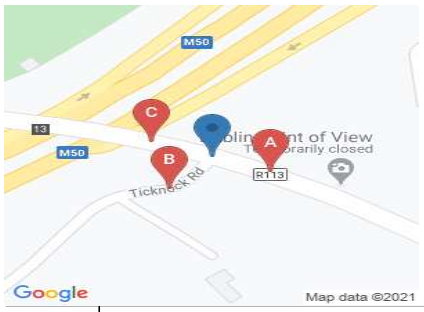


IDASO

Survey Name: HDR 21 043 South Dublin - Pedestrians
Site: JTC 14
Location: Kellystown Rd / Harolds Grange Rd / College Rd
Date: Tue 28-Mar-2017



	MVT 1			MVT 2			MVT 3			MVT 4			MVT 5			MVT 6			MVT 7			MVT 8		
TIME	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	2	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	0	2
7:30	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1
7:45	2	0	2	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	2	0	2	0	0	0
H/TOT	2	0	2	3	0	3	1	0	1	0	0	0	1	0	1	2	0	2	3	0	3	3	0	3
8:00	1	0	1	1	0	1	0	0	0	1	0	1	1	0	1	0	0	0	1	0	1	4	0	4
8:15	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	0	2
8:30	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	1	0	1
8:45	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	4	0	4	0	0	0
H/TOT	4	0	4	3	0	3	0	0	0	1	0	1	3	0	3	2	0	2	6	0	6	7	0	7
9:00	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	3	0	3	0	0	0
9:15	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	3	0	3
9:30	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	5	0	5
9:45	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	5	0	5	0	0	0
H/TOT	3	0	3	6	0	6	0	0	0	0	0	0	1	0	1	4	0	4	10	0	10	8	0	8
10:00	2	0	2	2	0	2	0	0	0	1	0	1	1	0	1	1	0	1	2	0	2	2	0	2
10:15	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
10:30	1	0	1	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
10:45	3	0	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	2	6	1	0	1
H/TOT	6	0	6	9	0	9	0	0	0	1	0	1	1	0	1	1	0	1	7	2	9	5	0	5
11:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
11:15	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
11:30	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1	2	0	2	1	0	1	2	1	3
11:45	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	2	0	2
H/TOT	6	0	6	2	0	2	0	0	0	0	0	0	1	0	1	2	0	2	5	0	5	5	1	6
12:00	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
12:15	0	0	0	3	0	3	0	0	0	0	0	0	1	0	1	2	0	2	6	0	6	6	0	6
12:30	2	0	2	2	0	2	0	0	0	1	0	1	0	0	0	0	0	0	4	1	5	2	0	2
12:45	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3	0	3
H/TOT	4	0	4	6	0	6	0	0	0	1	0	1	1	0	1	2	0	2	13	1	14	12	0	12
13:00	1	0	1	3	0	3	0	0	0	0	0	0	2	0	2	2	0	2	3	0	3	3	0	3
13:15	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	1	0	1	0	0	0
13:30	1	0	1	0	4	4	0	0	0	0	0	0	2	0	2	0	0	0	1	0	1	4	0	4
13:45	4	0	4	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2	0	0	0
H/TOT	6	0	6	4	4	8	0	0	0	1	0	1	4	0	4	4	0	4	6	1	7	7	0	7
14:00	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
14:15	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2	0	2	0	0	0
H/TOT	4	0	4	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1	4	0	4	1	0	1
15:00	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	1	0	1	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	1	0	1
15:45	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	3
H/TOT	7	0	7	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	4	0	4
16:00	2	0	2	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	0	1	2	0	2
16:15	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	1	0	1
16:30	2	0	2	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3	0	3	1	0	1	3	0	3
H/TOT	5	0	5	5	0	5	0	0	0	2	0	2	3	0	3	4	0	4	4	0	4	7	0	7
17:00	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	0	1
17:15	3	0	3	2	0	2	0	0	0	0	0	0	0	0	0	2	0	2	1	0	1	6	0	6
17:30	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	3	0	3	1	0	1
17:45	1	0	1	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
H/TOT	6	0	6	4	0	4	0	0	0	0	0	0	4	0	4	2	0	2	4	0	4	12	0	12
18:00	5	0	5	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	4	0	4	1	0	1
18:15	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0
18:30	1	0	1	5	0	5	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	2	0	2
18:45	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	6	0	6	2	0	2	1	0	1
H/TOT	8	0	8	7	0	7	0	0	0	1	0	1	5	0	5	6	0	6	7	0	7	4	0	4
12 TOT	61	0	61	56	4	60	1	0	1	7	0	7	24	0	24	30	0	30	76	4	80	75	1	76

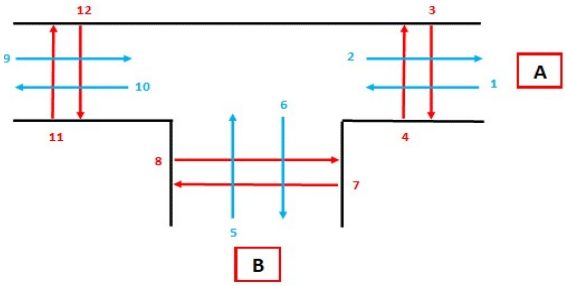


IDASO

Survey Name: HDR 21 043 South Dublin - Pedestrians
Site: Site 13
Location: Blackglen Rd / Ticknock Rd
Date: Thu 07-Nov-2019

C

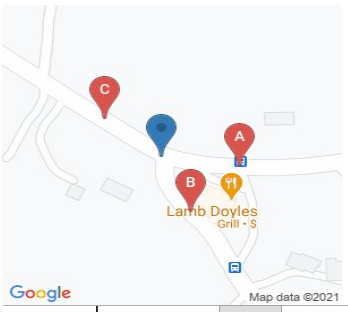
	MVT 1						MVT 2						MVT 3					
TIME	Child < 5	Child < 16	Adult	Elderly	Disabled	TOT	Child < 5	Child < 16	Adult	Elderly	Disabled	TOT	Child < 5	Child < 16	Adult	Elderly	Disabled	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:15	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	
07:30	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	
07:45	0	0	2	0	0	2	0	0	2	0	0	2	0	0	0	0	0	
H/TOT	0	0	2	1	0	3	0	0	6	0	0	6	0	0	0	0	0	
08:00	0	0	1	0	0	1	0	0	2	0	0	2	0	0	0	0	0	
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
08:30	1	0	2	0	0	3	0	0	2	0	0	2	0	0	0	0	0	
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	1	0	3	0	0	4	0	0	4	0	0	4	0	0	0	0	0	
09:00	0	0	1	0	0	1	0	0	2	0	0	2	0	0	0	0	0	
09:15	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	
09:30	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	2	0	0	2	0	0	4	0	0	4	0	0	0	0	0	
10:00	0	0	1	0	0	1	0	0	3	0	0	3	0	0	0	0	0	
10:15	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	
10:30	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	
10:45	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	
H/TOT	0	0	2	0	0	2	0	0	6	0	0	6	0	0	0	0	0	
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:00	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	
12:15	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	
H/TOT	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	
13:00	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	
13:15	0	1	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	
13:30	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	1	2	0	0	3	0	1	1	0	0	2	0	0	0	0	0	
14:00	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	
14:15	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14:45	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	4	0	0	4	0	0	2	0	0	2	0	0	0	0	0	
15:00	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15:45	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	1	1	0	0	2	0	0	2	0	0	2	0	0	0	0	0	
16:00	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	
16:15	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
16:30	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	
16:45	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	
H/TOT	0	0	6	0	0	6	0	0	2	0	0	2	0	0	0	0	0	
17:00	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:45	0	0	3	0	0	3	0	0	1	0	0	1	0	0	0	0	0	
H/TOT	0	0	3	0	0	3	0	0	2	0	0	2	0	0	0	0	0	
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18:15	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18:45	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
H/TOT	0	0	2	0	0	2	0	0	2	0	0	2	0	0	0	0	0	
12 TOT	1	2	27	1	0	31	0	1	36	0	0	37	0	0	0	0	0	



	MVT 4						MVT 5						MVT 6					
TOT	Child < 5	Child < 16	Adult	Elderly	Disabled	TOT	Child < 5	Child < 16	Adult	Elderly	Disabled	TOT	Child < 5	Child < 16	Adult	Elderly	Disabled
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

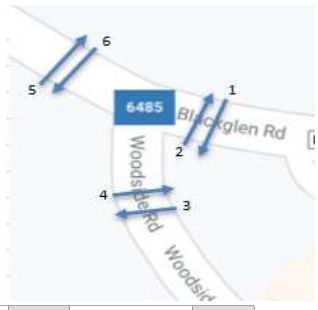
	MVT 7						MVT 8						MVT 9					
TOT	Child < 5	Child < 16	Adult	Elderly	Disabled	TOT	Child < 5	Child < 16	Adult	Elderly	Disabled	TOT	Child < 5	Child < 16	Adult	Elderly	Disabled
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	MVT 10						MVT 11						MVT 12				
TOT	Child < 5	Child < 16	Adult	Elderly	Disabled	TOT	Child < 5	Child < 16	Adult	Elderly	Disabled	TOT	Child < 5	Child < 16	Adult	Elderly	Disabled
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

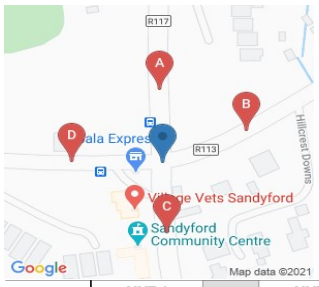


IDASO

Survey Name: HDR 21 043 South Dublin - Pedestrians
Site: 6485
Location: R113 Blackglen Road/Woodside Road
Date: Tue 18-Jun-2019



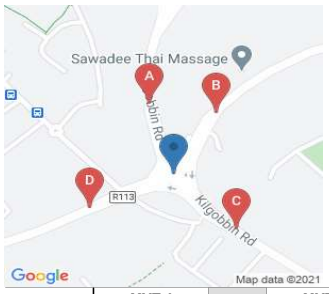
	MVT 1			MVT 2			MVT 3			MVT 4			MVT 5			MVT 6		
TIME	Adult	Child	TOT	Adult	Child	TOT	Adult	Child	TOT	Adult	Child	TOT	Adult	Child	TOT	Adult	Child	TOT
07:00	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0
07:30	1	0	1	0	0	0	0	0	0	7	0	7	1	0	1	0	0	0
07:45	0	0	0	0	0	0	5	0	5	3	0	3	2	0	2	0	0	0
H/TOT	2	0	2	0	0	0	5	0	5	14	0	14	3	0	3	0	0	0
08:00	2	0	2	0	0	0	0	0	0	4	0	4	0	0	0	2	0	2
08:15	0	0	0	0	0	0	1	1	2	2	0	2	1	0	1	1	0	1
08:30	0	0	0	1	0	1	7	1	8	3	0	3	0	0	0	1	0	1
08:45	0	0	0	1	0	1	5	4	9	7	0	7	2	0	2	2	0	2
H/TOT	2	0	2	2	0	2	13	6	19	16	0	16	3	0	3	6	0	6
09:00	0	0	0	0	0	0	3	0	3	8	0	8	0	0	0	1	0	1
09:15	2	0	2	0	0	0	2	0	2	5	0	5	0	0	0	0	0	0
09:30	1	0	1	4	0	4	1	0	1	3	0	3	0	0	0	1	0	1
09:45	0	0	0	0	0	0	2	1	3	3	0	3	1	1	2	1	0	1
H/TOT	3	0	3	4	0	4	8	1	9	19	0	19	1	1	2	3	0	3
10:00	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	1	1	2
10:15	0	0	0	0	0	0	2	0	2	2	0	2	0	0	0	0	0	0
10:30	0	0	0	0	0	0	2	0	2	0	0	0	1	0	1	0	0	0
10:45	0	0	0	0	0	0	2	0	2	2	0	2	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	6	0	6	5	1	6	1	0	1	1	1	2
11:00	1	0	1	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0
11:15	1	0	1	1	0	1	1	0	1	3	0	3	0	0	0	1	0	1
11:30	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0
H/TOT	2	0	2	4	0	4	1	0	1	6	0	6	1	0	1	1	0	1
12:00	0	0	0	1	0	1	1	0	1	3	0	3	0	0	0	0	0	0
12:15	0	0	0	1	2	3	0	0	0	5	0	5	0	0	0	0	0	0
12:30	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0
12:45	0	0	0	1	0	1	3	1	4	3	0	3	2	1	3	2	0	2
H/TOT	0	0	0	3	2	5	5	1	6	12	0	12	2	1	3	2	0	2
13:00	0	0	0	0	0	0	2	0	2	1	0	1	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	1	0	1	2	0	2	1	0	1
13:30	0	0	0	0	0	0	1	0	1	6	0	6	1	0	1	1	0	1
13:45	1	0	1	4	0	4	3	0	3	0	0	0	4	0	4	0	0	0
H/TOT	1	0	1	4	0	4	6	0	6	8	0	8	7	0	7	2	0	2
14:00	0	0	0	0	0	0	0	0	0	6	4	10	1	0	1	2	0	2
14:15	1	0	1	0	0	0	1	0	1	1	0	1	2	0	2	1	0	1
14:30	0	0	0	0	0	0	2	0	2	2	0	2	0	0	0	1	2	3
14:45	1	0	1	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0
H/TOT	2	0	2	1	0	1	3	0	3	10	4	14	3	0	3	4	2	6
15:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
15:30	1	0	1	1	0	1	2	0	2	1	0	1	0	0	0	0	0	0
15:45	0	0	0	0	0	0	2	1	3	1	0	1	2	0	2	0	0	0
H/TOT	2	0	2	1	0	1	4	1	5	3	0	3	2	0	2	0	0	0
16:00	0	0	0	0	0	0	2	1	3	4	1	5	0	0	0	0	0	0
16:15	0	0	0	1	0	1	2	0	2	1	1	2	0	0	0	0	0	0
16:30	0	0	0	0	0	0	4	0	4	1	0	1	0	0	0	0	0	0
16:45	0	0	0	0	0	0	4	0	4	3	2	5	1	0	1	1	2	3
H/TOT	0	0	0	1	0	1	12	1	13	9	4	13	1	0	1	1	2	3
17:00	0	0	0	0	0	0	2	0	2	1	0	1	1	0	1	2	1	3
17:15	0	0	0	3	0	3	4	0	4	3	0	3	1	0	1	1	0	1
17:30	8	0	8	5	0	5	6	0	6	4	0	4	1	0	1	0	0	0
17:45	0	0	0	3	0	3	3	0	3	5	0	5	0	0	0	0	0	0
H/TOT	8	0	8	11	0	11	15	0	15	13	0	13	3	0	3	3	1	4
18:00	2	0	2	0	0	0	7	0	7	1	0	1	1	0	1	1	0	1
18:15	0	0	0	0	0	0	6	1	7	4	0	4	1	1	2	0	0	0
18:30	0	0	0	0	0	0	3	0	3	2	0	2	2	0	2	0	0	0
18:45	0	0	0	0	0	0	4	0	4	4	0	4	1	0	1	2	0	2
H/TOT	2	0	2	0	0	0	20	1	21	11	0	11	5	1	6	3	0	3
12 TOT	24	0	24	31	2	33	98	11	109	126	9	135	32	3	35	26	6	32



IDASO

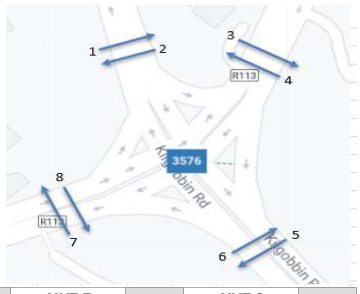
Survey Name: HDR 21 043 South Dublin - Pedestrians
Site: 6486
Location: Enniskerry Road/Hillcrest Road
Date: Tue 18-Jun-2019

	MVT 1			MVT 2			MVT 3			MVT 4			MVT 5			MVT 6			MVT 7			MVT 8		
TIME	Adult	Child	TOT	Adult	Child	TOT	Adult	Child	TOT	Adult	Child	TOT	Adult	Child	TOT	Adult	Child	TOT	Adult	Child	TOT	Adult	Child	TOT
07:00	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3	0	3	0	0	0
07:15	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
07:30	1	0	1	0	0	0	0	0	0	7	0	7	1	0	1	0	0	0	0	0	0	1	0	1
07:45	0	0	0	0	0	0	5	0	5	3	0	3	2	0	2	0	0	0	2	0	2	0	0	0
H/TOT	2	0	2	0	0	0	5	0	5	14	0	14	3	0	3	0	0	0	5	0	5	1	0	1
08:00	2	0	2	0	0	0	0	0	0	4	0	4	0	0	0	2	0	2	1	0	1	0	0	0
08:15	0	0	0	0	0	0	1	1	2	2	0	2	1	0	1	1	0	1	1	0	1	0	0	0
08:30	0	0	0	1	0	1	7	1	8	3	0	3	0	0	0	1	0	1	2	0	2	0	0	0
08:45	0	0	0	1	0	1	5	4	9	7	0	7	2	0	2	2	0	2	0	0	0	0	0	0
H/TOT	2	0	2	2	0	2	13	6	19	16	0	16	3	0	3	6	0	6	4	0	4	0	0	0
09:00	0	0	0	0	0	0	3	0	3	8	0	8	0	0	0	1	0	1	0	0	0	0	0	0
09:15	2	0	2	0	0	0	2	0	2	5	0	5	0	0	0	0	0	0	3	0	3	0	0	0
09:30	1	0	1	4	0	4	1	0	1	3	0	3	0	0	0	1	0	1	1	0	1	1	0	1
09:45	0	0	0	0	0	0	2	1	3	3	0	3	1	1	2	1	0	1	0	0	0	0	0	0
H/TOT	3	0	3	4	0	4	8	1	9	19	0	19	1	1	2	3	0	3	4	0	4	1	0	1
10:00	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	1	1	2	0	0	0	0	0	0
10:15	0	0	0	0	0	0	2	0	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	2	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	2	0	2	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1
H/TOT	0	0	0	0	0	0	6	0	6	5	1	6	1	0	1	1	1	2	0	0	0	1	0	1
11:00	1	0	1	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
11:15	1	0	1	1	0	1	1	0	1	3	0	3	0	0	0	1	0	1	3	0	3	1	0	1
11:30	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0
H/TOT	2	0	2	4	0	4	1	0	1	6	0	6	1	0	1	1	0	1	3	0	3	1	0	1
12:00	0	0	0	1	0	1	1	0	1	3	0	3	0	0	0	0	0	0	0	0	0	1	0	1
12:15	0	0	0	1	2	3	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0	1	2	3
12:30	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	1	0	1	3	1	4	3	0	3	2	1	3	2	0	2	0	0	0	0	0	0
H/TOT	0	0	0	3	2	5	5	1	6	12	0	12	2	1	3	2	0	2	0	0	0	2	2	4
13:00	0	0	0	0	0	0	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	1	0	1	2	0	2	1	0	1	1	0	1	0	0	0
13:30	0	0	0	0	0	0	1	0	1	6	0	6	1	0	1	1	0	1	0	0	0	0	0	0
13:45	1	0	1	4	0	4	3	0	3	0	0	0	4	0	4	0	0	0	4	0	4	1	0	1
H/TOT	1	0	1	4	0	4	6	0	6	8	0	8	7	0	7	2	0	2	5	0	5	1	0	1
14:00	0	0	0	0	0	0	0	0	0	6	4	10	1	0	1	2	0	2	0	0	0	0	0	0
14:15	1	0	1	0	0	0	1	0	1	1	0	1	2	0	2	1	0	1	1	0	1	0	0	0
14:30	0	0	0	0	0	0	2	0	2	2	0	2	0	0	0	1	2	3	0	0	0	0	0	0
14:45	1	0	1	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0
H/TOT	2	0	2	1	0	1	3	0	3	10	4	14	3	0	3	4	2	6	2	0	2	0	0	0
15:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0
15:15	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
15:30	1	0	1	1	0	1	2	0	2	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0
15:45	0	0	0	0	0	0	2	1	3	1	0	1	2	0	2	0	0	0	0	0	0	0	0	0
H/TOT	2	0	2	1	0	1	4	1	5	3	0	3	2	0	2	0	0	0	2	1	3	0	0	0
16:00	0	0	0	0	0	0	2	1	3	4	1	5	0	0	0	0	0	0	0	0	0	7	0	7
16:15	0	0	0	1	0	1	2	0	2	1	1	2	0	0	0	0	0	0	0	0	0	1	0	1
16:30	0	0	0	0	0	0	4	0	4	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	4	0	4	3	2	5	1	0	1	1	2	3	0	0	0	0	0	0
H/TOT	0	0	0	1	0	1	12	1	13	9	4	13	1	0	1	1	2	3	0	0	0	8	0	8
17:00	0	0	0	0	0	0	2	0	2	1	0	1	1	0	1	2	1	3	0	0	0	1	0	1
17:15	0	0	0	3	0	3	4	0	4	3	0	3	1	0	1	1	0	1	1	0	1	2	0	2
17:30	8	0	8	5	0	5	6	0	6	4	0	4	1	0	1	0	0	0	3	0	3	3	0	3
17:45	0	0	0	3	0	3	3	0	3	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	8	0	8	11	0	11	15	0	15	13	0	13	3	0	3	3	1	4	4	0	4	6	0	6
18:00	2	0	2	0	0	0	7	0	7	1	0	1	1	0	1	1	0	1	1	0	1	0	0	0
18:15	0	0	0	0	0	0	6	1	7	4	0	4	1	1	2	0	0	0	3	0	3	0	0	0
18:30	0	0	0	0	0	0	3	0	3	2	0	2	2	0	2	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	4	0	4	4	0	4	1	0	1	2	0	2	0	0	0	0	0	0
H/TOT	2	0	2	0	0	0	20	1	21	11	0	11	5	1	6	3	0	3	4	0	4	0	0	0
12 TOT	24	0	24	31	2	33	98	11	109	126	9	135	32	3	35	26	6	32	33	1	34	21	2	23



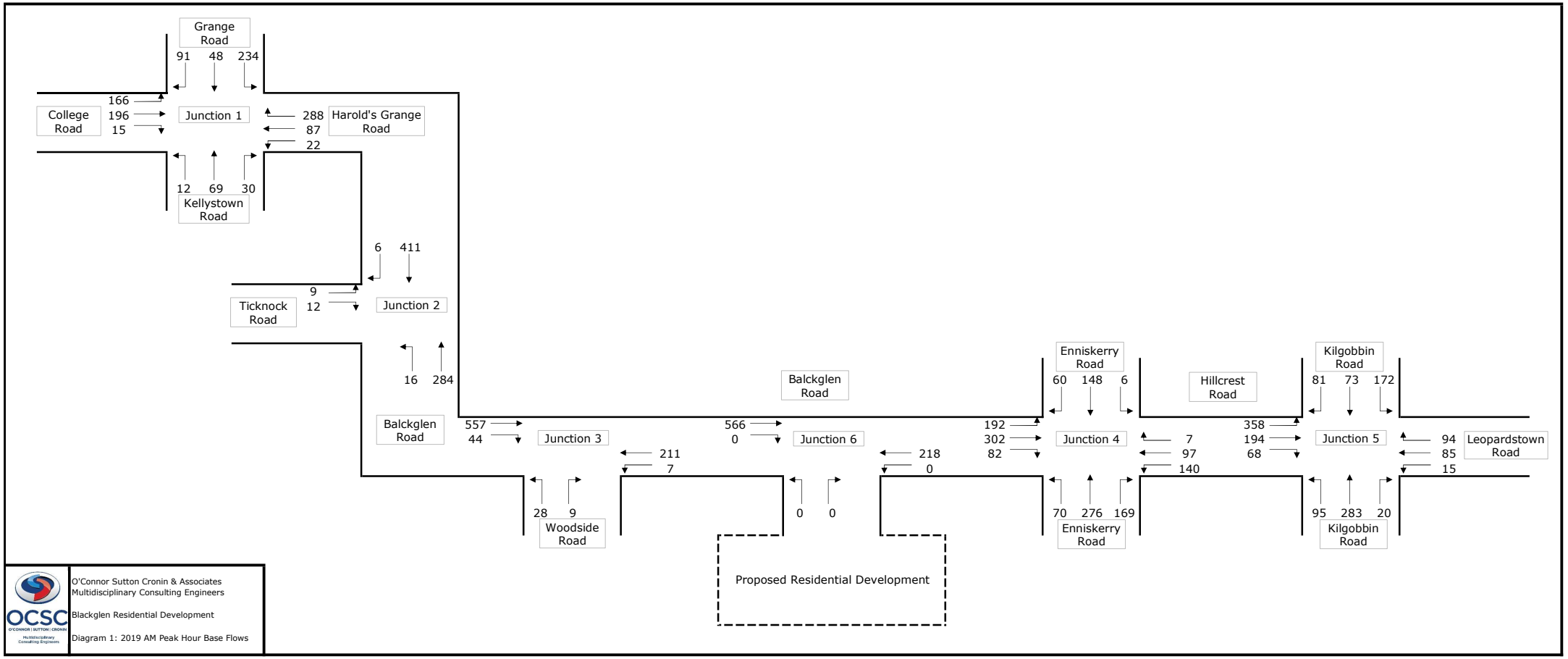
IDASO

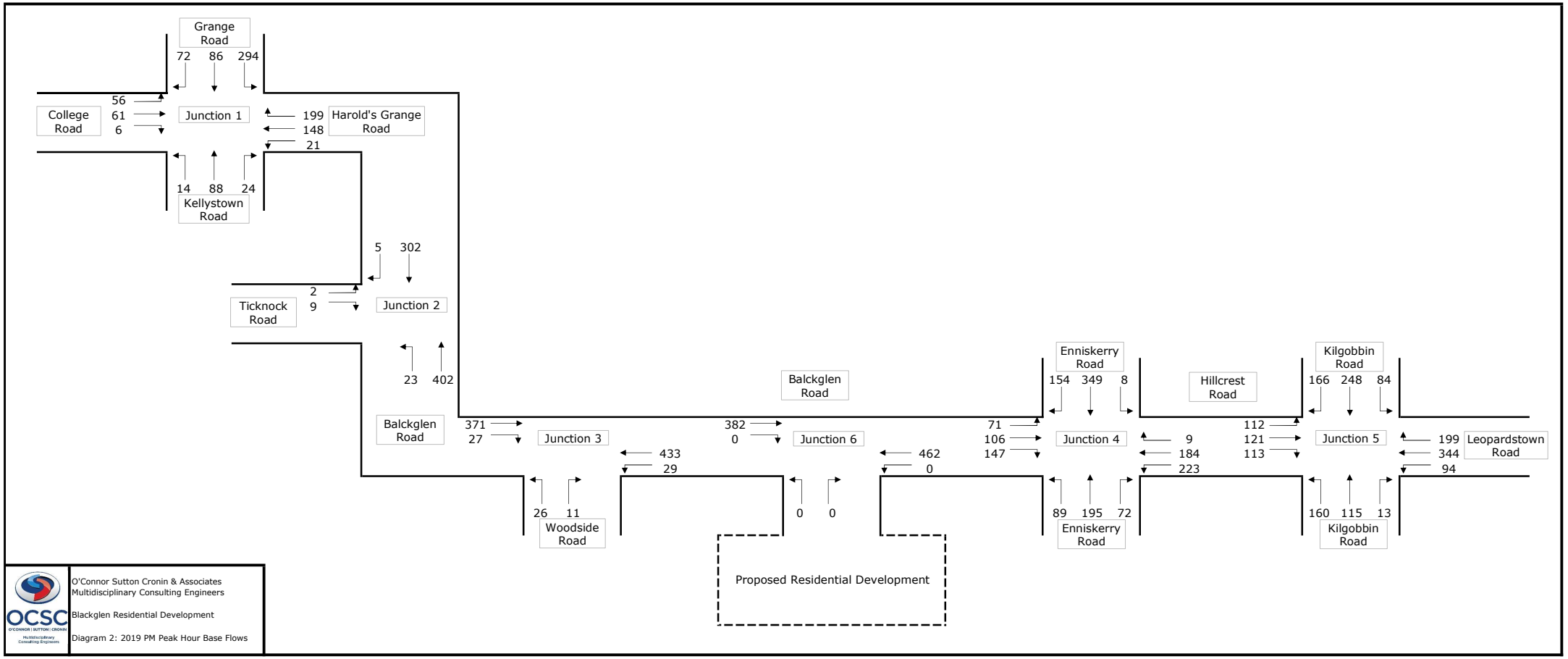
Survey Name: HDR 21 043 South Dublin - Pedestrians
Site: 3576
Location: Leopardstown Rd / Kilgobbin Rd / Hillcrest Rd
Date: Tue 24-Jul-2018



	MVT 1			MVT 2			MVT 3			MVT 4			MVT 5			MVT 6			MVT 7			MVT 8		
TIME	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**	**Adult**	**Child**	**TOT**
07:00	1	0	1	1	0	1	2	0	2	1	0	1	0	0	0	2	0	2	0	0	0	0	0	0
07:15	0	0	0	1	0	1	0	0	0	0	0	0	3	0	3	0	0	0	2	0	2	0	0	0
07:30	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	2
07:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1
H/TOT	5	0	5	2	0	2	2	0	2	1	0	1	3	0	3	3	0	3	3	0	3	3	0	3
08:00	3	0	3	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1
08:15	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0
08:30	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	6	0	6	4	0	4	0	0	0	0	0	0	0	0	0	3	0	3	1	0	1	1	0	1
09:00	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0
09:15	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1
09:30	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
H/TOT	8	0	8	1	0	1	0	0	0	0	0	0	1	0	1	3	0	3	0	0	0	1	0	1
10:00	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
10:45	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
H/TOT	2	0	2	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0
H/TOT	1	0	1	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0
12:00	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0
12:30	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	2	4	0	4	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0
13:30	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	1	3	0	3	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	1	0	1
14:15	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
H/TOT	1	0	1	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2	0	2
15:00	0	0	0	2	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
15:30	0	0	0	1	0	1	0	0	0	1	0	1	1	0	1	0	0	0	1	0	1	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0	2	0	0	0
H/TOT	0	0	0	3	0	3	0	0	0	1	0	1	4	0	4	0	0	0	3	0	3	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1
16:15	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
16:30	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	1	0	1	2	0	2
H/TOT	0	0	0	3	0	3	0	0	0	0	0	0	3	0	3	1	0	1	3	0	3	3	0	3
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	1	0	1	3	0	3	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
17:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	2	0	2
17:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0
H/TOT	2	0	2	3	0	3	0	0	0	0	0	0	2	0	2	1	0	1	2	0	2	2	0	2
18:00	0	0	0	3	0	3	0	0	0	0	0	0	4	0	4	1	0	1	2	0	2	0	0	0
18:15	0	0	0	3	0	3	0	0	0	1	0	1	2	0	2	0	0	0	0	0	0	0	0	0
18:30	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
18:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	1	0	1	0	0	0
H/TOT	1	0	1	7	0	7	0	0	0	1	0	1	9	0	9	1	0	1	3	0	3	1	0	1
12 TOT	29	0	29	37	0	37	2	0	2	4	0	4	23	0	23	13	0	13	21	0	21	14	0	14

APPENDIX B: TRAFFIC FLOW DIAGRAMS


Grange Road
91 48 234
College Road
166
196
15
Junction 1
288
87
22
Harold's Grange Road
12 69 30
Kellystown Road
6 411
9
12
Ticknock Road
Junction 2
16 284
Balckglen Road
557
44
Junction 3
566
0
Junction 6
Balckglen Road
192
302
82
Junction 4
Enniskerry Road
60 148 6
Hillcrest Road
7
97
140
358
194
68
Junction 5
Kilgobbin Road
81 73 172
94
85
15
Leopardstown Road
211
7
218
0
28 9
Woodside Road
0 0
70 276 169
Enniskerry Road
95 283 20
Kilgobbin Road
Proposed Residential Development
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Blackglen Residential Development
Diagram 1: 2019 AM Peak Hour Base Flows


Grange Road
72 86 294
56
College Road
61
6
Junction 1
199
148
21
Harold's Grange Road
14 88 24
Kellystown Road
5 302
2
Ticknock Road
9
Junction 2
23 402
Balckglen Road
371
27
Junction 3
433
29
382
0
Junction 6
462
0
Balckglen Road
71
106
147
Junction 4
Enniskerry Road
154 349 8
9
184
223
Hillcrest Road
112
121
113
Junction 5
Kilgobbin Road
166 248 84
199
344
94
Leopardstown Road
26 11
Woodside Road
0 0
89 195 72
Enniskerry Road
160 115 13
Kilgobbin Road
Proposed Residential Development
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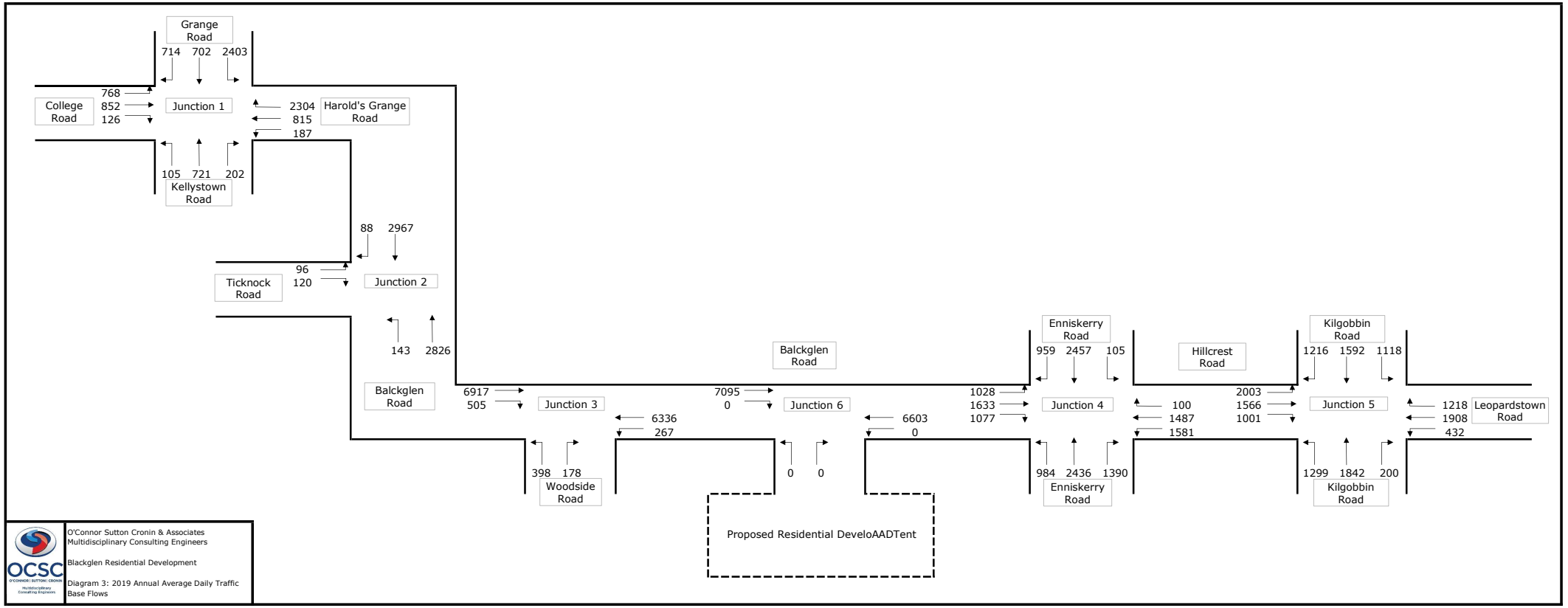
Blackglen Residential Development
Diagram 2: 2019 PM Peak Hour Base Flows


Grange Road
714 702 2403
768
College Road
852
126
Junction 1
2304
815
187
Harold's Grange Road
105 721 202
Kellystown Road
88 2967
96
120
Ticknock Road
Junction 2
143 2826
Balckglen Road
6917
505
Junction 3
6336
267
7095
0
Junction 6
6603
0
Balckglen Road
1028
1633
1077
Junction 4
Enniskerry Road
959 2457 105
100
1487
1581
Hillcrest Road
2003
1566
1001
Junction 5
Kilgobbin Road
1216 1592 1118
1218
1908
432
Leopardstown Road
398 178
Woodside Road
0 0
984 2436 1390
Enniskerry Road
1299 1842 200
Kilgobbin Road
Proposed Residential DeveloAADTent
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Blackglen Residential Development
Diagram 3: 2019 Annual Average Daily Traffic Base Flows

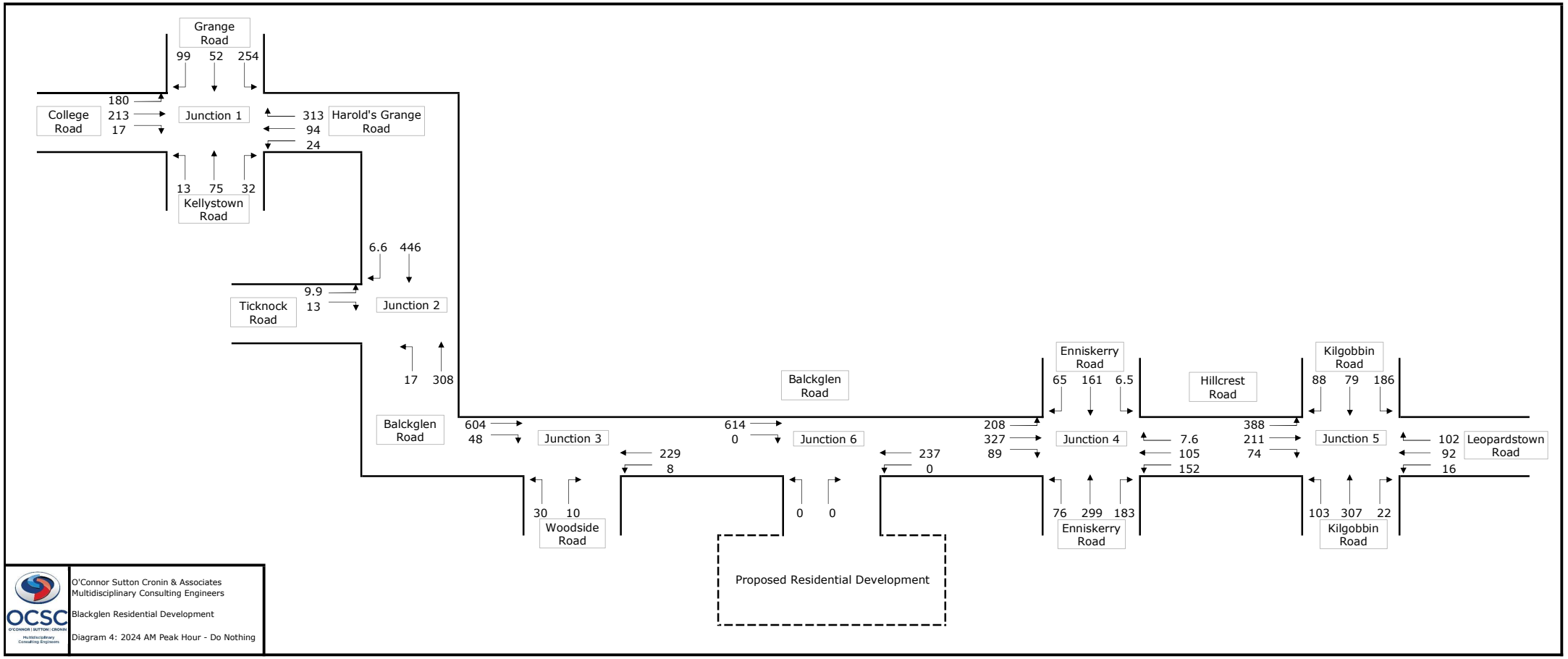


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Diagram 4: 2024 AM Peak Hour - Do Nothing

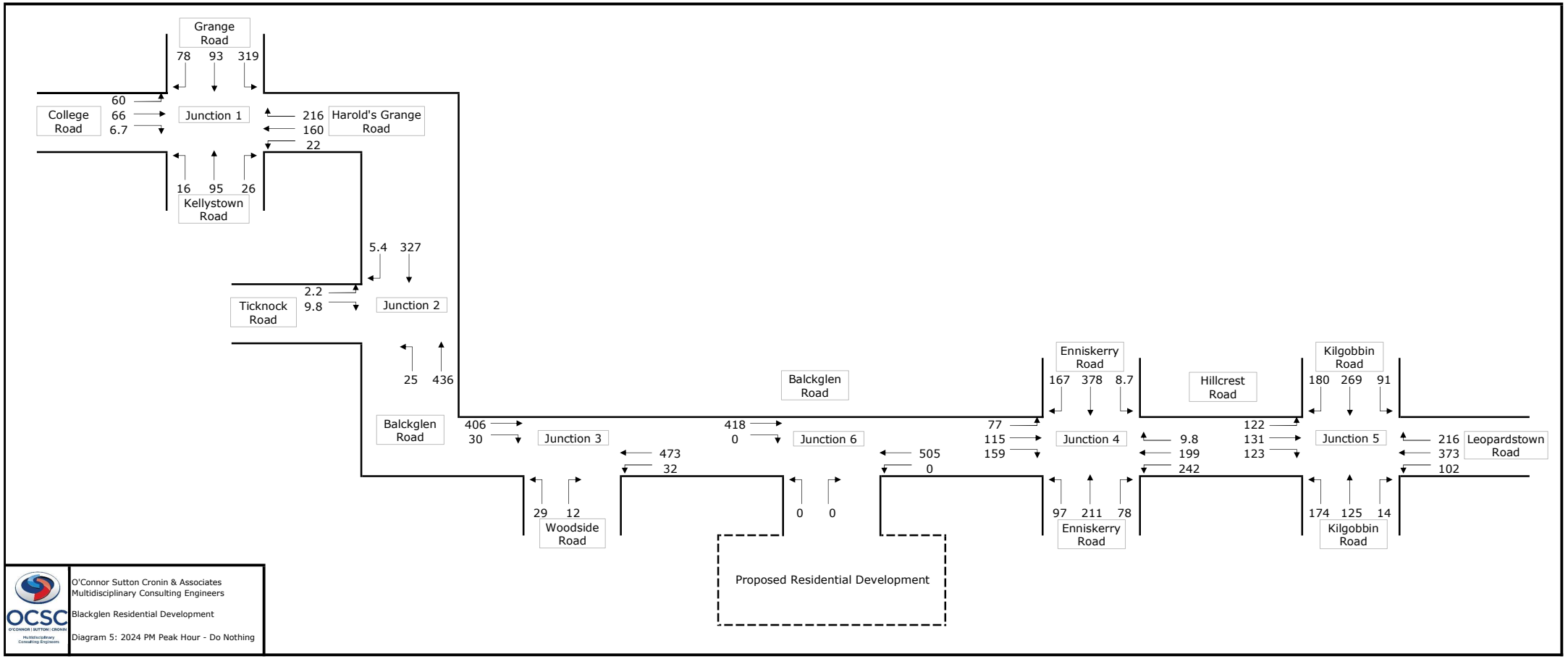

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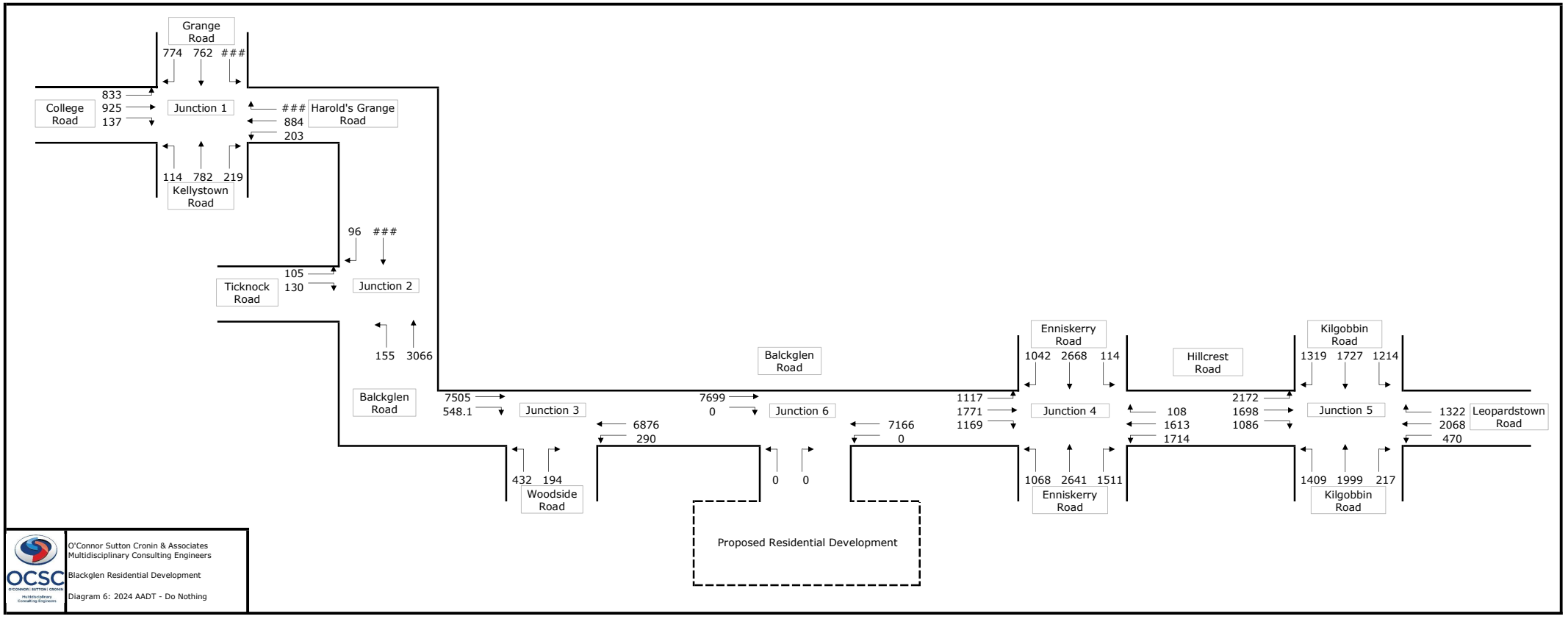
Diagram 5: 2024 PM Peak Hour - Do Nothing


Grange Road
774 762 ###
833
925
137
College Road
Junction 1
884 203
Harold's Grange Road
114 782 219
Kellystown Road
96 ###
105
130
Ticknock Road
Junction 2
155 3066
Balckglen Road
7505
548.1
Junction 3
6876
290
432 194
Woodside Road
7699
0
Junction 6
0 0
7166
0
Balckglen Road
Enniskerry Road
1042 2668 114
1117
1771
1169
Junction 4
1068 2641 1511
Enniskerry Road
Hillcrest Road
108
1613
1714
2172
1698
1086
Kilgobbin Road
1319 1727 1214
Junction 5
1409 1999 217
Kilgobbin Road
1322
2068
470
Leopardstown Road
Proposed Residential Development
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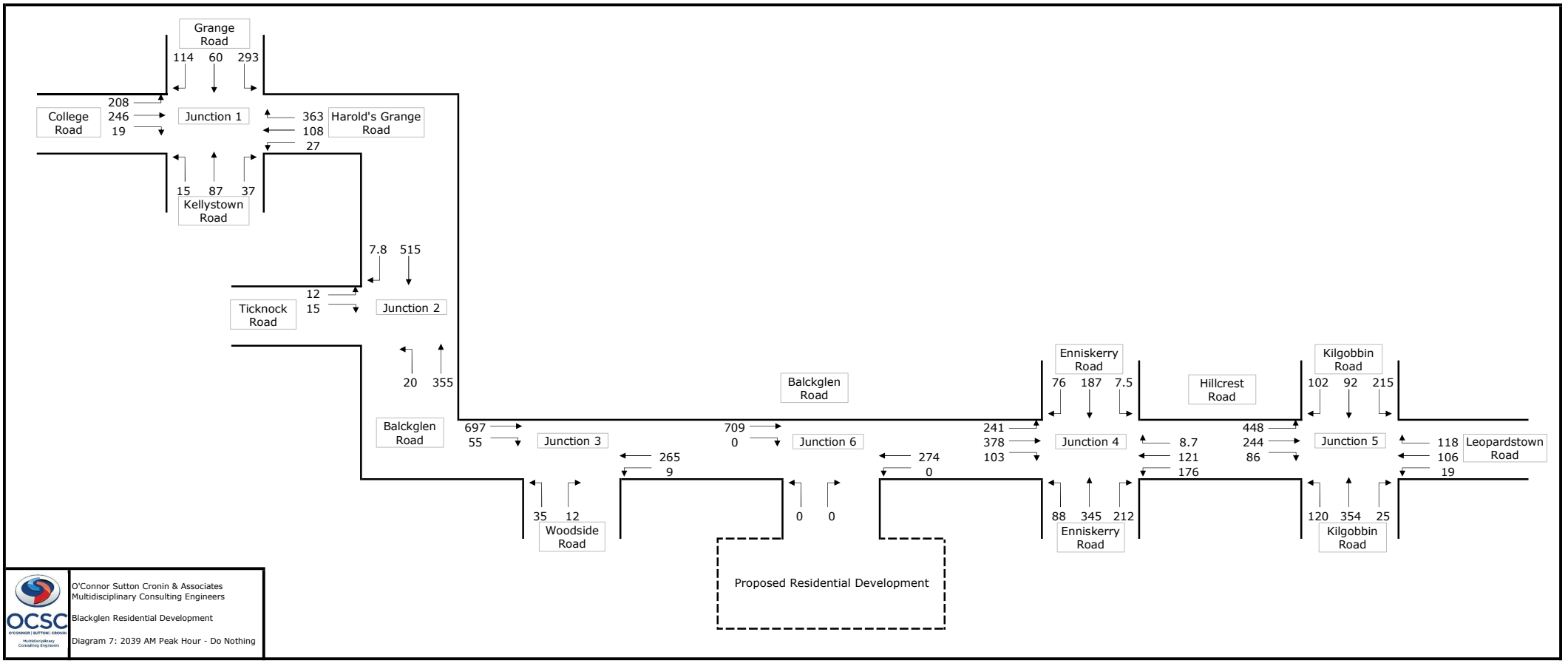
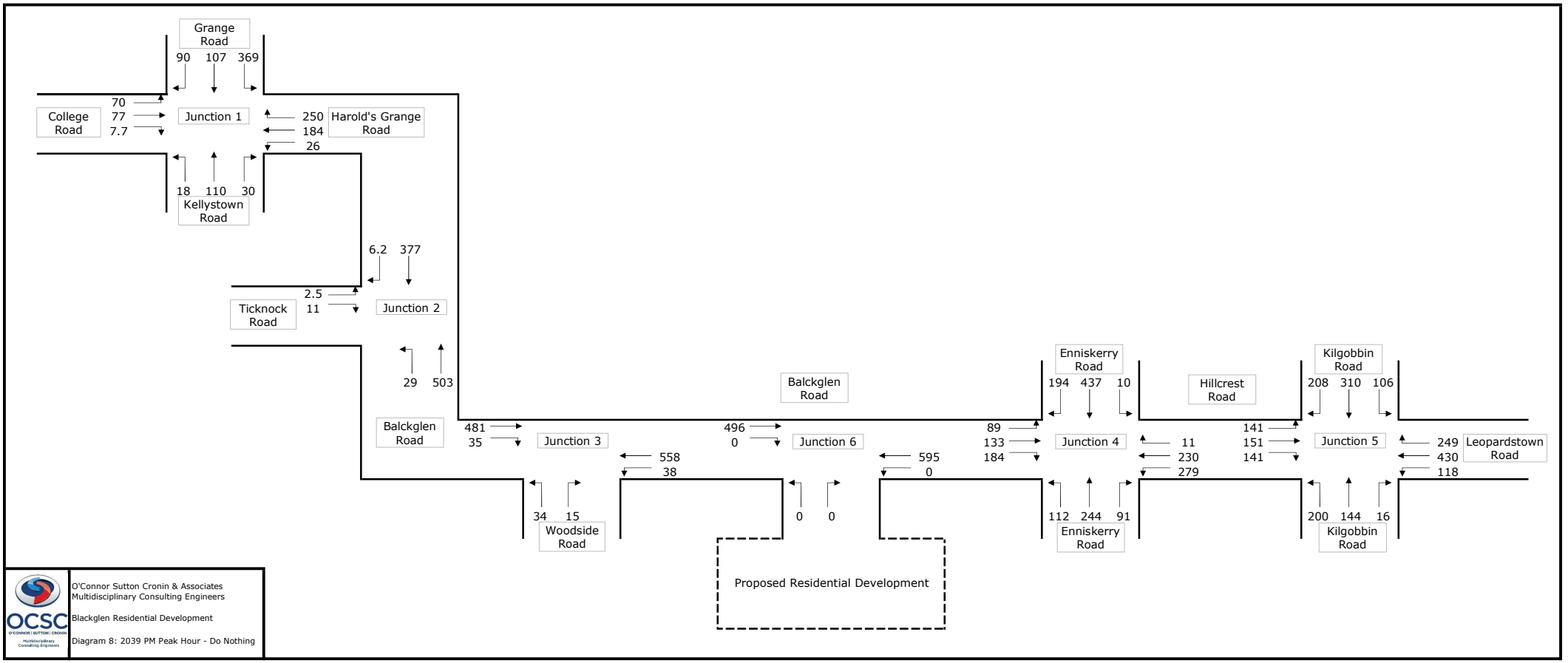
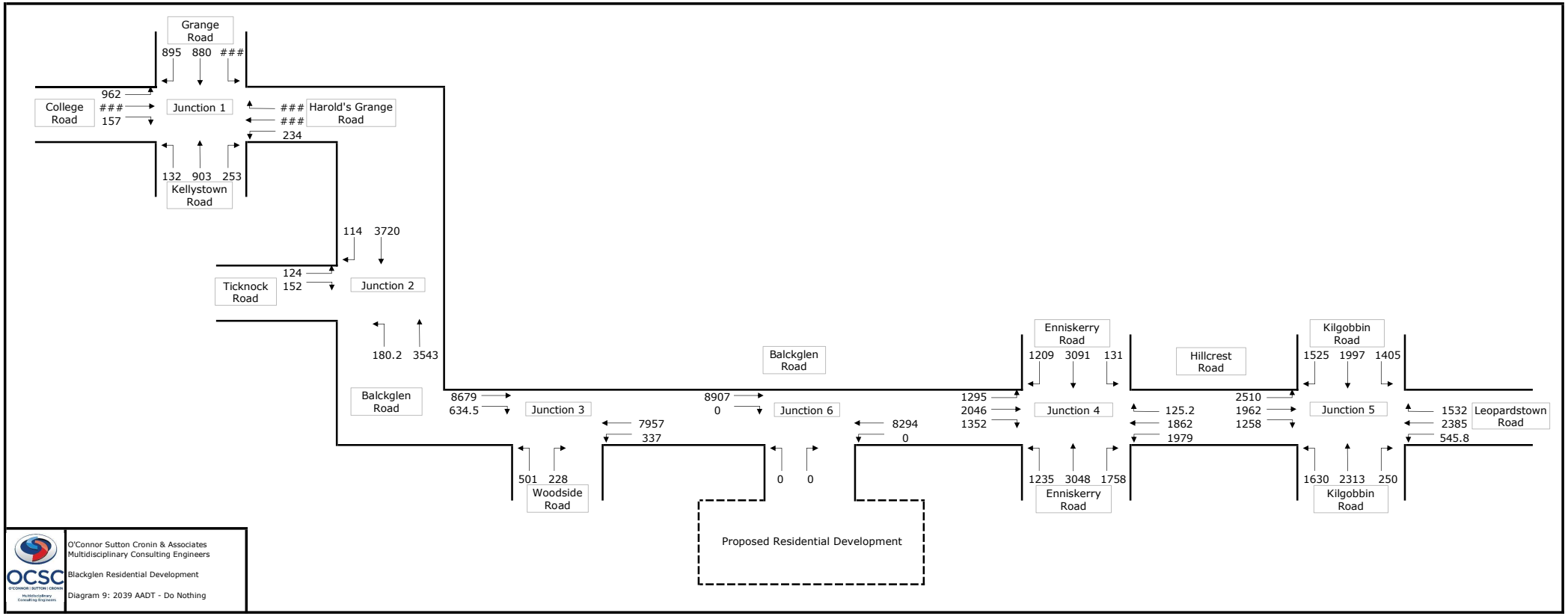
Blackglen Residential Development
Diagram 6: 2024 AADT - Do Nothing


Grange Road
114 60 293
College Road
208
246
19
Junction 1
363
108
27
Harold's Grange Road
15 87 37
Kellystown Road
7.8 515
12
15
Ticknock Road
Junction 2
20 355
Balckglen Road
697
55
Junction 3
709
0
Junction 6
Balckglen Road
241
378
103
Junction 4
Enniskerry Road
76 187 7.5
8.7
121
176
Hillcrest Road
448
244
86
Junction 5
Kilgobbin Road
102 92 215
118
106
19
Leopardstown Road
265
9
274
0
35 12
Woodside Road
0 0
88 345 212
Enniskerry Road
120 354 25
Kilgobbin Road
Proposed Residential Development
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Blackglen Residential Development
Diagram 7: 2039 AM Peak Hour - Do Nothing


Grange Road
90 107 369
70
77
7.7
College Road
Junction 1
250
184
26
Harold's Grange Road
18 110 30
Kellystown Road
6.2 377
2.5
11
Ticknock Road
Junction 2
29 503
Balckglen Road
481
35
Junction 3
558
38
34 15
Woodside Road
496
0
Junction 6
0 0
595
0
Balckglen Road
Enniskerry Road
194 437 10
89
133
184
Junction 4
11
230
279
112 244 91
Enniskerry Road
Hillcrest Road
Kilgobbin Road
208 310 106
141
151
141
Junction 5
249
430
118
200 144 16
Kilgobbin Road
Leopardstown Road
Proposed Residential Development
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Blackglen Residential Development
Diagram 8: 2039 PM Peak Hour - Do Nothing


Grange Road
895 880 ###
College Road
962
157
Junction 1
234
Harold's Grange Road
132 903 253
Kellystown Road
114 3720
124 152
Ticknock Road
Junction 2
180.2 3543
Balckglen Road
8679 634.5
Junction 3
7957 337
501 228
Woodside Road
8907 0
Junction 6
0 0
8294 0
Balckglen Road
Proposed Residential Development
Enniskerry Road
1209 3091 131
1295 2046 1352
Junction 4
1235 3048 1758
Enniskerry Road
Hillcrest Road
125.2 1862 1979
Kilgobbin Road
1525 1997 1405
2510 1962 1258
Junction 5
1630 2313 250
Kilgobbin Road
1532 2385 545.8
Leopardstown Road
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Blackglen Residential Development
Diagram 9: 2039 AADT - Do Nothing

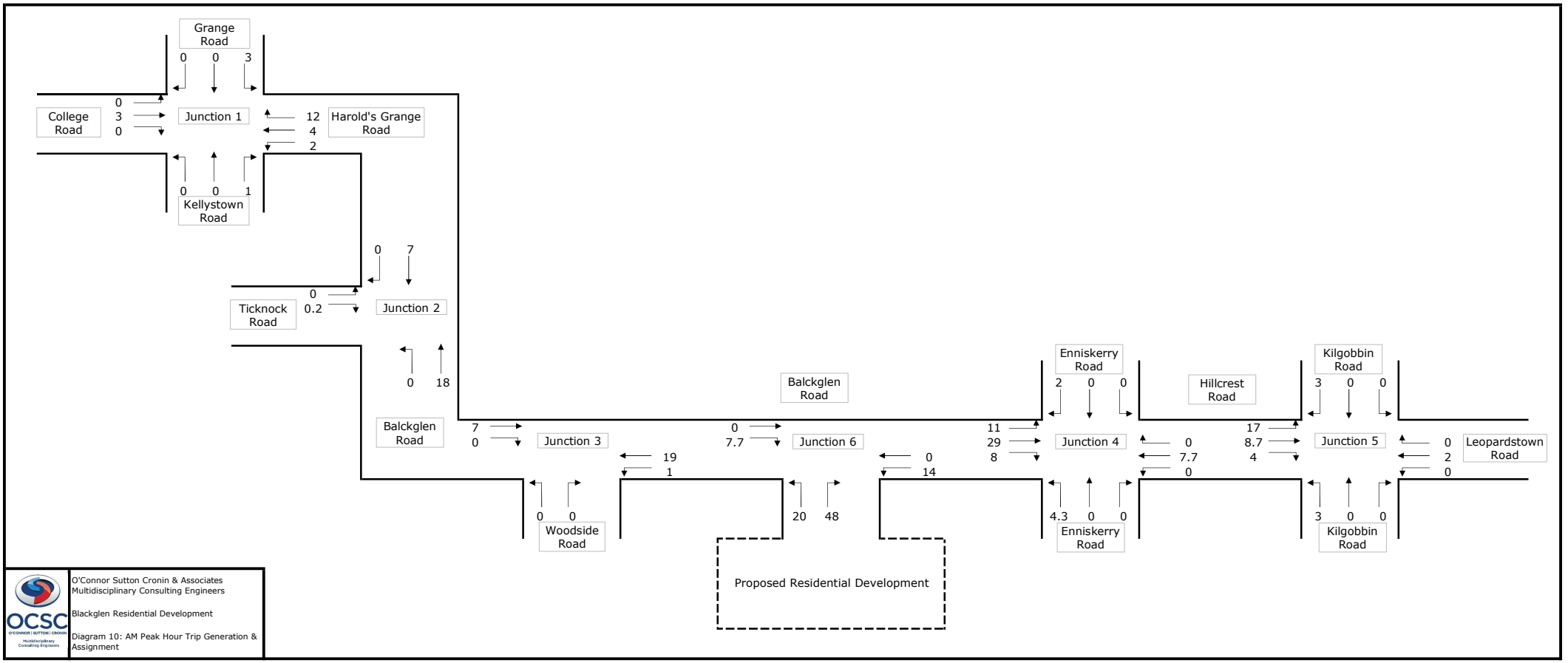

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Diagram 10: AM Peak Hour Trip Generation & Assignment

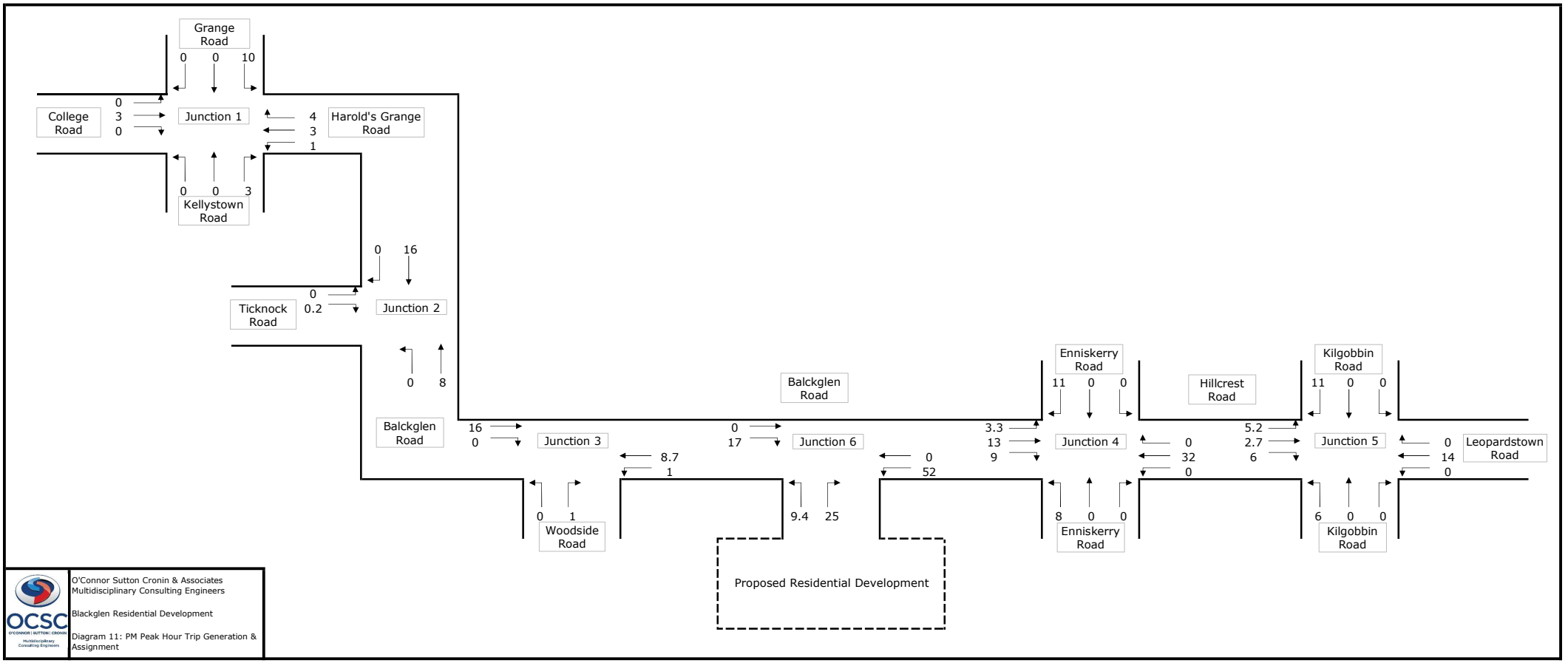

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Diagram 11: PM Peak Hour Trip Generation & Assignment

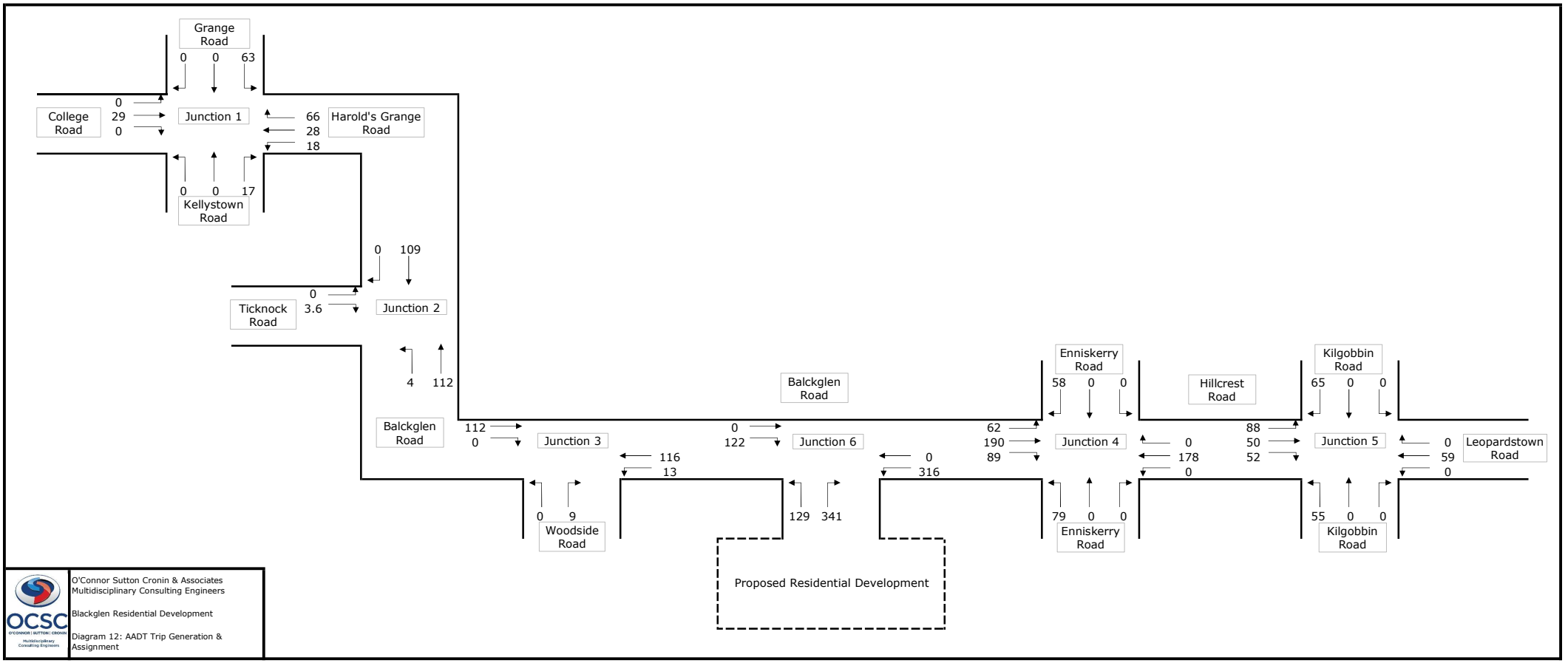

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Diagram 12: AADT Trip Generation & Assignment

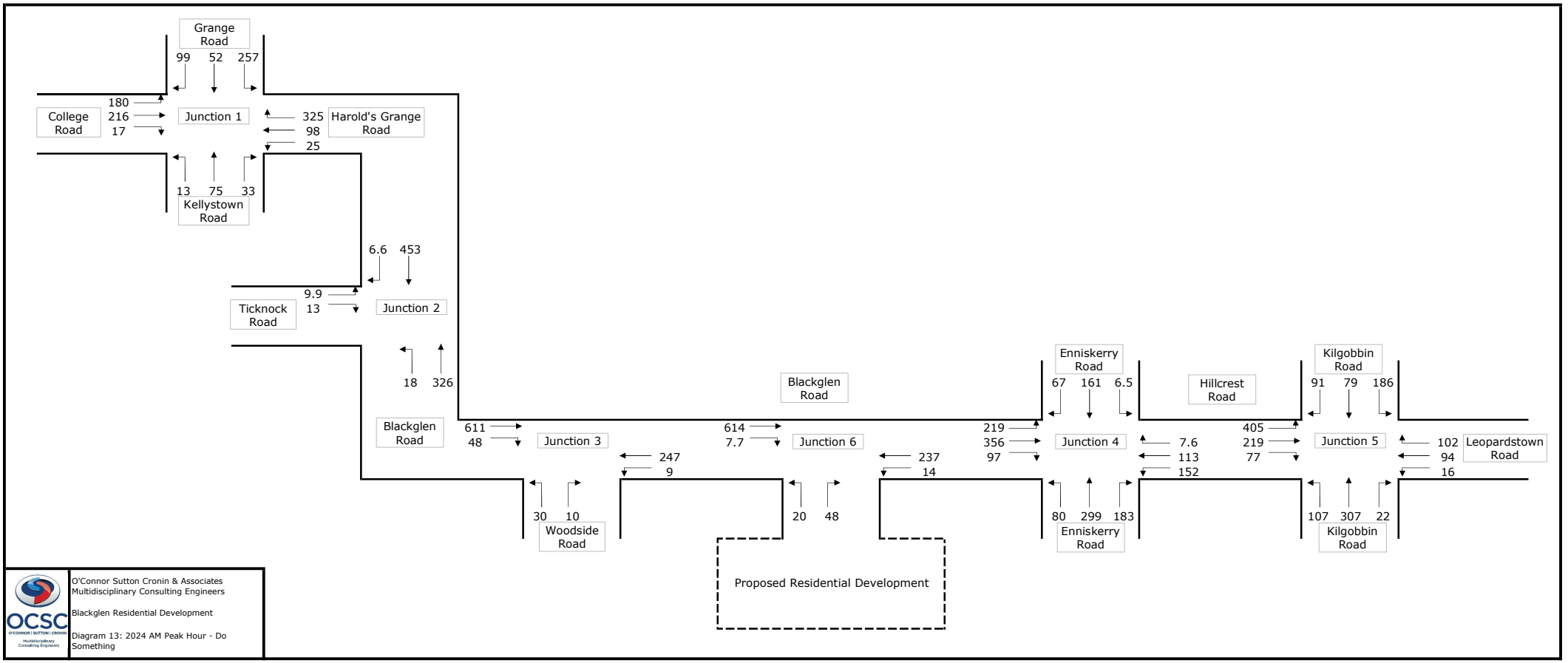

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Diagram 13: 2024 AM Peak Hour - Do Something

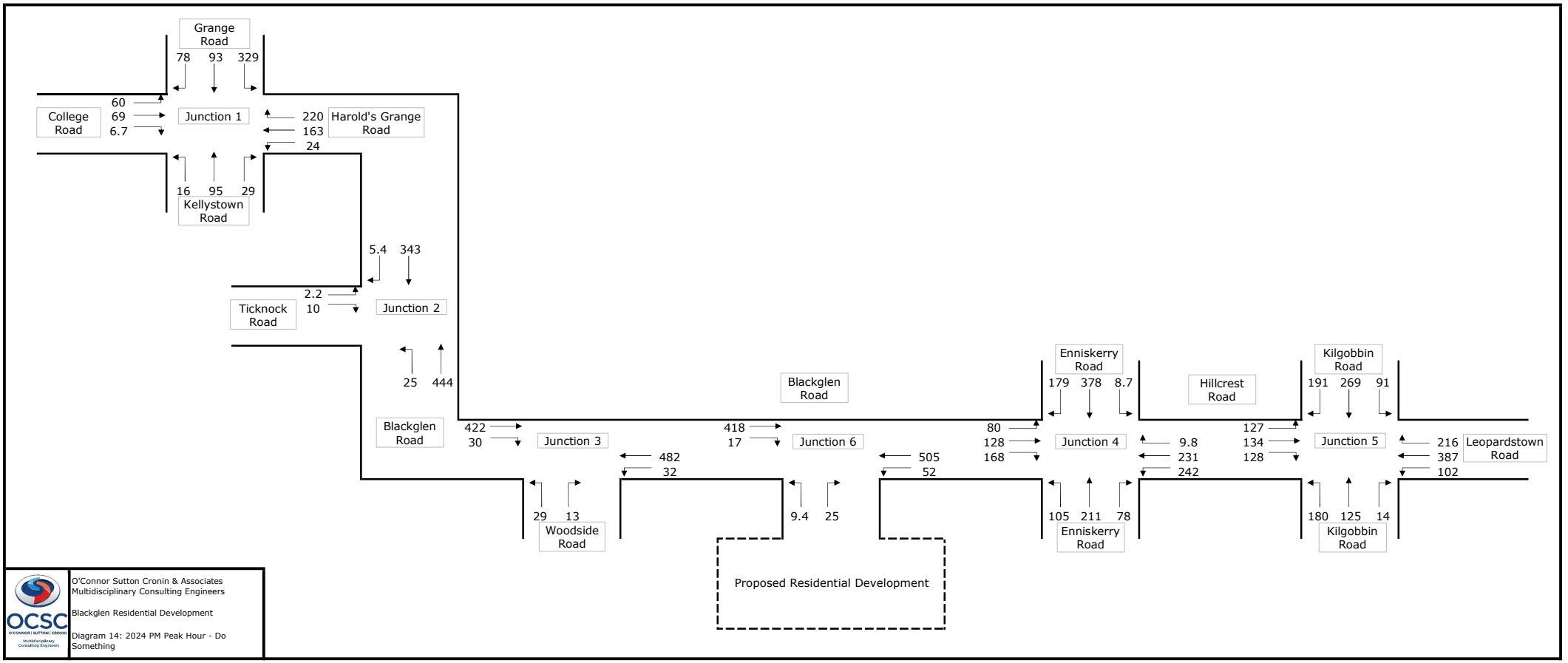

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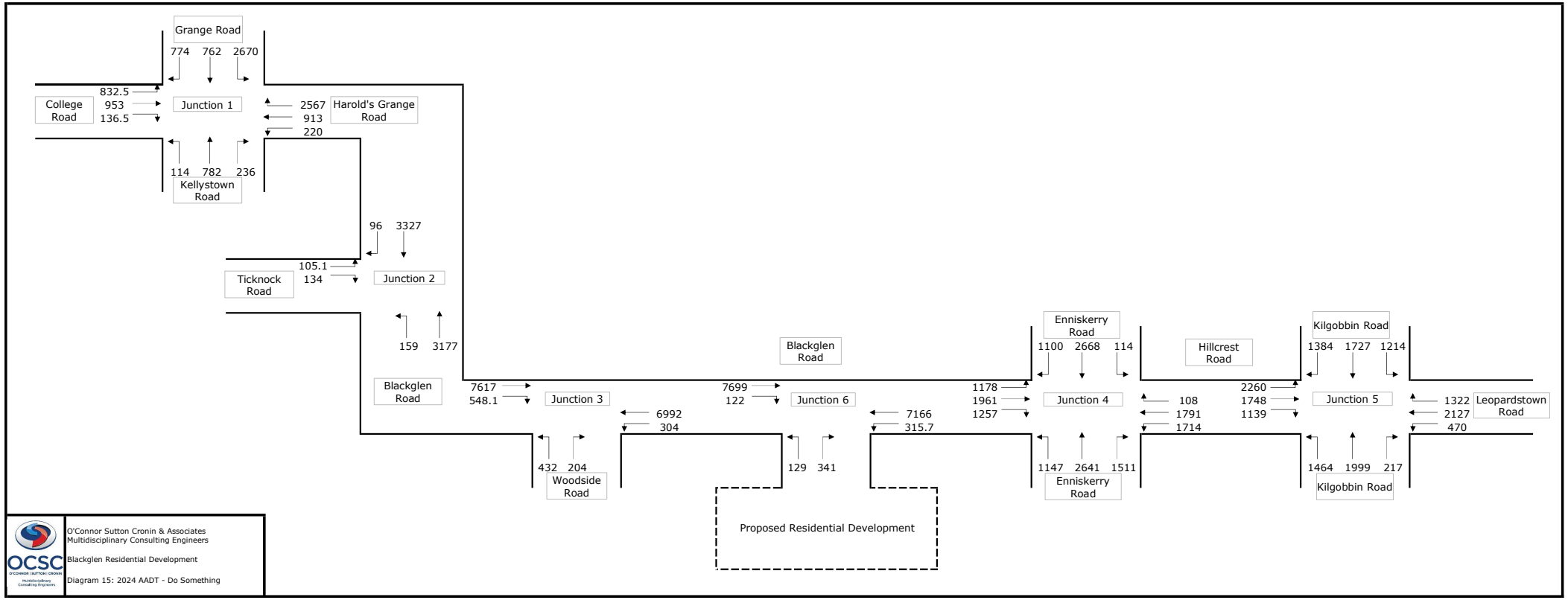
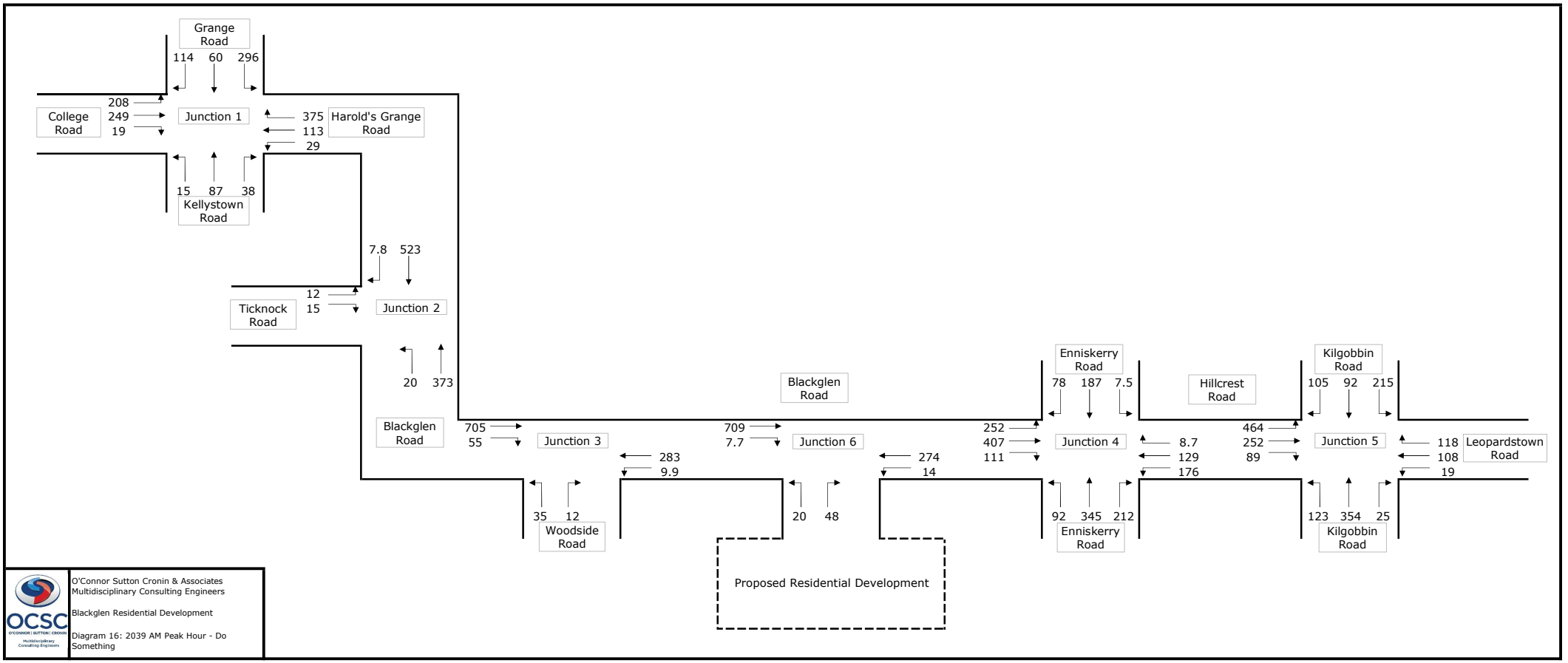
Diagram 14: 2024 PM Peak Hour - Do Something

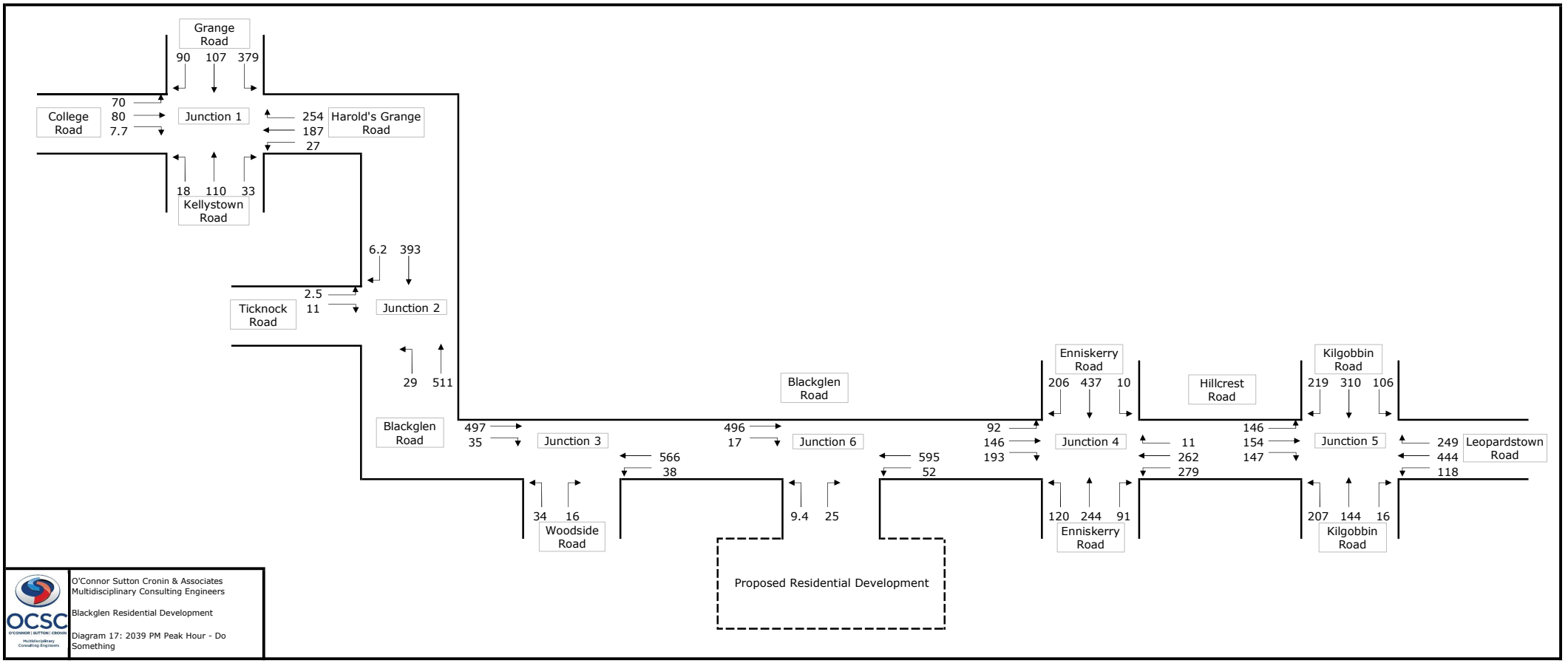

Grange Road
774
762
2670
832.5
College Road
953
136.5
Junction 1
2567
913
220
Harold's Grange Road
114
782
236
Kellystown Road
96
3327
105.1
134
Ticknock Road
Junction 2
159
3177
Blackglen Road
7617
548.1
Junction 3
6992
304
7699
122
Junction 6
7166
315.7
Blackglen Road
Enniskerry Road
1100
2668
114
1178
1961
1257
Junction 4
Hillcrest Road
108
1791
1714
Kilgobbin Road
1384
1727
1214
2260
1748
1139
Junction 5
1322
2127
470
Leopardstown Road
432
204
Woodside Road
129
341
1147
2641
1511
Enniskerry Road
1464
1999
217
Kilgobbin Road
Proposed Residential Development
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Blackglen Residential Development
Diagram 15: 2024 AADT - Do Something

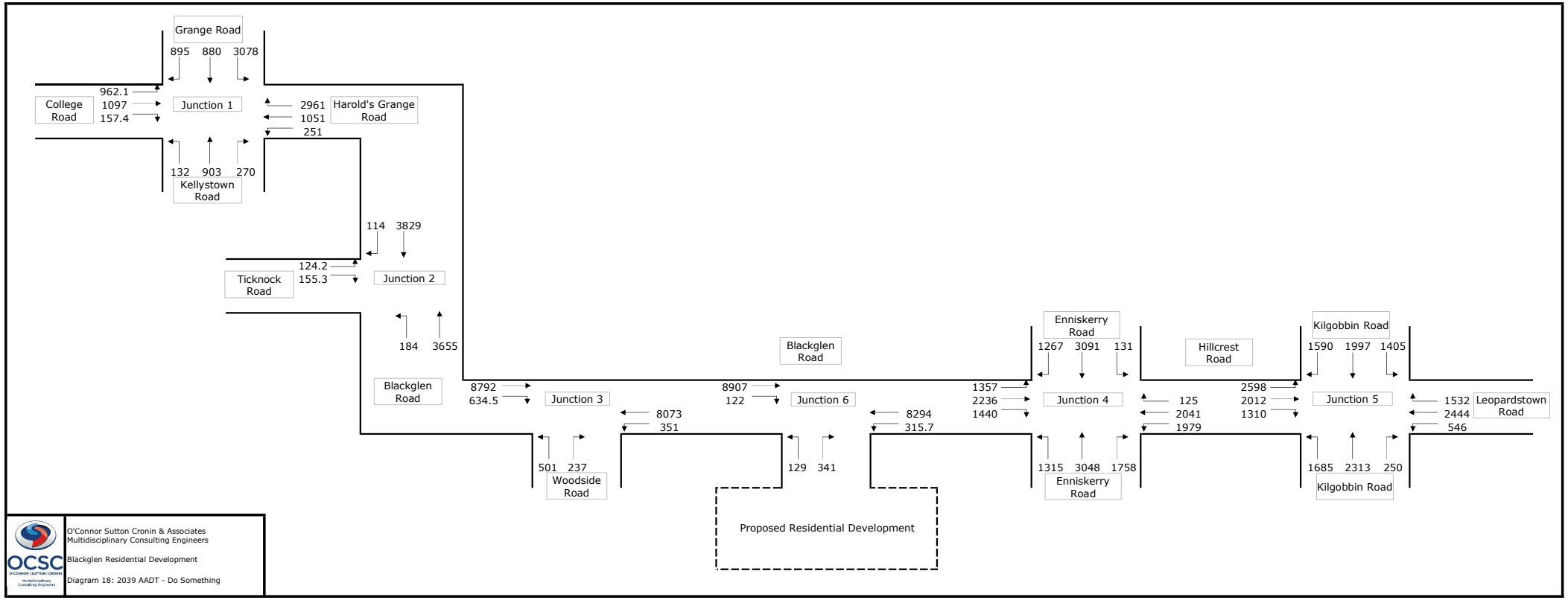


O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers

Blackglen Residential Development

Diagram 16: 2039 AM Peak Hour - Do Something


Grange Road
90 107 379
70
80
7.7
College Road
Junction 1
254
187
27
Harold's Grange Road
18 110 33
Kellystown Road
6.2 393
2.5
11
Ticknock Road
Junction 2
29 511
Blackglen Road
497
35
Junction 3
566
38
496
17
Junction 6
595
52
Blackglen Road
92
146
193
Junction 4
Enniskerry Road
206 437 10
11
262
279
Hillcrest Road
146
154
147
Junction 5
Kilgobbin Road
219 310 106
249
444
118
Leopardstown Road
34 16
Woodside Road
9.4 25
120 244 91
Enniskerry Road
207 144 16
Kilgobbin Road
Proposed Residential Development
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Blackglen Residential Development
Diagram 17: 2039 PM Peak Hour - Do Something


Grange Road
895
880
3078
962.1
College Road
1097
157.4
Junction 1
2961
1051
251
Harold's Grange Road
132
903
270
Kellystown Road
114
3829
124.2
155.3
Ticknock Road
Junction 2
184
3655
Blackglen Road
Blackglen Road
8792
634.5
Junction 3
8073
351
501
237
Woodside Road
8907
122
Junction 6
129
341
8294
315.7
Proposed Residential Development
Enniskerry Road
1267
3091
131
1357
2236
1440
Junction 4
1315
3048
1758
Enniskerry Road
Hillcrest Road
125
2041
1979
Kilgobbin Road
1590
1997
1405
2598
2012
1310
Junction 5
1685
2313
250
Kilgobbin Road
1532
2444
546
Leopardstown Road
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Blackglen Residential Development
Diagram 18: 2039 AADT - Do Something

APPENDIX C: TRICS OUTPUT FILES

ENGINEERS IRELAND
cpd ACCREDITED EMPLOYER

OCSC
O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers

Calculation Reference: AUDIT-322901-210917-0939

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
05	EAST MIDLANDS		
	NT	NOTTINGHAMSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	RI	EAST RIDING OF YORKSHIRE	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days
09	NORTH		
	CB	CUMBRIA	2 days
11	SCOTLAND		
	SR	STIRLING	1 days
12	CONNAUGHT		
	GA	GALWAY	1 days
13	MUNSTER		
	WA	WATERFORD	1 days
14	LEINSTER		
	LU	LOUTH	3 days
16	ULSTER (REPUBLIC OF IRELAND)		
	MG	MONAGHAN	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 9 to 135 (units:)
Range Selected by User: 6 to 372 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 23/10/20

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

Selected survey days:

Monday	4 days
Tuesday	5 days
Wednesday	2 days
Thursday	2 days
Friday	1 days

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

Selected survey types:

Manual count	14 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	4
Suburban Area (PPS6 Out of Centre)	7

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

Selected Location Sub Categories:

Development Zone	1
Residential Zone	7
No Sub Category	6

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

Secondary Filtering selection:

Use Class:

C3	14 days

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

Population within 500m Range:
All Surveys Included

Population within 1 mile:

1,001 to 5,000	4 days
5,001 to 10,000	3 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days
20,001 to 25,000	2 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	4 days
50,001 to 75,000	4 days
125,001 to 250,000	1 days
250,001 to 500,000	2 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	10 days

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

Travel Plan:

No	14 days

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

PTAL Rating:

No PTAL Present	14 days

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

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

LIST OF SITES relevant to selection parameters

1 CA-03-C-03 BLOCKS OF FLATS CAMBRIDGESHIRE
CROMWELL ROAD
CAMBRIDGE

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total No of Dwellings: 82
Survey date: MONDAY *18/09/17* *Survey Type: MANUAL*

2 CB-03-C-02 BLOCK OF FLATS CUMBRIA
BRIDGE LANE
PENRITH

Edge of Town
No Sub Category
Total No of Dwellings: 35
Survey date: WEDNESDAY *11/06/14* *Survey Type: MANUAL*

3 CB-03-C-03 FLATS & BUNGALOWS CUMBRIA
LOUND STREET
KENDAL

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 33
Survey date: MONDAY *09/06/14* *Survey Type: MANUAL*

4 GA-03-C-01 FLATS GALWAY
BALLYLOUGHANE ROAD
GALWAY

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total No of Dwellings: 34
Survey date: THURSDAY *31/10/13* *Survey Type: MANUAL*

5 LU-03-C-01 BLOCKS OF FLATS LOUTH
DONORE ROAD
DROGHEDA

Edge of Town Centre
Residential Zone
Total No of Dwellings: 52
Survey date: THURSDAY *12/09/13* *Survey Type: MANUAL*

6 LU-03-C-02 BLOCK OF FLATS LOUTH
NICHOLAS STREET
DUNDALK

Edge of Town Centre
Residential Zone
Total No of Dwellings: 33
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

7 LU-03-C-03 BLOCK OF FLATS LOUTH
NICHOLAS STREET
DUNDALK

Edge of Town Centre
Residential Zone
Total No of Dwellings: 20
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

8 MG-03-C-01 BLOCK OF FLATS MONAGHAN
MALL ROAD
MONAGHAN

Edge of Town Centre
No Sub Category
Total No of Dwellings: 28
Survey date: FRIDAY *06/09/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 MS-03-C-03 BLOCK OF FLATS MERSEYSIDE
MARINERS WHARF
LIVERPOOL
QUEENS DOCK
Suburban Area (PPS6 Out of Centre)
Development Zone
Total No of Dwellings: 9
Survey date: TUESDAY 13/11/18 Survey Type: MANUAL

10 NT-03-C-01 HOUSES (SPLIT INTO FLATS) NOTTINGHAMSHIRE
LAWRENCE WAY
NOTTINGHAM

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total No of Dwellings: 56
Survey date: TUESDAY 08/11/16 Survey Type: MANUAL

11 NT-03-C-02 HOUSES (SPLIT INTO FLATS) NOTTINGHAMSHIRE
CASTLE MARINA ROAD
NOTTINGHAM

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total No of Dwellings: 135
Survey date: WEDNESDAY 09/11/16 Survey Type: MANUAL

12 RI-03-C-01 FLATS EAST RIDING OF YORKSHIRE
465 PRIORY ROAD
HULL

Edge of Town
Residential Zone
Total No of Dwellings: 20
Survey date: TUESDAY 13/05/14 Survey Type: MANUAL

13 SR-03-C-03 BLOCK OF FLATS & TERRACED STIRLING
KERSEBONNY ROAD
STIRLING
CAMBUSBARRON
Edge of Town
Residential Zone
Total No of Dwellings: 82
Survey date: TUESDAY 01/09/20 Survey Type: MANUAL

14 WA-03-C-01 BLOCKS OF FLATS WATERFORD
UPPER YELLOW ROAD
WATERFORD

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 51
Survey date: TUESDAY 12/05/15 Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
AN-03-C-02	public transport
BD-03-C-01	public transport
BD-03-C-02	public transport
BD-03-C-03	public transport
CO-03-C-01	public transport
DC-03-C-02	public transport
DL-03-C-12	public transport
DL-03-C-14	public transport
DL-03-C-15	public transport
DL-03-C-16	public transport
DL-03-C-17	public transport
DS-03-C-03	public transport
DV-03-C-01	public transport
EB-03-C-01	public transport
ES-03-C-01	public transport

MANUALLY DESELECTED SITES (Cont.)

Site Ref	Reason for Deselection
EX-03-C-01	public transport
EX-03-C-02	public transport
HC-03-C-01	public transport
HF-03-C-03	public transport
MS-03-C-02	public transport
NF-03-C-01	public transport
NF-03-C-02	public transport
SA-03-C-01	public transport
SF-03-C-01	public transport
SF-03-C-03	public transport
SF-03-C-04	public transport
SR-03-C-01	public transport
SR-03-C-02	public transport
SY-03-C-01	public transport
WM-03-C-04	public transport

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	14	48	0.051	14	48	0.125	14	48	0.176
08:00 - 09:00	14	48	0.057	14	48	0.176	14	48	0.233
09:00 - 10:00	14	48	0.088	14	48	0.118	14	48	0.206
10:00 - 11:00	14	48	0.067	14	48	0.078	14	48	0.145
11:00 - 12:00	14	48	0.075	14	48	0.075	14	48	0.150
12:00 - 13:00	14	48	0.091	14	48	0.088	14	48	0.179
13:00 - 14:00	14	48	0.093	14	48	0.094	14	48	0.187
14:00 - 15:00	14	48	0.088	14	48	0.088	14	48	0.176
15:00 - 16:00	14	48	0.107	14	48	0.078	14	48	0.185
16:00 - 17:00	14	48	0.104	14	48	0.101	14	48	0.205
17:00 - 18:00	14	48	0.187	14	48	0.097	14	48	0.284
18:00 - 19:00	14	48	0.130	14	48	0.097	14	48	0.227
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.138			1.215			2.353

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

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

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Parameter summary

Trip rate parameter range selected:	9 - 135 (units:)
Survey date date range:	01/01/13 - 23/10/20
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	30

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

Appendix D: Model Output Files

TRANSYT 15

Version: 15.5.2.7994
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+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

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

Filename: Junction 1 - JTC14.t15
Path: C:\Users\wian.marais\Documents\Projects - Local\Z040 - Blackglen Road TIA\Models
Report generation date: 18/07/2022 14:26:51

»A1 - AM Peak - 2019 : D1-1 - AM Peak - 2019* :
»A2 - AM Peak - 2024 DN : D1-2 - AM Peak - 2024 DN* :
»A3 - AM Peak - 2024 DS : D1-3 - AM Peak - 2024 DS* :
»A4 - AM Peak - 2039 DN : D1-4 - AM Peak - 2039 DN* :
»A5 - AM Peak - 2039 DS : D1-5 - AM Peak - 2039 DS* :
»A6 - PM Peak - 2019 : D2-1 - PM Peak - 2019* :
»A7 - PM Peak - 2024 DN : D2-2 - PM Peak - 2024 DN* :
»A8 - PM Peak - 2024 DS : D2-3 - PM Peak - 2024 DS* :
»A9 - PM Peak - 2039 DN : D2-4 - PM Peak - 2039 DN* :
»A10 - PM Peak - 2039 DS : D2-5 - PM Peak - 2039 DS* :

File summary

File description

File title	Junction 1
Location	Kellystown/Grange/College
Site number	JTC14
UTCRegion	
Driving side	Left
Date	17/09/2021
Version	
Status	
Identifier	
Client	Zolbury Limited
Jobnumber	Z040
Enumerator	OCSC\wian.marais
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

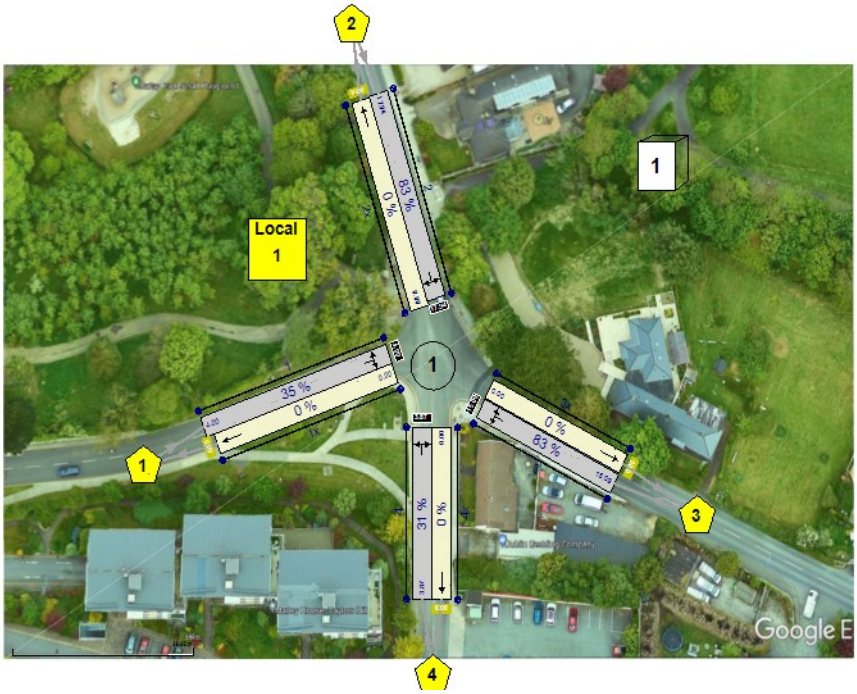
Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams


2
1
Local
1
83 %
0 %
1
35 %
0 %
1
0 %
83 %
3
31 %
0 %
4
Google E

A1 - AM Peak - 2019
D1-1 - AM Peak - 2019*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	18/07/2022 14:26:36	18/07/2022 14:26:37	08:00	100	187.33	12.23	72.04	1/1	0	0	1/1	3x/1	1/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2019		D1-1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2019				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	110

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	8	8	8	8	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	106	3	7	1	7
	2	✓	2	B	8	37	29	1	7
	3	✓	3	C	42	49	7	1	7
	4	✓	4	D	54	87	33	1	7
	5	✓	5	E	92	98	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	D	54	87	33
2	1	1	1	A	106	3	7
3	1	1	1	C	42	49	7
4	1	1	1	B	8	37	29

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	D		377	1693	33	0.00	72	25	54.45	42.45	94.61	11.07	100	100	0.00	67.60
1x	1						190	Unrestricted	110	21.00	0	Unrestricted	6.84	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	A	B	373	1830	36	0.00	59	53	44.24	32.24	84.05	9.75	100	100	0.00	51.36
2x	1						523	Unrestricted	110	29.00	0	Unrestricted	7.34	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	397	1652	40	0.00	63	43	43.26	31.26	83.75	10.34	100	100	0.00	53.12
3x	1						460	Unrestricted	110	29.00	0	Unrestricted	6.38	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	B		111	1692	29	0.00	24	274	44.38	32.38	77.31	2.66	100	100	0.00	15.25
4x	1						85	Unrestricted	110	55.00	0	Unrestricted	6.30	0.00	0.00	0.00	100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	197.57	18.82	10.50	12.23	173.69	13.65	0.00	187.33
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	197.57	18.82	10.50	12.23	173.69	13.65	0.00	187.33

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A2 - AM Peak - 2024 DN
D1-2 - AM Peak - 2024 DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
2	18/07/2022 14:26:38	18/07/2022 14:26:38	08:00	100	221.42	14.49	78.92	1/1	0	0	1/1	3x/1	1/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2024 DN	\	D1-2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2024 DN				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	110

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	8	8	8	8	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	106	3	7	1	7
	2	✓	2	B	8	37	29	1	7
	3	✓	3	C	42	49	7	1	7
	4	✓	4	D	54	87	33	1	7
	5	✓	5	E	92	98	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	D	54	87	33
2	1	1	1	A	106	3	7
3	1	1	1	C	42	49	7
4	1	1	1	B	8	37	29

Final Prediction Table

Traffic Stream Results

			SIGNALS				FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	D		413	1693	33	0.00	79	14	59.11	47.11	100.38	12.89	100	100	0.00	81.95
1x	1						207	Unrestricted	110	20.00	0	Unrestricted	6.84	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	A	B	408	1830	36	0.00	65	39	46.15	34.15	86.89	11.01	100	100	0.00	59.40
2x	1						577	Unrestricted	110	29.00	0	Unrestricted	7.34	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	437	1652	40	0.00	69	30	45.82	33.82	87.75	11.94	100	100	0.00	63.11
3x	1						502	Unrestricted	110	29.00	0	Unrestricted	6.38	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	B		122	1692	29	0.00	26	240	44.76	32.76	78.18	2.96	100	100	0.00	16.96
4x	1						94	Unrestricted	110	48.00	0	Unrestricted	6.30	0.00	0.00	0.00	100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	216.75	21.72	9.98	14.49	205.77	15.65	0.00	221.42
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	216.75	21.72	9.98	14.49	205.77	15.65	0.00	221.42

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A3 - AM Peak - 2024 DS
D1-3 - AM Peak - 2024 DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
3	18/07/2022 14:26:37	18/07/2022 14:26:37	08:00	100	224.98	14.72	77.23	1/1	0	0	1/1	3x/1	1/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2024 DS		D1-3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2024 DS				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	110

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	8	8	8	8	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	106	3	7	1	7
	2	✓	2	B	8	36	28	1	7
	3	✓	3	C	41	48	7	1	7
	4	✓	4	D	53	87	34	1	7
	5	✓	5	E	92	98	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	D	53	87	34
2	1	1	1	A	106	3	7
3	1	1	1	C	41	48	7
4	1	1	1	B	8	36	28

Final Prediction Table

Traffic Stream Results

			SIGNALS				FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	D		416	1693	34	0.00	77	17	56.87	44.87	98.18	12.71	100	100	0.00	78.74
1x	1						212	Unrestricted	110	20.00	0	Unrestricted	6.84	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	A	B	411	1830	35	0.00	67	35	47.75	35.75	88.80	11.39	100	100	0.00	62.53
2x	1						590	Unrestricted	110	29.00	0	Unrestricted	7.34	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	457	1652	41	0.00	71	27	45.80	33.80	88.07	12.52	100	100	0.00	65.97
3x	1						510	Unrestricted	110	29.00	0	Unrestricted	6.38	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	B		124	1692	28	0.00	28	224	45.75	33.75	79.36	3.05	100	100	0.00	17.74
4x	1						96	Unrestricted	110	47.00	0	Unrestricted	6.30	0.00	0.00	0.00	100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	221.16	22.09	10.01	14.72	209.00	15.98	0.00	224.98
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	221.16	22.09	10.01	14.72	209.00	15.98	0.00	224.98

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A4 - AM Peak - 2039 DN
D1-4 - AM Peak - 2039 DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
4	18/07/2022 14:26:38	18/07/2022 14:26:38	08:00	100	300.57	19.77	88.36	1/1	0	0	1/1	3x/1	1/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2039 DN		D1-4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2039 DN				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	110

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	8	8	8	8	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	106	3	7	1	7
	2	✓	2	B	8	36	28	1	7
	3	✓	3	C	41	48	7	1	7
	4	✓	4	D	53	87	34	1	7
	5	✓	5	E	92	98	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	D	53	87	34
2	1	1	1	A	106	3	7
3	1	1	1	C	41	48	7
4	1	1	1	B	8	36	28

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	D		476	1693	34	0.00	88	2	70.16	58.16	112.32	16.74	100	100	0.00	115.90
1x	1						239	Unrestricted	110	20.00	0	Unrestricted	6.84	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	A	B	472	1830	35	0.00	77	17	52.87	40.87	95.81	14.08	100	100	0.00	81.77
2x	1						669	Unrestricted	110	28.00	0	Unrestricted	7.34	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	506	1652	41	0.00	78	15	50.25	38.25	94.36	14.87	100	100	0.00	82.34
3x	1						579	Unrestricted	110	28.00	0	Unrestricted	6.38	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	B		141	1692	28	0.00	32	185	46.41	34.41	80.50	3.52	100	100	0.00	20.56
4x	1						108	Unrestricted	110	32.00	0	Unrestricted	6.30	0.00	0.00	0.00	100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	250.53	28.12	8.91	19.77	280.78	19.78	0.00	300.57
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	250.53	28.12	8.91	19.77	280.78	19.78	0.00	300.57

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A5 - AM Peak - 2039 DS
D1-5 - AM Peak - 2039 DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
5	18/07/2022 14:26:38	18/07/2022 14:26:39	08:00	100	304.08	20.00	86.63	1/1	0	0	1/1	3x/1	1/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2039 DS		D1-5	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2039 DS				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	110

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	8	8	8	8	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	106	3	7	1	7
	2	✓	2	B	8	35	27	1	7
	3	✓	3	C	40	47	7	1	7
	4	✓	4	D	52	87	35	1	7
	5	✓	5	E	92	98	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	D	52	87	35
2	1	1	1	A	106	3	7
3	1	1	1	C	40	47	7
4	1	1	1	B	8	35	27

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	D		480	1693	35	0.00	87	4	66.01	54.01	108.58	16.30	100	100	0.00	108.79
1x	1						244	Unrestricted	110	20.00	0	Unrestricted	6.84	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	A	B	476	1830	34	0.00	79	13	55.75	43.75	98.67	14.57	100	100	0.00	88.03
2x	1						682	Unrestricted	110	28.00	0	Unrestricted	7.34	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	526	1652	42	0.00	80	13	50.42	38.42	94.88	15.53	100	100	0.00	85.96
3x	1						588	Unrestricted	110	28.00	0	Unrestricted	6.38	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	B		142	1692	27	0.00	33	173	47.43	35.43	81.64	3.59	100	100	0.00	21.30
4x	1						110	Unrestricted	110	33.00	0	Unrestricted	6.30	0.00	0.00	0.00	100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	255.10	28.50	8.95	20.00	283.94	20.13	0.00	304.08
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	255.10	28.50	8.95	20.00	283.94	20.13	0.00	304.08

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A6 - PM Peak - 2019
D2-1 - PM Peak - 2019*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
6	18/07/2022 14:26:37	18/07/2022 14:26:37	17:00	100	148.03	9.64	66.23	3/1	0	0	3/1	3x/1	3/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2019		D2-1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2019				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	110

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	8	8	8	8	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	106	3	7	1	7
	2	✓	2	B	8	42	34	1	7
	3	✓	3	C	47	54	7	1	7
	4	✓	4	D	59	87	28	1	7
	5	✓	5	E	92	98	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	D	59	87	28
2	1	1	1	A	106	3	7
3	1	1	1	C	47	54	7
4	1	1	1	B	8	42	34

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	D		123	1693	28	0.00	28	227	45.70	33.70	79.31	3.02	100	100	0.00	17.57
1x	1						234	Unrestricted	110	21.00	0	Unrestricted	6.84	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	A	B	452	1830	41	0.00	63	42	42.20	30.20	82.57	11.59	100	100	0.00	58.52
2x	1						343	Unrestricted	110	31.00	0	Unrestricted	7.34	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	368	1652	35	0.00	66	36	48.13	36.13	88.91	10.15	100	100	0.00	56.54
3x	1						379	Unrestricted	110	31.00	0	Unrestricted	6.38	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	B		126	1692	34	0.00	23	285	40.65	28.65	72.79	2.87	100	100	0.00	15.39
4x	1						113	Unrestricted	110	43.00	0	Unrestricted	6.30	0.00	0.00	0.00	100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	167.32	15.22	11.00	9.64	136.87	11.16	0.00	148.03
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	167.32	15.22	11.00	9.64	136.87	11.16	0.00	148.03

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A7 - PM Peak - 2024 DN
D2-2 - PM Peak - 2024 DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
7	18/07/2022 14:26:39	18/07/2022 14:26:39	17:00	100	171.21	11.17	72.16	3/1	0	0	3/1	3x/1	3/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2024 DN		D2-2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2024 DN				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	110

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	8	8	8	8	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	106	3	7	1	7
	2	✓	2	B	8	42	34	1	7
	3	✓	3	C	47	54	7	1	7
	4	✓	4	D	59	87	28	1	7
	5	✓	5	E	92	98	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	D	59	87	28
2	1	1	1	A	106	3	7
3	1	1	1	C	47	54	7
4	1	1	1	B	8	42	34

Final Prediction Table

Traffic Stream Results

			SIGNALS				FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	D		134	1693	28	0.00	30	200	46.11	34.11	79.58	3.30	100	100	0.00	19.37
1x	1						254	Unrestricted	110	20.00	0	Unrestricted	6.84	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	A	B	493	1830	41	0.00	69	31	44.36	32.36	86.23	13.22	100	100	0.00	68.25
2x	1						376	Unrestricted	110	30.00	0	Unrestricted	7.34	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	401	1652	35	0.00	72	25	51.02	39.02	93.06	11.61	100	100	0.00	66.39
3x	1						415	Unrestricted	110	31.00	0	Unrestricted	6.38	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	B		139	1692	34	0.00	26	249	41.03	29.03	73.61	3.17	100	100	0.00	17.20
4x	1						122	Unrestricted	110	40.00	0	Unrestricted	6.30	0.00	0.00	0.00	100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	182.67	17.26	10.59	11.17	158.58	12.63	0.00	171.21
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	182.67	17.26	10.59	11.17	158.58	12.63	0.00	171.21

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A8 - PM Peak - 2024 DS
D2-3 - PM Peak - 2024 DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
8	18/07/2022 14:26:39	18/07/2022 14:26:39	17:00	100	178.64	11.66	73.96	3/1	0	0	3/1	3x/1	3/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2024 DS		D2-3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2024 DS				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	110

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	8	8	8	8	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	106	3	7	1	7
	2	✓	2	B	8	42	34	1	7
	3	✓	3	C	47	54	7	1	7
	4	✓	4	D	59	87	28	1	7
	5	✓	5	E	92	98	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	D	59	87	28
2	1	1	1	A	106	3	7
3	1	1	1	C	47	54	7
4	1	1	1	B	8	42	34

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	D		138	1693	28	0.00	31	191	46.28	34.28	80.30	3.44	100	100	0.00	20.05
1x	1						257	Unrestricted	110	20.00	0	Unrestricted	6.84	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	A	B	504	1830	41	0.00	70	28	45.02	33.02	87.34	13.71	100	100	0.00	71.17
2x	1						381	Unrestricted	110	30.00	0	Unrestricted	7.34	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	411	1652	35	0.00	74	22	52.06	40.06	94.30	12.10	100	100	0.00	69.81
3x	1						433	Unrestricted	110	30.00	0	Unrestricted	6.38	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	B		142	1692	34	0.00	26	241	41.11	29.11	73.65	3.24	100	100	0.00	17.62
4x	1						124	Unrestricted	110	38.00	0	Unrestricted	6.30	0.00	0.00	0.00	100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	187.00	17.89	10.45	11.66	165.56	13.08	0.00	178.64
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	187.00	17.89	10.45	11.66	165.56	13.08	0.00	178.64

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A9 - PM Peak - 2039 DN
D2-4 - PM Peak - 2039 DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
9	18/07/2022 14:26:40	18/07/2022 14:26:40	17:00	100	229.35	15.03	81.58	2/1	0	0	2/1	3x/1	2/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2039 DN		D2-4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2039 DN				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	110

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	8	8	8	8	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	106	3	7	1	7
	2	✓	2	B	8	41	33	1	7
	3	✓	3	C	46	53	7	1	7
	4	✓	4	D	58	87	29	1	7
	5	✓	5	E	92	98	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	D	58	87	29
2	1	1	1	A	106	3	7
3	1	1	1	C	46	53	7
4	1	1	1	B	8	41	33

Final Prediction Table

Traffic Stream Results

			SIGNALS				FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	D		156	1693	29	0.00	34	166	46.03	34.03	80.34	3.90	100	100	0.00	22.51
1x	1						292	Unrestricted	110	20.00	0	Unrestricted	6.84	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	A	B	570	1830	40	0.00	82	10	52.57	40.57	97.28	17.25	100	100	0.00	98.16
2x	1						436	Unrestricted	110	29.00	0	Unrestricted	7.34	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	464	1652	36	0.00	81	11	56.84	44.84	100.40	14.58	100	100	0.00	87.90
3x	1						481	Unrestricted	110	30.00	0	Unrestricted	6.38	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	B		160	1692	33	0.00	31	194	42.51	30.51	75.75	3.76	100	100	0.00	20.78
4x	1						141	Unrestricted	110	35.00	0	Unrestricted	6.30	0.00	0.00	0.00	100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	211.31	22.08	9.57	15.03	213.46	15.89	0.00	229.35
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	211.31	22.08	9.57	15.03	213.46	15.89	0.00	229.35

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A10 - PM Peak - 2039 DS
D2-5 - PM Peak - 2039 DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
10	18/07/2022 14:26:40	18/07/2022 14:26:40	17:00	100	241.28	15.83	83.15	2/1	0	0	2/1	3x/1	2/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2039 DS		D2-5	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2039 DS				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	110

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	8	8	8	8	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	106	3	7	1	7
	2	✓	2	B	8	41	33	1	7
	3	✓	3	C	46	53	7	1	7
	4	✓	4	D	58	87	29	1	7
	5	✓	5	E	92	98	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	D	58	87	29
2	1	1	1	A	106	3	7
3	1	1	1	C	46	53	7
4	1	1	1	B	8	41	33

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	D		160	1693	29	0.00	35	160	46.20	34.20	80.64	4.00	100	100	0.00	23.20
1x	1						296	Unrestricted	110	20.00	0	Unrestricted	6.84	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	A	B	581 <	1830	40	0.00	83	8	54.02	42.02	99.11	17.94 +	100	100	0.00	103.52
2x	1						441	Unrestricted	110	29.00	0	Unrestricted	7.34	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	474	1652	36	0.00	83	8	58.66	46.66	102.39	15.09	100	100	0.00	93.32
3x	1						499	Unrestricted	110	30.00	0	Unrestricted	6.38	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	B		163	1692	33	0.00	31	189	42.61	30.61	76.26	3.87	100	100	0.00	21.24
4x	1						142	Unrestricted	110	34.00	0	Unrestricted	6.30	0.00	0.00	0.00	100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	215.65	23.02	9.37	15.83	224.80	16.48	0.00	241.28
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	215.65	23.02	9.37	15.83	224.80	16.48	0.00	241.28

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: Junction 2 - SIte 13.j9
Path: C:\Users\wian.marais\Documents\Projects - Local\Z040 - Blackglen Road TIA\Models
Report generation date: 18/07/2022 14:14:47

»Analysis - 2019, AM
»Analysis - 2019, PM
»Analysis - 2024 DN, AM
»Analysis - 2024 DN, PM
»Analysis - 2039 DN, AM
»Analysis - 2039 DN, PM
»Analysis - 2024 DS, AM
»Analysis - 2024 DS, PM
»Analysis - 2039 DS, AM
»Analysis - 2039 DS, PM

Summary of junction performance

	AM			PM		
	Set ID	Queue (PCU)	RFC	Set ID	Queue (PCU)	RFC
	Analysis - 2019					
Stream B-C	D1	0.0	0.02	D2	0.0	0.00
Stream B-A		0.0	0.03		0.0	0.03
Stream C-AB		0.0	0.02		0.0	0.01
	Analysis - 2024 DN					
Stream B-C	D3	0.0	0.02	D4	0.0	0.00
Stream B-A		0.0	0.04		0.0	0.03
Stream C-AB		0.0	0.02		0.0	0.01
	Analysis - 2039 DN					
Stream B-C	D5	0.0	0.02	D6	0.0	0.00
Stream B-A		0.0	0.05		0.0	0.04
Stream C-AB		0.0	0.03		0.0	0.02
	Analysis - 2024 DS					
Stream B-C	D7	0.0	0.02	D8	0.0	0.00
Stream B-A		0.0	0.04		0.0	0.03
Stream C-AB		0.0	0.02		0.0	0.02
	Analysis - 2039 DS					
Stream B-C	D9	0.0	0.02	D10	0.0	0.00
Stream B-A		0.1	0.05		0.0	0.04
Stream C-AB		0.0	0.03		0.0	0.02

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

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

File summary

File Description

Title	Junction 2
Location	Blackglen/Ticknock
Site number	SIte 13
Date	17/09/2021
Version	
Status	
Identifier	
Client	Zolbury Limited
Jobnumber	Z040
Enumerator	OCSC\wian.marais
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

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2019	AM	ONE HOUR	08:00	09:30	15
D2	2019	PM	ONE HOUR	17:00	18:30	15
D3	2024 DN	AM	ONE HOUR	08:00	09:30	15
D4	2024 DN	PM	ONE HOUR	17:00	18:30	15
D5	2039 DN	AM	ONE HOUR	08:00	09:30	15
D6	2039 DN	PM	ONE HOUR	17:00	18:30	15
D7	2024 DS	AM	ONE HOUR	08:00	09:30	15
D8	2024 DS	PM	ONE HOUR	17:00	18:30	15
D9	2039 DS	AM	ONE HOUR	08:00	09:30	15
D10	2039 DS	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Analysis	100.000

Analysis - 2019, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		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	7.20			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	9.70	5.00	4.00	4.00	4.00	✓	1.00	0	0

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	522	0.090	0.228	0.143	0.326
B-C	650	0.094	0.239	-	-
C-B	574	0.211	0.211	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)

D1	2019	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	300	100.000
B		✓	21	100.000
C		✓	417	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	16	284
	B	12	0	9
	C	411	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	1
	B	0	0	22
	C	1	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	7.86	0.0	A
B-A	0.03	9.75	0.0	A
C-AB	0.02	5.36	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	595	0.011	7	0.0	7.466	A
B-A	9	427	0.021	9	0.0	8.616	A
C-AB	8	745	0.010	8	0.0	5.357	A
C-A	306			306			
A-B	12			12			
A-C	214			214			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	584	0.014	8	0.0	7.625	A
B-A	11	408	0.026	11	0.0	9.061	A
C-AB	10	780	0.013	10	0.0	5.105	A
C-A	365			365			
A-B	14			14			
A-C	255			255			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	569	0.017	10	0.0	7.857	A
B-A	13	382	0.035	13	0.0	9.750	A
C-AB	15	830	0.018	15	0.0	4.773	A
C-A	445			445			
A-B	18			18			
A-C	313			313			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	569	0.017	10	0.0	7.858	A
B-A	13	382	0.035	13	0.0	9.750	A
C-AB	15	830	0.018	15	0.0	4.754	A
C-A	445			445			
A-B	18			18			
A-C	313			313			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	584	0.014	8	0.0	7.627	A
B-A	11	408	0.026	11	0.0	9.061	A
C-AB	10	780	0.013	10	0.0	5.054	A
C-A	365			365			
A-B	14			14			
A-C	255			255			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	595	0.011	7	0.0	7.468	A
B-A	9	427	0.021	9	0.0	8.620	A
C-AB	8	745	0.010	8	0.0	5.329	A
C-A	306			306			
A-B	12			12			
A-C	214			214			

Analysis - 2019, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2019	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	425	100.000
B		✓	11	100.000
C		✓	307	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	23	402
	B	9	0	2
	C	302	5	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	7.14	0.0	A
B-A	0.03	9.74	0.0	A
C-AB	0.01	5.42	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	540	0.003	1	0.0	6.683	A
B-A	7	429	0.016	7	0.0	8.524	A
C-AB	6	670	0.009	6	0.0	5.419	A
C-A	225			225			
A-B	17			17			
A-C	303			303			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	526	0.003	2	0.0	6.866	A
B-A	8	408	0.020	8	0.0	8.996	A
C-AB	7	691	0.011	7	0.0	5.269	A
C-A	269			269			
A-B	21			21			
A-C	361			361			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	507	0.004	2	0.0	7.135	A
B-A	10	379	0.026	10	0.0	9.740	A
C-AB	10	720	0.014	10	0.0	5.071	A
C-A	328			328			
A-B	25			25			
A-C	443			443			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	507	0.004	2	0.0	7.136	A
B-A	10	379	0.026	10	0.0	9.740	A
C-AB	10	720	0.014	10	0.0	5.073	A
C-A	328			328			
A-B	25			25			
A-C	443			443			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	2	526	0.003	2	0.0	6.867	A
B-A	8	408	0.020	8	0.0	8.997	A
C-AB	7	691	0.011	7	0.0	5.269	A
C-A	269			269			
A-B	21			21			
A-C	361			361			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	540	0.003	2	0.0	6.684	A
B-A	7	429	0.016	7	0.0	8.528	A
C-AB	6	670	0.009	6	0.0	5.421	A
C-A	225			225			
A-B	17			17			
A-C	303			303			

Analysis - 2024 DN, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.36	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)
D3	2024 DN	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	325	100.000
B		✓	23	100.000
C		✓	453	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	308
	B	13	0	10
	C	446	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	22
	C	1	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	7.96	0.0	A
B-A	0.04	10.12	0.0	B
C-AB	0.02	5.24	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	591	0.013	7	0.0	7.525	A
B-A	10	418	0.023	10	0.0	8.818	A
C-AB	9	761	0.012	9	0.0	5.239	A
C-A	332			332			
A-B	13			13			
A-C	232			232			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	579	0.016	9	0.0	7.702	A
B-A	12	398	0.029	12	0.0	9.325	A
C-AB	13	799	0.016	13	0.0	4.978	A
C-A	395			395			
A-B	15			15			
A-C	277			277			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	563	0.020	11	0.0	7.960	A
B-A	14	370	0.039	14	0.0	10.122	B
C-AB	18	854	0.021	18	0.0	4.640	A
C-A	481			481			
A-B	19			19			
A-C	339			339			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	563	0.020	11	0.0	7.961	A
B-A	14	370	0.039	14	0.0	10.124	B
C-AB	18	854	0.021	18	0.0	4.619	A
C-A	481			481			
A-B	19			19			
A-C	339			339			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	579	0.016	9	0.0	7.704	A
B-A	12	398	0.029	12	0.0	9.326	A
C-AB	13	799	0.016	13	0.0	4.929	A
C-A	395			395			
A-B	15			15			

A-C	277			277			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	591	0.013	8	0.0	7.527	A
B-A	10	418	0.023	10	0.0	8.822	A
C-AB	9	761	0.012	9	0.0	5.213	A
C-A	332			332			
A-B	13			13			
A-C	232			232			

Analysis - 2024 DN, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2024 DN	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	461	100.000
B		✓	12	100.000
C		✓	332	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	25	436
	B	10	0	2
	C	327	5	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	7.29	0.0	A
B-A	0.03	10.11	0.0	B
C-AB	0.01	5.35	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	532	0.003	1	0.0	6.787	A
B-A	8	421	0.018	7	0.0	8.711	A
C-AB	6	678	0.009	6	0.0	5.351	A
C-A	244			244			
A-B	19			19			
A-C	328			328			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	517	0.003	2	0.0	6.991	A
B-A	9	398	0.023	9	0.0	9.250	A
C-AB	8	701	0.011	8	0.0	5.191	A
C-A	291			291			
A-B	22			22			
A-C	392			392			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	496	0.004	2	0.0	7.294	A
B-A	11	367	0.030	11	0.0	10.113	B
C-AB	11	734	0.015	11	0.0	4.980	A
C-A	355			355			
A-B	28			28			
A-C	480			480			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	496	0.004	2	0.0	7.294	A
B-A	11	367	0.030	11	0.0	10.113	B
C-AB	11	734	0.015	11	0.0	4.982	A
C-A	355			355			
A-B	28			28			
A-C	480			480			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	2	517	0.003	2	0.0	6.994	A
B-A	9	398	0.023	9	0.0	9.253	A
C-AB	8	701	0.011	8	0.0	5.193	A
C-A	291			291			
A-B	22			22			
A-C	392			392			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	532	0.003	2	0.0	6.791	A
B-A	8	421	0.018	8	0.0	8.715	A
C-AB	6	679	0.009	6	0.0	5.352	A
C-A	244			244			
A-B	19			19			
A-C	328			328			

Analysis - 2039 DN, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.39	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)
D5	2039 DN	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	375	100.000
B		✓	27	100.000
C		✓	523	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	20	355
	B	15	0	12
	C	515	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	22
	C	1	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	8.18	0.0	A
B-A	0.05	10.93	0.0	B
C-AB	0.03	5.01	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	583	0.015	9	0.0	7.649	A
B-A	11	401	0.028	11	0.0	9.233	A
C-AB	12	791	0.015	12	0.0	5.013	A
C-A	382			382			
A-B	15			15			
A-C	267			267			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	569	0.019	11	0.0	7.863	A
B-A	13	378	0.036	13	0.0	9.880	A
C-AB	16	837	0.019	16	0.0	4.738	A
C-A	454			454			
A-B	18			18			
A-C	319			319			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	550	0.024	13	0.0	8.180	A
B-A	17	346	0.048	16	0.0	10.930	B
C-AB	24	901	0.026	24	0.0	4.387	A
C-A	552			552			
A-B	22			22			
A-C	391			391			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	550	0.024	13	0.0	8.181	A
B-A	17	346	0.048	17	0.0	10.932	B
C-AB	24	901	0.027	24	0.0	4.369	A
C-A	552			552			
A-B	22			22			
A-C	391			391			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	569	0.019	11	0.0	7.866	A
B-A	13	378	0.036	14	0.0	9.881	A
C-AB	16	837	0.019	16	0.0	4.687	A
C-A	454			454			
A-B	18			18			

A-C	319			319			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	583	0.016	9	0.0	7.652	A
B-A	11	401	0.028	11	0.0	9.239	A
C-AB	12	791	0.015	12	0.0	4.985	A
C-A	382			382			
A-B	15			15			
A-C	267			267			

Analysis - 2039 DN, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.21	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)
D6	2039 DN	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	532	100.000
B		✓	13	100.000
C		✓	383	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	29	503
	B	11	0	2
	C	377	6	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	7.59	0.0	A
B-A	0.04	10.94	0.0	B
C-AB	0.02	5.23	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	518	0.003	1	0.0	6.965	A
B-A	8	403	0.021	8	0.0	9.110	A
C-AB	8	696	0.011	8	0.0	5.227	A
C-A	281			281			
A-B	22			22			
A-C	379			379			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	501	0.004	2	0.0	7.213	A
B-A	10	377	0.026	10	0.0	9.800	A
C-AB	10	723	0.014	10	0.0	5.049	A
C-A	334			334			
A-B	26			26			
A-C	452			452			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	477	0.005	2	0.0	7.586	A
B-A	12	341	0.036	12	0.0	10.937	B
C-AB	15	762	0.019	15	0.0	4.817	A
C-A	407			407			
A-B	32			32			
A-C	554			554			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	477	0.005	2	0.0	7.587	A
B-A	12	341	0.036	12	0.0	10.939	B
C-AB	15	762	0.019	15	0.0	4.819	A
C-A	407			407			
A-B	32			32			
A-C	554			554			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	2	501	0.004	2	0.0	7.216	A
B-A	10	377	0.026	10	0.0	9.804	A
C-AB	10	723	0.014	10	0.0	5.050	A
C-A	334			334			
A-B	26			26			
A-C	452			452			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	518	0.003	2	0.0	6.966	A
B-A	8	403	0.021	8	0.0	9.115	A
C-AB	8	696	0.011	8	0.0	5.230	A
C-A	281			281			
A-B	22			22			
A-C	379			379			

Analysis - 2024 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.35	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)
D7	2024 DS	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	346	100.000
B		✓	23	100.000
C		✓	461	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	18	328
	B	13	0	10
	C	454	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	22
	C	1	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	8.04	0.0	A
B-A	0.04	10.31	0.0	B
C-AB	0.02	5.22	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	587	0.013	7	0.0	7.573	A
B-A	10	413	0.024	10	0.0	8.914	A
C-AB	10	762	0.013	9	0.0	5.223	A
C-A	338			338			
A-B	14			14			
A-C	247			247			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	575	0.016	9	0.0	7.762	A
B-A	12	393	0.030	12	0.0	9.452	A
C-AB	13	801	0.016	13	0.0	4.961	A
C-A	402			402			
A-B	16			16			
A-C	295			295			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	557	0.020	11	0.0	8.039	A
B-A	14	364	0.039	14	0.0	10.307	B
C-AB	19	856	0.022	19	0.0	4.620	A
C-A	489			489			
A-B	20			20			
A-C	361			361			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	557	0.020	11	0.0	8.040	A
B-A	14	364	0.039	14	0.0	10.308	B
C-AB	19	856	0.022	19	0.0	4.602	A
C-A	489			489			
A-B	20			20			
A-C	361			361			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	575	0.016	9	0.0	7.765	A
B-A	12	393	0.030	12	0.0	9.455	A
C-AB	13	801	0.016	13	0.0	4.912	A
C-A	402			402			
A-B	16			16			

A-C	295			295			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	587	0.013	8	0.0	7.578	A
B-A	10	414	0.024	10	0.0	8.917	A
C-AB	10	762	0.013	10	0.0	5.195	A
C-A	337			337			
A-B	14			14			
A-C	247			247			

Analysis - 2024 DS, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2024 DS	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	470	100.000
B		✓	12	100.000
C		✓	350	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	25	445
	B	10	0	2
	C	345	5	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	7.33	0.0	A
B-A	0.03	10.26	0.0	B
C-AB	0.02	5.29	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	530	0.003	1	0.0	6.806	A
B-A	8	417	0.018	7	0.0	8.787	A
C-AB	6	687	0.009	6	0.0	5.285	A
C-A	257			257			
A-B	19			19			
A-C	335			335			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	515	0.003	2	0.0	7.016	A
B-A	9	394	0.023	9	0.0	9.353	A
C-AB	8	712	0.011	8	0.0	5.116	A
C-A	307			307			
A-B	22			22			
A-C	400			400			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	493	0.004	2	0.0	7.327	A
B-A	11	362	0.030	11	0.0	10.264	B
C-AB	11	747	0.015	11	0.0	4.894	A
C-A	374			374			
A-B	28			28			
A-C	490			490			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	493	0.004	2	0.0	7.328	A
B-A	11	362	0.030	11	0.0	10.264	B
C-AB	11	747	0.015	11	0.0	4.896	A
C-A	374			374			
A-B	28			28			
A-C	490			490			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	2	515	0.003	2	0.0	7.019	A
B-A	9	394	0.023	9	0.0	9.355	A
C-AB	8	712	0.011	8	0.0	5.116	A
C-A	307			307			
A-B	22			22			
A-C	400			400			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	530	0.003	2	0.0	6.808	A
B-A	8	417	0.018	8	0.0	8.791	A
C-AB	6	687	0.009	6	0.0	5.286	A
C-A	257			257			
A-B	19			19			
A-C	335			335			

Analysis - 2039 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.38	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)
D9	2039 DS	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	397	100.000
B		✓	27	100.000
C		✓	531	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	21	376
	B	15	0	12
	C	523	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	22
	C	1	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	8.27	0.0	A
B-A	0.05	11.16	0.1	B
C-AB	0.03	5.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	579	0.016	9	0.0	7.701	A
B-A	11	396	0.028	11	0.0	9.340	A
C-AB	12	793	0.015	12	0.0	4.999	A
C-A	388			388			
A-B	16			16			
A-C	283			283			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	565	0.019	11	0.0	7.929	A
B-A	13	372	0.036	13	0.0	10.028	B
C-AB	16	839	0.020	16	0.0	4.722	A
C-A	461			461			
A-B	19			19			
A-C	338			338			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	544	0.024	13	0.0	8.268	A
B-A	17	339	0.049	16	0.1	11.154	B
C-AB	24	904	0.027	24	0.0	4.370	A
C-A	560			560			
A-B	23			23			
A-C	414			414			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	544	0.024	13	0.0	8.269	A
B-A	17	339	0.049	17	0.1	11.155	B
C-AB	24	904	0.027	24	0.0	4.352	A
C-A	560			560			
A-B	23			23			
A-C	414			414			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	565	0.019	11	0.0	7.932	A
B-A	13	372	0.036	14	0.0	10.032	B
C-AB	16	839	0.020	16	0.0	4.673	A
C-A	461			461			
A-B	19			19			

A-C	338			338			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	579	0.016	9	0.0	7.705	A
B-A	11	397	0.028	11	0.0	9.348	A
C-AB	12	793	0.015	12	0.0	4.973	A
C-A	388			388			
A-B	16			16			
A-C	283			283			

Analysis - 2039 DS, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2039 DS	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	541	100.000
B		✓	14	100.000
C		✓	401	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	29	512
	B	12	0	2
	C	395	6	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	7.65	0.0	A
B-A	0.04	11.14	0.0	B
C-AB	0.02	5.16	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	515	0.003	1	0.0	7.009	A
B-A	9	400	0.023	9	0.0	9.202	A
C-AB	8	705	0.011	8	0.0	5.164	A
C-A	294			294			
A-B	22			22			
A-C	385			385			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	497	0.004	2	0.0	7.264	A
B-A	11	373	0.029	11	0.0	9.931	A
C-AB	10	734	0.014	10	0.0	4.978	A
C-A	350			350			
A-B	26			26			
A-C	460			460			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	473	0.005	2	0.0	7.651	A
B-A	13	336	0.039	13	0.0	11.141	B
C-AB	15	775	0.019	15	0.0	4.737	A
C-A	426			426			
A-B	32			32			
A-C	564			564			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	473	0.005	2	0.0	7.651	A
B-A	13	336	0.039	13	0.0	11.143	B
C-AB	15	775	0.019	15	0.0	4.739	A
C-A	426			426			
A-B	32			32			
A-C	564			564			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	2	497	0.004	2	0.0	7.268	A
B-A	11	373	0.029	11	0.0	9.935	A
C-AB	10	734	0.014	11	0.0	4.980	A
C-A	350			350			
A-B	26			26			
A-C	460			460			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	515	0.003	2	0.0	7.013	A
B-A	9	400	0.023	9	0.0	9.207	A
C-AB	8	705	0.011	8	0.0	5.164	A
C-A	294			294			
A-B	22			22			
A-C	385			385			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: Junction 3 - 6485.j9
Path: C:\Users\wian.marais\Documents\Projects - Local\Z040 - Blackglen Road TIA\Models
Report generation date: 18/07/2022 14:25:26

»Analysis - 2019, AM
»Analysis - 2019, PM
»Analysis - 2024 DN, AM
»Analysis - 2024 DN, PM
»Analysis - 2039 DN, AM
»Analysis - 2039 DN, PM
»Analysis - 2024 DS, AM
»Analysis - 2024 DS, PM
»Analysis - 2039 DS, AM
»Analysis - 2039 DS, PM

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	RFC	LOS	Set ID	Queue (PCU)	RFC	LOS
	Analysis - 2019							
Stream B-C	D1	0.1	0.05	A	D2	0.1	0.06	A
Stream B-A		0.0	0.03	B		0.1	0.06	C
Stream C-AB		0.4	0.15	A		0.2	0.09	A
	Analysis - 2024 DN							
Stream B-C	D3	0.1	0.06	A	D4	0.1	0.07	A
Stream B-A		0.0	0.04	B		0.1	0.07	C
Stream C-AB		0.5	0.16	A		0.3	0.11	A
	Analysis - 2039 DN							
Stream B-C	D5	0.1	0.07	A	D6	0.1	0.09	A
Stream B-A		0.1	0.05	B		0.2	0.10	C
Stream C-AB		0.7	0.21	A		0.5	0.15	A
	Analysis - 2024 DS							
Stream B-C	D7	0.1	0.06	A	D8	0.1	0.07	A
Stream B-A		0.0	0.04	B		0.1	0.07	C
Stream C-AB		0.5	0.17	A		0.3	0.11	A
	Analysis - 2039 DS							
Stream B-C	D9	0.1	0.07	A	D10	0.1	0.09	B
Stream B-A		0.1	0.05	C		0.2	0.11	D
Stream C-AB		0.7	0.22	A		0.5	0.16	A

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

File summary

File Description

Title	Junction 3

Location	Blackglen/Woodside
Site number	6485
Date	17/09/2021
Version	
Status	
Identifier	
Client	Zolbury Limited
Jobnumber	Z040
Enumerator	OCSC\wian.marais
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

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2019	AM	ONE HOUR	08:00	09:30	15
D2	2019	PM	ONE HOUR	17:00	18:30	15
D3	2024 DN	AM	ONE HOUR	08:00	09:30	15
D4	2024 DN	PM	ONE HOUR	17:00	18:30	15
D5	2039 DN	AM	ONE HOUR	08:00	09:30	15
D6	2039 DN	PM	ONE HOUR	17:00	18:30	15
D7	2024 DS	AM	ONE HOUR	08:00	09:30	15
D8	2024 DS	PM	ONE HOUR	17:00	18:30	15
D9	2039 DS	AM	ONE HOUR	08:00	09:30	15
D10	2039 DS	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Analysis	100.000

Analysis - 2019, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.60			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	9.25	4.40	3.00	3.00	3.00		1.00	0	0

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	463	0.082	0.208	0.131	0.297
B-C	652	0.097	0.246	-	-
C-B	574	0.217	0.217	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)

D1	2019	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	221	100.000
B		✓	39	100.000
C		✓	606	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	7	214
	B	10	0	29
	C	561	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	2
	B	11	0	4
	C	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	6.73	0.1	A
B-A	0.03	13.02	0.0	B
C-AB	0.15	4.78	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	609	0.036	22	0.0	6.373	A
B-A	8	364	0.021	7	0.0	11.208	B
C-AB	69	834	0.082	68	0.2	4.769	A
C-A	388			388			
A-B	5			5			
A-C	161			161			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	600	0.043	26	0.0	6.519	A
B-A	9	345	0.026	9	0.0	11.907	B
C-AB	94	887	0.106	94	0.2	4.611	A
C-A	451			451			
A-B	6			6			
A-C	192			192			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	588	0.054	32	0.1	6.728	A
B-A	11	318	0.035	11	0.0	13.017	B
C-AB	140	960	0.145	139	0.4	4.450	A
C-A	528			528			
A-B	8			8			
A-C	236			236			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	588	0.054	32	0.1	6.729	A
B-A	11	318	0.035	11	0.0	13.023	B
C-AB	140	961	0.146	140	0.4	4.454	A
C-A	527			527			
A-B	8			8			
A-C	236			236			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	600	0.043	26	0.0	6.523	A
B-A	9	344	0.026	9	0.0	11.913	B
C-AB	95	887	0.107	95	0.2	4.616	A
C-A	450			450			
A-B	6			6			
A-C	192			192			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	609	0.036	22	0.0	6.380	A
B-A	8	364	0.021	8	0.0	11.219	B
C-AB	69	834	0.083	69	0.2	4.780	A
C-A	387			387			
A-B	5			5			
A-C	161			161			

Analysis - 2019, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.93	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)
D2	2019	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	502	100.000
B		✓	45	100.000
C		✓	441	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	33	469
	B	15	0	30
	C	412	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	17	13
	B	45	0	23
	C	15	15	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	8.75	0.1	A
B-A	0.06	19.16	0.1	C
C-AB	0.09	6.10	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	586	0.039	22	0.0	7.857	A
B-A	11	347	0.033	11	0.0	15.551	C
C-AB	38	717	0.054	38	0.1	6.093	A
C-A	294			294			
A-B	25			25			
A-C	353			353			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	566	0.048	27	0.1	8.213	A
B-A	13	322	0.042	13	0.1	16.894	C
C-AB	52	749	0.069	52	0.1	5.940	A
C-A	345			345			
A-B	30			30			
A-C	422			422			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	539	0.061	33	0.1	8.750	A
B-A	17	289	0.057	16	0.1	19.149	C
C-AB	75	794	0.094	75	0.2	5.763	A
C-A	411			411			
A-B	36			36			
A-C	516			516			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	539	0.061	33	0.1	8.754	A
B-A	17	289	0.057	17	0.1	19.162	C
C-AB	75	794	0.095	75	0.2	5.765	A
C-A	410			410			
A-B	36			36			
A-C	516			516			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	566	0.048	27	0.1	8.220	A
B-A	13	322	0.042	14	0.1	16.907	C
C-AB	52	749	0.069	52	0.1	5.950	A
C-A	344			344			
A-B	30			30			

A-C	422			422			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	585	0.039	23	0.0	7.871	A
B-A	11	347	0.033	11	0.0	15.572	C
C-AB	39	718	0.054	39	0.1	6.101	A
C-A	293			293			
A-B	25			25			
A-C	353			353			

Analysis - 2024 DN, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.02	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)
D3	2024 DN	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	240	100.000
B		✓	42	100.000
C		✓	656	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	8	232
	B	11	0	31
	C	608	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	11	0	4
	C	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	6.83	0.1	A
B-A	0.04	13.59	0.0	B
C-AB	0.16	4.70	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	605	0.039	23	0.0	6.434	A
B-A	8	356	0.023	8	0.0	11.479	B
C-AB	78	857	0.091	77	0.2	4.685	A
C-A	416			416			
A-B	6			6			
A-C	175			175			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	595	0.047	28	0.1	6.595	A
B-A	10	335	0.030	10	0.0	12.282	B
C-AB	108	914	0.118	108	0.3	4.531	A
C-A	482			482			
A-B	7			7			
A-C	209			209			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	582	0.059	34	0.1	6.828	A
B-A	12	306	0.040	12	0.0	13.579	B
C-AB	163	994	0.164	162	0.5	4.390	A
C-A	559			559			
A-B	9			9			
A-C	255			255			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	582	0.059	34	0.1	6.829	A
B-A	12	306	0.040	12	0.0	13.587	B
C-AB	163	995	0.164	163	0.5	4.399	A
C-A	559			559			
A-B	9			9			
A-C	255			255			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	595	0.047	28	0.1	6.600	A
B-A	10	335	0.030	10	0.0	12.293	B
C-AB	108	915	0.119	109	0.3	4.542	A
C-A	481			481			
A-B	7			7			

A-C	209			209			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	605	0.039	23	0.0	6.439	A
B-A	8	356	0.023	8	0.0	11.493	B
C-AB	78	857	0.091	79	0.2	4.697	A
C-A	416			416			
A-B	6			6			
A-C	175			175			

Analysis - 2024 DN, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.98	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)
D4	2024 DN	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	551	100.000
B		✓	49	100.000
C		✓	486	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	36	515
	B	16	0	33
	C	454	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	17	13
	B	45	0	23
	C	15	15	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.07	9.06	0.1	A
B-A	0.07	20.66	0.1	C
C-AB	0.11	6.02	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	577	0.043	25	0.1	8.011	A
B-A	12	334	0.036	12	0.1	16.209	C
C-AB	45	734	0.061	45	0.1	6.004	A
C-A	321			321			
A-B	27			27			
A-C	388			388			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	555	0.053	30	0.1	8.423	A
B-A	14	307	0.047	14	0.1	17.824	C
C-AB	62	769	0.080	61	0.2	5.853	A
C-A	375			375			
A-B	32			32			
A-C	463			463			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	525	0.069	36	0.1	9.054	A
B-A	18	270	0.065	18	0.1	20.637	C
C-AB	91	820	0.111	90	0.3	5.682	A
C-A	444			444			
A-B	40			40			
A-C	567			567			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	525	0.069	36	0.1	9.059	A
B-A	18	270	0.065	18	0.1	20.657	C
C-AB	91	820	0.111	91	0.3	5.688	A
C-A	444			444			
A-B	40			40			
A-C	567			567			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	555	0.053	30	0.1	8.432	A
B-A	14	307	0.047	14	0.1	17.844	C
C-AB	62	770	0.080	62	0.2	5.861	A
C-A	375			375			
A-B	32			32			

A-C	463			463			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	576	0.043	25	0.1	8.028	A
B-A	12	334	0.036	12	0.1	16.235	C
C-AB	45	734	0.062	46	0.1	6.015	A
C-A	321			321			
A-B	27			27			
A-C	388			388			

Analysis - 2039 DN, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.14	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)
D5	2039 DN	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	278	100.000
B		✓	49	100.000
C		✓	759	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	269
	B	13	0	36
	C	703	56	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	11	0	4
	C	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.07	7.05	0.1	A
B-A	0.05	14.96	0.1	B
C-AB	0.21	4.57	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	597	0.045	27	0.0	6.566	A
B-A	10	339	0.029	10	0.0	12.118	B
C-AB	102	902	0.113	101	0.3	4.554	A
C-A	469			469			
A-B	7			7			
A-C	203			203			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	586	0.055	32	0.1	6.762	A
B-A	12	315	0.037	12	0.0	13.166	B
C-AB	146	970	0.150	145	0.4	4.430	A
C-A	537			537			
A-B	8			8			
A-C	242			242			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	570	0.069	40	0.1	7.052	A
B-A	14	282	0.051	14	0.1	14.946	B
C-AB	228	1064	0.215	227	0.7	4.370	A
C-A	607			607			
A-B	10			10			
A-C	296			296			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	570	0.070	40	0.1	7.053	A
B-A	14	281	0.051	14	0.1	14.960	B
C-AB	229	1065	0.215	229	0.7	4.379	A
C-A	607			607			
A-B	10			10			
A-C	296			296			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	586	0.055	32	0.1	6.765	A
B-A	12	315	0.037	12	0.0	13.184	B
C-AB	146	971	0.151	147	0.4	4.446	A
C-A	536			536			
A-B	8			8			

A-C	242			242			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	597	0.045	27	0.0	6.571	A
B-A	10	339	0.029	10	0.0	12.134	B
C-AB	103	903	0.114	103	0.3	4.572	A
C-A	469			469			
A-B	7			7			
A-C	203			203			

Analysis - 2039 DN, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.17	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)
D6	2039 DN	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	658	100.000
B		✓	61	100.000
C		✓	583	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	44	614
	B	21	0	40
	C	545	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	17	13
	B	45	0	23
	C	15	15	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.09	9.94	0.1	A
B-A	0.10	25.00	0.2	C
C-AB	0.15	5.85	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	553	0.054	30	0.1	8.459	A
B-A	16	308	0.051	16	0.1	17.817	C
C-AB	61	771	0.079	61	0.2	5.830	A
C-A	378			378			
A-B	33			33			
A-C	462			462			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	527	0.068	36	0.1	9.020	A
B-A	19	276	0.068	19	0.1	20.266	C
C-AB	86	815	0.106	86	0.3	5.686	A
C-A	438			438			
A-B	40			40			
A-C	552			552			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	490	0.090	44	0.1	9.928	A
B-A	23	232	0.100	23	0.2	24.939	C
C-AB	133	879	0.151	132	0.5	5.556	A
C-A	509			509			
A-B	48			48			
A-C	676			676			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	490	0.090	44	0.1	9.938	A
B-A	23	232	0.100	23	0.2	24.995	C
C-AB	134	879	0.152	133	0.5	5.570	A
C-A	508			508			
A-B	48			48			
A-C	676			676			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	526	0.068	36	0.1	9.036	A
B-A	19	276	0.068	19	0.1	20.320	C
C-AB	87	815	0.106	88	0.3	5.701	A
C-A	437			437			
A-B	40			40			

A-C	552			552			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	552	0.055	30	0.1	8.481	A
B-A	16	308	0.051	16	0.1	17.869	C
C-AB	62	771	0.080	62	0.2	5.846	A
C-A	377			377			
A-B	33			33			
A-C	462			462			

Analysis - 2024 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2024 DS	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	262	100.000
B		✓	42	100.000
C		✓	664	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	253
	B	11	0	31
	C	616	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	11	0	4
	C	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	6.90	0.1	A
B-A	0.04	13.87	0.0	B
C-AB	0.17	4.69	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	601	0.039	23	0.0	6.478	A
B-A	8	352	0.024	8	0.0	11.617	B
C-AB	79	858	0.092	78	0.2	4.681	A
C-A	421			421			
A-B	7			7			
A-C	190			190			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	591	0.047	28	0.1	6.651	A
B-A	10	330	0.030	10	0.0	12.471	B
C-AB	110	916	0.120	109	0.3	4.529	A
C-A	487			487			
A-B	8			8			
A-C	227			227			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	576	0.059	34	0.1	6.902	A
B-A	12	300	0.040	12	0.0	13.864	B
C-AB	166	997	0.167	165	0.5	4.392	A
C-A	565			565			
A-B	10			10			
A-C	279			279			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	576	0.059	34	0.1	6.903	A
B-A	12	300	0.040	12	0.0	13.872	B
C-AB	167	998	0.167	167	0.5	4.401	A
C-A	564			564			
A-B	10			10			
A-C	279			279			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	591	0.047	28	0.1	6.656	A
B-A	10	330	0.030	10	0.0	12.483	B
C-AB	110	917	0.120	111	0.3	4.538	A
C-A	487			487			
A-B	8			8			

A-C	227			227			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	601	0.039	23	0.0	6.486	A
B-A	8	352	0.024	8	0.0	11.632	B
C-AB	79	859	0.092	80	0.2	4.692	A
C-A	421			421			
A-B	7			7			
A-C	190			190			

Analysis - 2024 DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.99	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)
D8	2024 DS	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	562	100.000
B		✓	50	100.000
C		✓	504	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	37	525
	B	17	0	33
	C	472	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	17	13
	B	45	0	23
	C	15	15	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.07	9.15	0.1	A
B-A	0.07	21.10	0.1	C
C-AB	0.11	5.95	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	573	0.043	25	0.1	8.069	A
B-A	13	331	0.039	13	0.1	16.370	C
C-AB	46	742	0.062	46	0.1	5.940	A
C-A	333			333			
A-B	28			28			
A-C	395			395			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	551	0.054	30	0.1	8.494	A
B-A	15	304	0.050	15	0.1	18.076	C
C-AB	63	780	0.081	63	0.2	5.784	A
C-A	390			390			
A-B	33			33			
A-C	472			472			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	520	0.070	36	0.1	9.151	A
B-A	19	266	0.070	19	0.1	21.081	C
C-AB	94	833	0.113	94	0.3	5.606	A
C-A	461			461			
A-B	41			41			
A-C	578			578			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	520	0.070	36	0.1	9.155	A
B-A	19	266	0.070	19	0.1	21.104	C
C-AB	94	833	0.113	94	0.3	5.614	A
C-A	460			460			
A-B	41			41			
A-C	578			578			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	551	0.054	30	0.1	8.505	A
B-A	15	304	0.050	15	0.1	18.100	C
C-AB	64	780	0.082	64	0.2	5.794	A
C-A	389			389			
A-B	33			33			

A-C	472			472			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	572	0.043	25	0.1	8.086	A
B-A	13	331	0.039	13	0.1	16.397	C
C-AB	47	743	0.063	47	0.1	5.954	A
C-A	333			333			
A-B	28			28			
A-C	395			395			

Analysis - 2039 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.13	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)
D9	2039 DS	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	299	100.000
B		✓	49	100.000
C		✓	767	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	10	289
	B	13	0	36
	C	711	56	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	11	0	4
	C	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.07	7.13	0.1	A
B-A	0.05	15.29	0.1	C
C-AB	0.22	4.57	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	593	0.046	27	0.0	6.610	A
B-A	10	335	0.029	10	0.0	12.257	B
C-AB	103	904	0.114	102	0.3	4.551	A
C-A	474			474			
A-B	8			8			
A-C	218			218			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	581	0.056	32	0.1	6.818	A
B-A	12	310	0.038	12	0.0	13.376	B
C-AB	148	972	0.152	147	0.4	4.432	A
C-A	542			542			
A-B	9			9			
A-C	260			260			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	565	0.070	40	0.1	7.128	A
B-A	14	276	0.052	14	0.1	15.280	C
C-AB	233	1068	0.219	232	0.7	4.376	A
C-A	611			611			
A-B	11			11			
A-C	318			318			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	565	0.070	40	0.1	7.129	A
B-A	14	276	0.052	14	0.1	15.294	C
C-AB	234	1068	0.219	234	0.7	4.386	A
C-A	610			610			
A-B	11			11			
A-C	318			318			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	581	0.056	32	0.1	6.824	A
B-A	12	310	0.038	12	0.0	13.395	B
C-AB	149	973	0.153	150	0.4	4.444	A
C-A	541			541			
A-B	9			9			

A-C	260			260			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	593	0.046	27	0.1	6.615	A
B-A	10	335	0.029	10	0.0	12.283	B
C-AB	104	905	0.115	105	0.3	4.571	A
C-A	473			473			
A-B	8			8			
A-C	218			218			

Analysis - 2039 DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.18	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)
D10	2039 DS	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	669	100.000
B		✓	62	100.000
C		✓	601	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	45	624
	B	22	0	40
	C	563	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	17	13
	B	45	0	23
	C	15	15	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.09	10.05	0.1	B
B-A	0.11	25.69	0.2	D
C-AB	0.16	5.79	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	549	0.055	30	0.1	8.518	A
B-A	17	305	0.054	16	0.1	18.031	C
C-AB	63	779	0.080	62	0.2	5.772	A
C-A	390			390			
A-B	34			34			
A-C	470			470			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	523	0.069	36	0.1	9.096	A
B-A	20	273	0.073	20	0.1	20.617	C
C-AB	89	825	0.108	88	0.3	5.622	A
C-A	451			451			
A-B	40			40			
A-C	561			561			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	485	0.091	44	0.1	10.040	B
B-A	24	227	0.106	24	0.2	25.625	D
C-AB	138	892	0.155	137	0.5	5.494	A
C-A	523			523			
A-B	50			50			
A-C	687			687			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	485	0.091	44	0.1	10.050	B
B-A	24	227	0.107	24	0.2	25.691	D
C-AB	139	893	0.155	139	0.5	5.509	A
C-A	523			523			
A-B	50			50			
A-C	687			687			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	522	0.069	36	0.1	9.114	A
B-A	20	273	0.073	20	0.1	20.675	C
C-AB	89	826	0.108	90	0.3	5.640	A
C-A	451			451			
A-B	40			40			

A-C	561			561			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	549	0.055	30	0.1	8.541	A
B-A	17	305	0.054	17	0.1	18.087	C
C-AB	63	780	0.081	64	0.2	5.788	A
C-A	389			389			
A-B	34			34			
A-C	470			470			

TRANSYT 15

Version: 15.5.2.7994
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Filename: Junction 4 - 6486.t15
Path: C:\Users\wian.marais\Documents\Projects - Local\Z040 - Blackglen Road TIA\Models
Report generation date: 18/07/2022 14:35:38

»A1 - AM Peak - 2019 : D1-1 - AM Peak - 2019* :
»A2 - AM Peak - 2024 DN : D1-2 - AM Peak - 2024 DN* :
»A3 - AM Peak - 2024 DS : D1-3 - AM Peak - 2024 DS* :
»A4 - AM Peak - 2039 DN : D1-4 - AM Peak - 2039 DN* :
»A5 - AM Peak - 2039 DS : D1-5 - AM Peak - 2039 DS* :
»A6 - PM Peak - 2019 : D2-1 - PM Peak - 2019* :
»A7 - PM Peak - 2024 DN : D2-2 - PM Peak - 2024 DN* :
»A8 - PM Peak - 2024 DS : D2-3 - PM Peak - 2024 DS* :
»A9 - PM Peak - 2039 DN : D2-4 - PM Peak - 2039 DN* :
»A10 - PM Peak - 2039 DS : D2-5 - PM Peak - 2039 DS* :

File summary

File description

File title	Junction 4
Location	Enniskerry/Hillcrest/Blackglen
Site number	6486
UTCRegion	
Driving side	Left
Date	17/09/2021
Version	
Status	
Identifier	
Client	Zolbury Limited
Jobnumber	Z040
Enumerator	OCSC\wian.marais
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

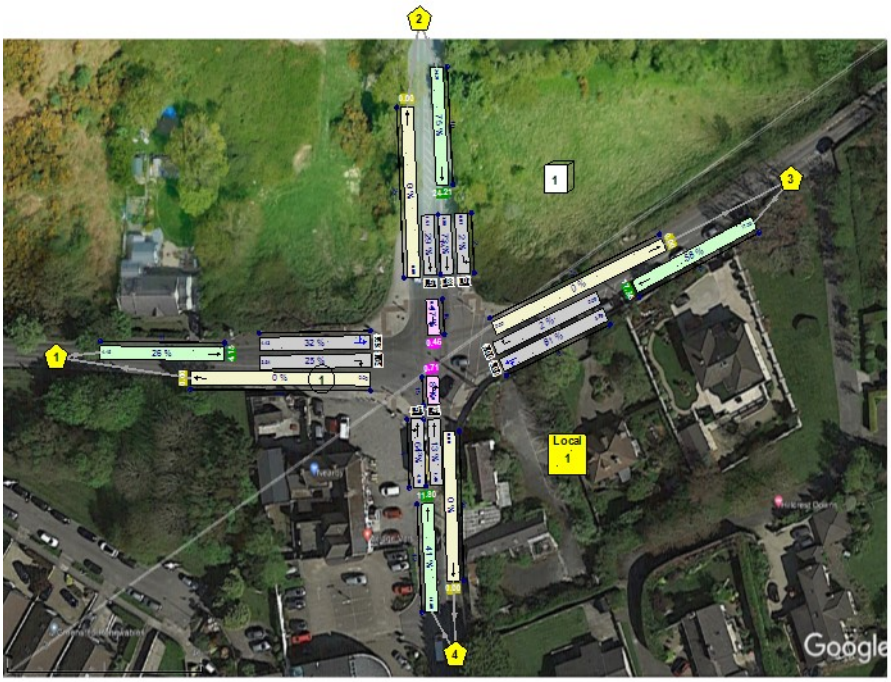
Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams


2
1
3
1
Local
1
4
Google

A1 - AM Peak - 2019
D1-1 - AM Peak - 2019*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Arm Data	Arm 15	No traffic node specified for arm(s): 15, 16

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	18/07/2022 14:32:16	18/07/2022 14:32:16	08:00	100	276.05	18.22	63.64	4/1	0	0	4/1	11/1	4/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2019		D1-1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2019				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	150

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	14	14	14	14	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	146	3	7	1	7
	2	✓	2	B	8	64	56	1	7
	3	✓	3	C	69	109	40	1	7
	4	✓	4	D	114	121	7	1	7
	5	✓	5	E	126	132	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	A	146	3	7
1	2	1	1	A	146	3	7
2	1	1	1	C	69	109	40
2	2	1	1	C	69	109	40
3	1	1	1	B	8	64	56
3	2	1	1	B	8	64	56
4	1	1	1	C	69	109	40
13	1	1	1	D	114	121	7
14	1	1	1	D	114	121	7

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	A	B	494	1799	63	0.00	63	42	23.51	19.55	40.29	4.89	100	100	0.00	40.58
	2		1	1	A	B	82	1861	63	5.00	10	785	18.30	14.34	28.64	1.46	100	100	0.00	4.93
1x	1						227	Unrestricted	150	41.00	0	Unrestricted	7.85	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	C		6	1628	40	40.00	1	6575	37.35	34.95	47.04	0.12	100	100	0.00	0.86
	2		1	1	C		148	2036	40	0.00	27	238	39.78	37.14	47.78	2.95	100	100	0.00	22.57
2x	1						475	Unrestricted	150	33.00	0	Unrestricted	7.68	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	B		237	1869	56	0.00	33	170	33.24	29.64	44.87	4.43	100	100	0.00	29.04
	2		1	1	B		7	1826	56	56.00	1	8821	29.77	26.65	44.05	0.13	100	100	0.00	0.77
3x	1						477	Unrestricted	150	21.00	0	Unrestricted	7.97	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	C		346 <	1989	40	0.00	64	41	36.06	33.06	33.94	4.90 +	100	100	0.00	46.60
4x	1						370	Unrestricted	150	38.00	0	Unrestricted	7.21	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				244	2055	150	36.79	16	472	16.95	4.95	26.17	2.79	100	100	0.00	5.57
10	1		1				214	2105	150	44.70	14	521	19.17	7.17	31.22	2.93	100	100	0.00	6.89
11	1		1				576	2035	150	62.76	49	85	30.31	18.31	56.89	14.15	100	100	0.00	45.70
12	1		1				515	2155	150	72.31	46	95	35.68	23.68	62.10	13.64	100	100	0.00	52.11
13	1		1	1	D	C	169	2055	47	3.00	25	257	22.08	19.08	26.02	1.60	100	100	0.00	13.27
14	1		1	1	D	C	60	2055	47	1.00	9	907	28.51	26.83	41.35	1.45	100	100	0.00	6.66
15	1						169 <	1200	150	102.00	14	539	1.40	0.40	8.04	1.54 +	100	100	0.00	0.42
16	1						60	1200	150	101.00	5	1700	1.20	0.20	7.65	0.85	100	100	0.00	0.07

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	299.08	28.20	10.61	18.22	258.69	17.35	0.00	276.05
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	299.08	28.20	10.61	18.22	258.69	17.35	0.00	276.05

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A2 - AM Peak - 2024 DN
D1-2 - AM Peak - 2024 DN*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Arm Data	Arm 15	No traffic node specified for arm(s): 15, 16

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
2	18/07/2022 14:32:17	18/07/2022 14:32:17	08:00	100	313.10	20.69	70.81	1/1	0	0	1/1	11/1	1/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2024 DN		D1-2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2024 DN				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	150

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	14	14	14	14	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	146	3	7	1	7
	2	✓	2	B	8	62	54	1	7
	3	✓	3	C	67	109	42	1	7
	4	✓	4	D	114	121	7	1	7
	5	✓	5	E	126	132	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	A	146	3	7
1	2	1	1	A	146	3	7
2	1	1	1	C	67	109	42
2	2	1	1	C	67	109	42
3	1	1	1	B	8	62	54
3	2	1	1	B	8	62	54
4	1	1	1	C	67	109	42
13	1	1	1	D	114	121	7
14	1	1	1	D	114	121	7

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	A	B	535	1799	61	0.00	71	27	24.67	20.71	38.54	5.19	100	100	0.00	46.30
	2		1	1	A	B	89	1861	61	5.00	11	690	17.89	13.93	26.53	1.46	100	100	0.00	5.19
1x	1						246	Unrestricted	150	40.00	0	Unrestricted	7.85	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	C		7	1628	42	38.00	1	5900	34.90	32.50	43.25	0.13	100	100	0.00	0.94
	2		1	1	C		161	2036	42	0.00	28	226	37.24	34.60	43.99	2.95	100	100	0.00	22.86
2x	1						515	Unrestricted	150	33.00	0	Unrestricted	7.68	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	B		257	1869	54	0.00	38	140	33.19	29.59	41.65	4.46	100	100	0.00	31.34
	2		1	1	B		8	1826	54	54.00	1	7432	29.56	26.44	40.62	0.14	100	100	0.00	0.88
3x	1						517	Unrestricted	150	21.00	0	Unrestricted	7.97	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	C		375 <	1989	42	0.00	66	37	34.14	31.14	31.78	4.97 +	100	100	0.00	47.56
4x	1						402	Unrestricted	150	38.00	0	Unrestricted	7.21	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				265	2055	150	44.03	18	393	19.25	7.25	32.22	3.70	100	100	0.00	8.65
10	1		1				233	2105	150	48.66	16	449	20.54	8.54	34.33	3.51	100	100	0.00	8.85
11	1		1				624	2035	150	66.85	55	63	34.21	22.21	63.44	16.98	100	100	0.00	59.62
12	1		1				558	2155	150	74.16	51	76	37.60	25.60	65.32	15.77	100	100	0.00	60.92
13	1		1	1	D	C	183	2055	49	3.00	26	244	20.13	17.13	23.71	1.56	100	100	0.00	12.91
14	1		1	1	D	C	65	2055	49	1.00	9	867	26.18	24.50	37.56	1.45	100	100	0.00	6.59
15	1						183 <	1200	150	100.00	15	490	1.40	0.40	7.04	1.50 +	100	100	0.00	0.44
16	1						65	1200	150	99.00	5	1562	1.19	0.19	6.64	0.83	100	100	0.00	0.07

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	324.36	31.51	10.29	20.69	293.79	19.31	0.00	313.10
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	324.36	31.51	10.29	20.69	293.79	19.31	0.00	313.10

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A3 - AM Peak - 2024 DS
D1-3 - AM Peak - 2024 DS*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Arm Data	Arm 15	No traffic node specified for arm(s): 15, 16

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
3	18/07/2022 14:32:17	18/07/2022 14:32:17	08:00	100	335.86	22.22	73.59	4/1	0	0	4/1	11/1	4/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2024 DS		D1-3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2024 DS				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	150

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	14	14	14	14	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	146	3	7	1	7
	2	✓	2	B	8	66	58	1	7
	3	✓	3	C	71	109	38	1	7
	4	✓	4	D	114	121	7	1	7
	5	✓	5	E	126	132	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	A	146	3	7
1	2	1	1	A	146	3	7
2	1	1	1	C	71	109	38
2	2	1	1	C	71	109	38
3	1	1	1	B	8	66	58
3	2	1	1	B	8	66	58
4	1	1	1	C	71	109	38
13	1	1	1	D	114	121	7
14	1	1	1	D	114	121	7

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	A	B	579	1799	65	0.00	72	25	23.01	19.05	35.90	5.26	100	100	0.00	46.11
	2		1	1	A	B	98	1861	65	5.00	12	663	16.33	12.37	24.53	1.46	100	100	0.00	5.08
1x	1						262	Unrestricted	150	40.00	0	Unrestricted	7.85	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	C		7	1628	38	33.00	2	5342	36.64	34.24	43.26	0.13	100	100	0.00	0.98
	2		1	1	C		161	2036	38	0.00	30	196	39.28	36.64	44.19	2.96	100	100	0.00	24.16
2x	1						527	Unrestricted	150	32.00	0	Unrestricted	7.68	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	B		266	1869	58	0.00	36	149	30.89	27.29	40.15	4.45	100	100	0.00	29.97
	2		1	1	B		8	1826	58	58.00	1	7980	27.49	24.37	39.25	0.13	100	100	0.00	0.81
3x	1						549	Unrestricted	150	20.00	0	Unrestricted	7.97	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	C		380 <	1986	38	0.00	74	22	38.47	35.47	33.68	5.35 +	100	100	0.00	54.77
4x	1						411	Unrestricted	150	38.00	0	Unrestricted	7.21	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				274	2055	150	42.90	19	382	18.67	6.67	30.92	3.75	100	100	0.00	8.27
10	1		1				235	2105	150	52.64	17	423	22.04	10.04	37.53	3.87	100	100	0.00	10.41
11	1		1				677 <	2035	150	64.86	59	54	34.13	22.13	64.08	18.65 +	100	100	0.00	64.54
12	1		1				563	2155	150	78.31	55	65	41.14	29.14	69.88	16.75	100	100	0.00	69.65
13	1		1	1	D	C	183	2055	45	3.00	28	217	20.86	17.86	23.60	1.54	100	100	0.00	13.43
14	1		1	1	D	C	67	2055	45	1.00	10	765	27.63	25.95	37.64	1.46	100	100	0.00	7.17
15	1						183 <	1200	150	104.00	15	490	1.39	0.39	6.80	1.47 +	100	100	0.00	0.43
16	1						67	1200	150	103.00	6	1512	1.20	0.20	6.97	0.85	100	100	0.00	0.07

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	337.92	33.49	10.09	22.22	315.48	20.38	0.00	335.86
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	337.92	33.49	10.09	22.22	315.48	20.38	0.00	335.86

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A4 - AM Peak - 2039 DN
D1-4 - AM Peak - 2039 DN*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Arm Data	Arm 15	No traffic node specified for arm(s): 15, 16

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
4	18/07/2022 14:32:17	18/07/2022 14:32:18	08:00	100	406.38	26.95	80.64	1/1	0	0	1/1	11/1	1/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2039 DN		D1-4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2039 DN				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	150

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	14	14	14	14	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	146	3	7	1	7
	2	✓	2	B	8	63	55	1	7
	3	✓	3	C	68	109	41	1	7
	4	✓	4	D	114	121	7	1	7
	5	✓	5	E	126	132	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	A	146	3	7
1	2	1	1	A	146	3	7
2	1	1	1	C	68	109	41
2	2	1	1	C	68	109	41
3	1	1	1	B	8	63	55
3	2	1	1	B	8	63	55
4	1	1	1	C	68	109	41
13	1	1	1	D	114	121	7
14	1	1	1	D	114	121	7

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	A	B	619 <	1799	62	0.00	81	12	26.56	22.60	36.27	5.97 +	100	100	0.00	58.00
	2		1	1	A	B	103	1861	62	5.00	13	594	16.25	12.29	23.04	1.46	100	100	0.00	5.29
1x	1						285	Unrestricted	150	37.00	0	Unrestricted	7.85	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	C		7	1628	41	41.00	2	5761	32.44	30.04	37.24	0.11	100	100	0.00	0.86
	2		1	1	C		187	2036	41	0.00	33	174	35.01	32.37	38.22	2.98	100	100	0.00	24.77
2x	1						595	Unrestricted	150	30.00	0	Unrestricted	7.68	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	B		297	1869	55	0.00	43	111	30.84	27.24	36.40	4.51	100	100	0.00	33.27
	2		1	1	B		9	1826	55	55.00	1	6717	27.09	23.97	35.16	0.13	100	100	0.00	0.89
3x	1						597	Unrestricted	150	20.00	0	Unrestricted	7.97	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	C		433 <	1989	41	0.00	78	16	36.62	33.62	31.25	5.66 +	100	100	0.00	59.12
4x	1						466	Unrestricted	150	38.00	0	Unrestricted	7.21	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				306	2055	150	52.20	23	294	22.23	10.23	39.00	5.22	100	100	0.00	13.85
10	1		1				270	2105	150	58.63	21	327	24.82	12.82	42.90	5.05	100	100	0.00	15.10
11	1		1				722 <	2035	150	69.78	66	36	39.20	27.20	71.87	22.31 +	100	100	0.00	83.97
12	1		1				645 <	2155	150	80.26	64	40	45.25	33.25	76.42	21.00 +	100	100	0.00	90.78
13	1		1	1	D	C	212	2055	48	3.00	31	191	17.96	14.96	20.33	1.52	100	100	0.00	13.05
14	1		1	1	D	C	76	2055	48	1.00	11	711	23.60	21.92	31.64	1.46	100	100	0.00	6.87
15	1						212 <	1200	150	100.00	18	409	1.42	0.42	5.44	1.42 +	100	100	0.00	0.48
16	1						76	1200	150	100.00	6	1321	1.18	0.18	5.19	0.81	100	100	0.00	0.07

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	375.13	39.46	9.51	26.95	382.62	23.76	0.00	406.38
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	375.13	39.46	9.51	26.95	382.62	23.76	0.00	406.38

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A5 - AM Peak - 2039 DS
D1-5 - AM Peak - 2039 DS*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Arm Data	Arm 15	No traffic node specified for arm(s): 15, 16

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
5	18/07/2022 14:32:18	18/07/2022 14:32:18	08:00	100	460.71	30.69	86.38	1/1	0	0	1/1	11/1	1/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2039 DS		D1-5	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2039 DS				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	150

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	14	14	14	14	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	146	3	7	1	7
	2	✓	2	B	8	63	55	1	7
	3	✓	3	C	68	109	41	1	7
	4	✓	4	D	114	121	7	1	7
	5	✓	5	E	126	132	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	A	146	3	7
1	2	1	1	A	146	3	7
2	1	1	1	C	68	109	41
2	2	1	1	C	68	109	41
3	1	1	1	B	8	63	55
3	2	1	1	B	8	63	55
4	1	1	1	C	68	109	41
13	1	1	1	D	114	121	7
14	1	1	1	D	114	121	7

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	A	B	663 <	1799	62	0.00	86	4	30.31	26.35	37.15	6.92 +	100	100	0.00	72.01
	2		1	1	A	B	112	1861	62	5.00	14	538	15.62	11.66	21.58	1.46	100	100	0.00	5.46
1x	1						301	Unrestricted	150	36.00	0	Unrestricted	7.85	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	C		7	1628	41	41.00	2	5761	32.44	30.04	37.24	0.11	100	100	0.00	0.86
	2		1	1	C		187	2036	41	0.00	33	174	35.01	32.37	38.22	2.98	100	100	0.00	24.77
2x	1						606	Unrestricted	150	30.00	0	Unrestricted	7.68	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	B		306	1869	55	0.00	44	105	30.46	26.86	35.44	4.52	100	100	0.00	33.78
	2		1	1	B		9	1826	55	55.00	1	6717	26.65	23.53	34.12	0.13	100	100	0.00	0.87
3x	1						629	Unrestricted	150	19.00	0	Unrestricted	7.97	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	C		437 <	1986	41	0.00	79	14	38.36	35.36	31.44	5.74 +	100	100	0.00	62.71
4x	1						475	Unrestricted	150	38.00	0	Unrestricted	7.21	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				315	2055	150	53.38	24	278	22.95	10.95	40.34	5.55	100	100	0.00	15.20
10	1		1				272	2105	150	58.62	21	324	24.83	12.83	42.94	5.09	100	100	0.00	15.23
11	1		1				775 <	2035	150	71.59	73	24	42.77	30.77	77.44	25.72 +	100	100	0.00	101.59
12	1		1				650 <	2155	150	87.24	72	25	52.77	40.77	72.48	30.35 +	100	100	0.00	110.42
13	1		1	1	D	C	212	2055	48	4.00	31	191	14.67	11.67	20.14	1.52	100	100	0.00	10.28
14	1		1	1	D	C	78	2055	48	1.00	11	690	23.62	21.94	31.65	1.46	100	100	0.00	7.06
15	1						212	1200	150	101.00	18	409	1.38	0.38	3.39	1.02	100	100	0.00	0.40
16	1						78	1200	150	100.00	7	1285	1.19	0.19	5.43	0.82	100	100	0.00	0.08

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	388.61	43.66	8.90	30.69	435.84	24.87	0.00	460.71
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	388.61	43.66	8.90	30.69	435.84	24.87	0.00	460.71

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A6 - PM Peak - 2019
D2-1 - PM Peak - 2019*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Arm Data	Arm 15	No traffic node specified for arm(s): 15, 16

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
6	18/07/2022 14:32:16	18/07/2022 14:32:16	17:00	100	289.10	19.18	60.49	3/1	0	0	3/1	10/1	3/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2019		D2-1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2019				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	150

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	14	14	14	14	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	146	3	7	1	7
	2	✓	2	B	8	61	53	1	7
	3	✓	3	C	66	109	43	1	7
	4	✓	4	D	114	121	7	1	7
	5	✓	5	E	126	132	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	A	146	3	7
1	2	1	1	A	146	3	7
2	1	1	1	C	66	109	43
2	2	1	1	C	66	109	43
3	1	1	1	B	8	61	53
3	2	1	1	B	8	61	53
4	1	1	1	C	66	109	43
13	1	1	1	D	114	121	7
14	1	1	1	D	114	121	7

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	A	B	177	1799	60	0.00	24	278	31.16	27.20	68.72	4.35	100	100	0.00	20.51
	2		1	1	A	B	147	1861	60	0.00	19	371	30.11	26.15	61.90	3.61	100	100	0.00	16.30
1x	1						427	Unrestricted	150	35.00	0	Unrestricted	7.85	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	C		8	1628	43	43.00	2	5272	20.71	18.31	19.98	0.07	100	100	0.00	0.60
	2		1	1	C		349	2036	43	0.00	58	54	25.54	22.90	22.72	3.31	100	100	0.00	32.52
2x	1						275	Unrestricted	150	37.00	0	Unrestricted	7.68	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	B		407	1869	53	0.00	60	49	28.49	24.89	28.33	4.81	100	100	0.00	41.40
	2		1	1	B		9	1826	53	53.00	1	6474	22.96	19.84	25.66	0.10	100	100	0.00	0.73
3x	1						186	Unrestricted	150	30.00	0	Unrestricted	7.97	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	C		284 <	1955	43	0.00	50	82	36.48	33.48	38.77	4.59 +	100	100	0.00	38.88
4x	1						719	Unrestricted	150	32.00	0	Unrestricted	7.21	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				416	2055	150	69.17	38	140	31.72	19.72	56.29	10.05	100	100	0.00	35.30
10	1		1				511	2105	150	81.62	53	69	42.97	30.97	71.35	15.49	100	100	0.00	66.99
11	1		1				324	2035	150	3.55	16	452	12.20	0.20	1.36	0.38	100	100	0.00	0.31
12	1		1				356	2155	150	59.96	28	227	26.40	14.40	46.31	7.07	100	100	0.00	22.29
13	1		1	1	D	C	72	2055	50	4.00	10	791	24.41	21.41	31.79	1.45	100	100	0.00	6.37
14	1		1	1	D	C	154	2055	50	1.00	22	316	12.16	10.48	14.86	1.48	100	100	0.00	6.65
15	1						72	1200	150	102.00	6	1400	1.17	0.17	4.09	0.77	100	100	0.00	0.08
16	1						154	1200	150	98.00	13	601	1.24	0.24	1.29	0.46	100	100	0.00	0.15

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	305.14	29.37	10.39	19.18	272.32	16.78	0.00	289.10
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	305.14	29.37	10.39	19.18	272.32	16.78	0.00	289.10

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A7 - PM Peak - 2024 DN
D2-2 - PM Peak - 2024 DN*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Arm Data	Arm 15	No traffic node specified for arm(s): 15, 16

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
7	18/07/2022 14:32:18	18/07/2022 14:32:19	17:00	100	326.86	21.69	65.54	3/1	0	0	3/1	10/1	3/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2024 DN		D2-2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2024 DN				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	150

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	14	14	14	14	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	146	3	7	1	7
	2	✓	2	B	8	61	53	1	7
	3	✓	3	C	66	109	43	1	7
	4	✓	4	D	114	121	7	1	7
	5	✓	5	E	126	132	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	A	146	3	7
1	2	1	1	A	146	3	7
2	1	1	1	C	66	109	43
2	2	1	1	C	66	109	43
3	1	1	1	B	8	61	53
3	2	1	1	B	8	61	53
4	1	1	1	C	66	109	43
13	1	1	1	D	114	121	7
14	1	1	1	D	114	121	7

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	A	B	192	1799	60	0.00	26	249	31.33	27.37	68.86	4.39	100	100	0.00	22.39
	2		1	1	A	B	159	1861	60	0.00	21	335	30.18	26.22	61.69	3.63	100	100	0.00	17.68
1x	1						463	Unrestricted	150	34.00	0	Unrestricted	7.85	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	C		9	1628	43	43.00	2	4675	19.53	17.13	18.45	0.07	100	100	0.00	0.63
	2		1	1	C		378	2036	43	0.00	63	42	25.26	22.62	21.80	3.44	100	100	0.00	34.75
2x	1						298	Unrestricted	150	37.00	0	Unrestricted	7.68	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	B		441	1869	53	0.00	66	37	28.20	24.60	26.99	4.96	100	100	0.00	44.29
	2		1	1	B		10	1826	53	53.00	2	5816	21.79	18.67	23.69	0.10	100	100	0.00	0.77
3x	1						202	Unrestricted	150	28.00	0	Unrestricted	7.97	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	C		308 <	1955	43	0.00	54	68	35.39	32.39	36.28	4.66 +	100	100	0.00	40.75
4x	1						779	Unrestricted	150	32.00	0	Unrestricted	7.21	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				451	2055	150	72.44	42	112	34.24	22.24	60.44	11.68	100	100	0.00	42.98
10	1		1				554 <	2105	150	84.42	60	50	46.28	34.28	75.99	18.00 +	100	100	0.00	80.20
11	1		1				351	2035	150	11.04	19	383	12.60	0.60	6.97	1.29	100	100	0.00	1.13
12	1		1				386	2155	150	64.82	32	185	28.92	16.92	50.58	8.44	100	100	0.00	28.21
13	1		1	1	D	C	78	2055	50	4.00	11	722	22.89	19.89	28.96	1.46	100	100	0.00	6.40
14	1		1	1	D	C	167	2055	50	1.00	23	284	11.02	9.34	13.43	1.49	100	100	0.00	6.43
15	1						78	1200	150	102.00	7	1285	1.17	0.17	3.50	0.76	100	100	0.00	0.08
16	1						167	1200	150	98.00	14	547	1.26	0.26	1.21	0.46	100	100	0.00	0.18

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	330.77	32.73	10.11	21.69	307.94	18.92	0.00	326.86
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	330.77	32.73	10.11	21.69	307.94	18.92	0.00	326.86

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A8 - PM Peak - 2024 DS
D2-3 - PM Peak - 2024 DS*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Arm Data	Arm 15	No traffic node specified for arm(s): 15, 16

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
8	18/07/2022 14:32:19	18/07/2022 14:32:19	17:00	100	350.13	23.22	70.89	3/1	0	0	3/1	10/1	3/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2024 DS		D2-3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2024 DS				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	150

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	14	14	14	14	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	146	3	7	1	7
	2	✓	2	B	8	61	53	1	7
	3	✓	3	C	66	109	43	1	7
	4	✓	4	D	114	121	7	1	7
	5	✓	5	E	126	132	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	A	146	3	7
1	2	1	1	A	146	3	7
2	1	1	1	C	66	109	43
2	2	1	1	C	66	109	43
3	1	1	1	B	8	61	53
3	2	1	1	B	8	61	53
4	1	1	1	C	66	109	43
13	1	1	1	D	114	121	7
14	1	1	1	D	114	121	7

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	A	B	211	1799	60	0.00	28	217	31.15	27.19	68.71	4.40	100	100	0.00	24.45
	2		1	1	A	B	169	1861	60	0.00	22	310	29.86	25.90	62.04	3.51	100	100	0.00	18.58
1x	1						520	Unrestricted	150	33.00	0	Unrestricted	7.85	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	C		9	1628	43	43.00	2	4675	19.53	17.13	18.45	0.07	100	100	0.00	0.63
	2		1	1	C		378	2036	43	0.00	63	42	25.26	22.62	21.80	3.44	100	100	0.00	34.75
2x	1						302	Unrestricted	150	36.00	0	Unrestricted	7.68	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	B		477	1869	53	0.00	71	27	28.40	24.80	26.11	5.20	100	100	0.00	48.22
	2		1	1	B		10	1826	53	53.00	2	5816	20.68	17.56	21.90	0.09	100	100	0.00	0.72
3x	1						217	Unrestricted	150	27.00	0	Unrestricted	7.97	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	C		316 <	1949	43	0.00	55	63	35.12	32.12	35.58	4.69 +	100	100	0.00	41.45
4x	1						789	Unrestricted	150	32.00	0	Unrestricted	7.21	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				487	2055	150	75.79	48	88	36.90	24.90	64.88	13.61	100	100	0.00	51.80
10	1		1				567 <	2105	150	84.38	62	46	46.70	34.70	76.73	18.60 +	100	100	0.00	83.06
11	1		1				380	2035	150	18.11	21	324	13.47	1.47	13.18	2.35	100	100	0.00	2.83
12	1		1				394	2155	150	65.90	33	176	29.73	17.73	52.08	8.83	100	100	0.00	30.12
13	1		1	1	D	C	78	2055	50	4.00	11	722	22.40	19.40	28.10	1.46	100	100	0.00	6.24
14	1		1	1	D	C	180	2055	50	1.00	25	256	11.11	9.43	13.54	1.49	100	100	0.00	7.00
15	1						78	1200	150	102.00	7	1285	1.16	0.16	3.13	0.74	100	100	0.00	0.08
16	1						180	1200	150	98.00	15	500	1.28	0.28	1.16	0.68	100	100	0.00	0.21

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	347.44	34.82	9.98	23.22	329.71	20.42	0.00	350.13
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	347.44	34.82	9.98	23.22	329.71	20.42	0.00	350.13

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A9 - PM Peak - 2039 DN
D2-4 - PM Peak - 2039 DN*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Arm Data	Arm 15	No traffic node specified for arm(s): 15, 16

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
9	18/07/2022 14:32:19	18/07/2022 14:32:19	17:00	100	418.73	27.82	75.65	3/1	0	0	3/1	10/1	3/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2039 DN		D2-4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2039 DN				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	150

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	14	14	14	14	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	146	3	7	1	7
	2	✓	2	B	8	61	53	1	7
	3	✓	3	C	66	109	43	1	7
	4	✓	4	D	114	121	7	1	7
	5	✓	5	E	126	132	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	A	146	3	7
1	2	1	1	A	146	3	7
2	1	1	1	C	66	109	43
2	2	1	1	C	66	109	43
3	1	1	1	B	8	61	53
3	2	1	1	B	8	61	53
4	1	1	1	C	66	109	43
13	1	1	1	D	114	121	7
14	1	1	1	D	114	121	7

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	A	B	222	1799	60	0.00	30	201	30.92	26.96	68.62	4.41	100	100	0.00	25.52
	2		1	1	A	B	184	1861	60	0.00	24	276	29.68	25.72	60.98	3.64	100	100	0.00	20.07
1x	1						536	Unrestricted	150	33.00	0	Unrestricted	7.85	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	C		10	1628	43	43.00	2	4198	17.53	15.13	15.97	0.07	100	100	0.00	0.62
	2		1	1	C		437 <	2036	43	0.00	73	23	26.10	23.46	21.21	3.88 +	100	100	0.00	41.60
2x	1						344	Unrestricted	150	36.00	0	Unrestricted	7.68	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	B		509 <	1869	53	0.00	76	19	29.16	25.56	25.84	5.50 +	100	100	0.00	52.97
	2		1	1	B		11	1826	53	53.00	2	5278	19.79	16.67	20.53	0.09	100	100	0.00	0.75
3x	1						234	Unrestricted	150	27.00	0	Unrestricted	7.97	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	C		356 <	1955	43	0.00	62	45	33.98	30.98	32.67	4.85 +	100	100	0.00	44.96
4x	1						900	Unrestricted	150	29.00	0	Unrestricted	7.21	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				520	2055	150	78.08	53	71	39.29	27.29	68.60	15.32	100	100	0.00	60.45
10	1		1				641 <	2105	150	88.27	74	22	54.06	42.06	85.72	23.47 +	100	100	0.00	113.25
11	1		1				406	2035	150	22.00	23	285	14.11	2.11	16.42	3.08	100	100	0.00	4.22
12	1		1				447	2155	150	70.94	39	129	33.71	21.71	58.55	11.18	100	100	0.00	41.55
13	1		1	1	D	C	91	2055	50	4.00	13	605	20.23	17.23	24.47	1.46	100	100	0.00	6.46
14	1		1	1	D	C	194	2055	50	2.00	27	230	9.15	7.47	11.17	1.50	100	100	0.00	5.98
15	1						91	1200	150	102.00	8	1087	1.17	0.17	2.64	0.73	100	100	0.00	0.09
16	1						194	1200	150	98.00	16	457	1.30	0.30	1.10	0.46	100	100	0.00	0.24

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	382.42	40.59	9.42	27.82	395.03	23.70	0.00	418.73
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	382.42	40.59	9.42	27.82	395.03	23.70	0.00	418.73

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A10 - PM Peak - 2039 DS
D2-5 - PM Peak - 2039 DS*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Arm Data	Arm 15	No traffic node specified for arm(s): 15, 16

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
10	18/07/2022 14:32:20	18/07/2022 14:32:20	17:00	100	449.80	29.89	80.85	3/1	0	0	3/1	10/1	3/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2039 DS		D2-5	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2039 DS				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	150

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		5	5	5	5
	B	5		5	5	5
	C	5	5		5	5
	D	5	5	5		5
	E	14	14	14	14	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	146	3	7	1	7
	2	✓	2	B	8	61	53	1	7
	3	✓	3	C	66	109	43	1	7
	4	✓	4	D	114	121	7	1	7
	5	✓	5	E	126	132	6	1	6

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	A	146	3	7
1	2	1	1	A	146	3	7
2	1	1	1	C	66	109	43
2	2	1	1	C	66	109	43
3	1	1	1	B	8	61	53
3	2	1	1	B	8	61	53
4	1	1	1	C	66	109	43
13	1	1	1	D	114	121	7
14	1	1	1	D	114	121	7

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	A	B	241	1799	60	0.00	32	178	30.39	26.43	67.28	4.43	100	100	0.00	27.16
	2		1	1	A	B	194	1861	60	0.00	25	257	28.98	25.02	58.15	3.54	100	100	0.00	20.56
1x	1						593	Unrestricted	150	32.00	0	Unrestricted	7.85	0.00	0.00	0.00	100	100	0.00	0.00
2	1		1	1	C		10	1628	43	43.00	2	4198	17.54	15.14	15.97	0.07	100	100	0.00	0.62
	2		1	1	C		437 <	2036	43	0.00	73	23	26.12	23.48	21.21	3.88 +	100	100	0.00	41.63
2x	1						348	Unrestricted	150	36.00	0	Unrestricted	7.68	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	B		544 <	1869	53	0.00	81	11	30.99	27.39	26.31	5.99 +	100	100	0.00	60.56
	2		1	1	B		11	1826	53	53.00	2	5278	18.91	15.79	19.21	0.09	100	100	0.00	0.71
3x	1						249	Unrestricted	150	27.00	0	Unrestricted	7.97	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	C		365 <	1949	43	0.00	64	41	33.91	30.91	32.22	4.91 +	100	100	0.00	45.98
4x	1						910	Unrestricted	150	29.00	0	Unrestricted	7.21	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				555	2055	150	80.51	58	54	42.01	30.01	72.76	17.36	100	100	0.00	70.75
10	1		1				654 <	2105	150	88.27	75	19	54.92	42.92	86.87	24.21 +	100	100	0.00	117.85
11	1		1				435	2035	150	27.12	26	245	15.33	3.33	21.45	4.15	100	100	0.00	6.88
12	1		1				456	2155	150	72.77	41	119	34.58	22.58	59.89	11.80	100	100	0.00	44.04
13	1		1	1	D	C	91	2055	50	4.00	13	605	19.76	16.76	23.75	1.46	100	100	0.00	6.29
14	1		1	1	D	C	207	2055	50	1.00	29	210	9.18	7.50	11.22	1.51	100	100	0.00	6.42
15	1						91	1200	150	102.00	8	1087	1.16	0.16	2.33	0.71	100	100	0.00	0.08
16	1						207	1200	150	97.00	17	422	1.33	0.33	1.06	0.46	100	100	0.00	0.28

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	399.08	43.22	9.23	29.89	424.50	25.30	0.00	449.80
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	399.08	43.22	9.23	29.89	424.50	25.30	0.00	449.80

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

TRANSYT 15

Version: 15.5.2.7994
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Filename: Junction 5 - 3576.t15
Path: C:\Users\wian.marais\Documents\Projects - Local\Z040 - Blackglen Road TIA\Models
Report generation date: 18/07/2022 14:43:23

»A1 - AM Peak - 2019 : D1-1 - AM Peak - 2019* :
»A2 - AM Peak - 2024 DN : D1-2 - AM Peak - 2024 DN* :
»A3 - AM Peak - 2024 DS : D1-3 - AM Peak - 2024 DS* :
»A4 - AM Peak - 2039 DN : D1-4 - AM Peak - 2039 DN* :
»A5 - AM Peak - 2039 DS : D1-5 - AM Peak - 2039 DS* :
»A6 - PM Peak - 2019 : D2-1 - PM Peak - 2019* :
»A7 - PM Peak - 2024 DN : D2-2 - PM Peak - 2024 DN* :
»A8 - PM Peak - 2024 DS : D2-3 - PM Peak - 2024 DS* :
»A9 - PM Peak - 2039 DN : D2-4 - PM Peak - 2039 DN* :
»A10 - PM Peak - 2039 DS : D2-5 - PM Peak - 2039 DS* :

File summary

File description

File title	Junction 5
Location	Leopardstown/Kilgobbin/Hillcrest
Site number	3576
UTCRegion	
Driving side	Left
Date	17/09/2021
Version	
Status	(new file)
Identifier	
Client	Zolbury Limited
Jobnumber	Z040
Enumerator	OCSC\wian.marais
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams

A1 - AM Peak - 2019
D1-1 - AM Peak - 2019*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	18/07/2022 14:40:47	18/07/2022 14:40:47	08:00	100	147.41	9.25	60.01	16/1	0	0	16/1	11/1	16/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2019		D1-1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2019				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	80

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		6	5	6	6
	B	6		6	6	6
	C	6	6		6	6
	D	6	6	6		6
	E	10	10	10	10	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	5	21	16	1	7
	2	✓	2	B	27	34	7	1	7
	3	✓	3	C	40	51	11	1	7
	4	✓	4	D	57	64	7	1	7
	5	✓	5	E	70	75	5	1	5

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	C	40	51	11
1	2	1	1	D	57	64	7
2	2	1	1	A	5	21	16
2	3	1	1	B	27	34	7
3	1	1	1	C	40	51	11
3	3	1	1	D	57	64	7
4	1	1	1	A	5	21	16
4	2	1	1	B	27	34	7
14	1	1	1	A	5	21	16
15	2	1	1	C	40	51	11
16	1	1	1	C	40	51	11
17	1	1	1	A	5	21	16

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	C	D	194	2058	18	0.00	38	139	26.63	23.27	85.17	3.29	100	100	0.00	19.88
	2		1	1	D		68	2016	7	0.00	34	167	41.45	38.09	95.57	1.53	100	100	0.00	11.03
1x	1						261	Unrestricted	80	18.00	0	Unrestricted	13.64	0.00	0.00	0.00	100	100	0.00	0.00
2	2		1	1	A	B	73	2122	23	0.00	11	718	21.53	16.73	69.59	1.46	100	100	0.00	5.46
	3		1	1	B		81	1867	7	0.00	43	107	46.00	41.20	101.43	1.83	100	100	0.00	14.19
2x	1						735	Unrestricted	80	14.00	0	Unrestricted	9.56	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	85	2096	18	0.00	16	455	26.11	20.59	76.65	1.46	100	100	0.00	7.72
	3		1	1	D		94	1900	7	0.00	49	82	48.77	43.25	103.60	2.17	100	100	0.00	17.26
3x	1						386	Unrestricted	80	23.00	0	Unrestricted	9.77	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	A	B	283	2075	23	0.00	44	106	20.90	18.14	57.63	3.07	100	100	0.00	22.29
	2		1	1	B		20	2012	7	7.00	10	805	34.11	31.35	91.23	0.41	100	100	0.00	2.70
4x	1						156	Unrestricted	80	38.00	0	Unrestricted	11.07	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				194	2105	80	0.00	9	877	12.09	0.09	0.00	0.00	100	100	0.00	0.07
10	1		1				326	2174	80	0.00	15	500	12.15	0.15	0.00	0.01	100	100	0.00	0.19
11	1		1				620	2107	80	0.00	29	206	12.36	0.36	0.00	0.06	100	100	0.00	0.87
12	1		1				398	2203	80	19.64	24	276	14.82	2.82	25.58	2.58	100	100	0.00	5.71
13	3		1				154	2181	80	0.00	7	1175	6.06	0.06	0.00	0.00	100	100	0.00	0.04
14	1		1	1	A	C	172	1636	27	0.00	29	210	20.95	11.11	69.26	1.73	100	100	0.00	9.03
15	2		1	1	C	A	15	1687	27	27.00	2	3569	15.82	9.22	63.93	0.14	100	100	0.00	0.67
16	1		1	1	C	A	358	1646	27	0.00	60	50	20.03	15.95	82.12	4.13	100	100	0.00	26.21
17	1		1	1	A	C	95	1631	27	6.00	16	460	15.86	9.26	53.79	1.46	100	100	0.00	4.11

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	356.58	21.13	16.87	9.25	131.33	16.08	0.00	147.41
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	356.58	21.13	16.87	9.25	131.33	16.08	0.00	147.41

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A2 - AM Peak - 2024 DN
D1-2 - AM Peak - 2024 DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
2	18/07/2022 14:40:47	18/07/2022 14:40:48	08:00	100	165.76	10.42	65.04	16/1	0	0	16/1	11/1	16/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2024 DN		D1-2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2024 DN				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	80

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		6	5	6	6
	B	6		6	6	6
	C	6	6		6	6
	D	6	6	6		6
	E	10	10	10	10	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	5	21	16	1	7
	2	✓	2	B	27	34	7	1	7
	3	✓	3	C	40	51	11	1	7
	4	✓	4	D	57	64	7	1	7
	5	✓	5	E	70	75	5	1	5

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	C	40	51	11
1	2	1	1	D	57	64	7
2	2	1	1	A	5	21	16
2	3	1	1	B	27	34	7
3	1	1	1	C	40	51	11
3	3	1	1	D	57	64	7
4	1	1	1	A	5	21	16
4	2	1	1	B	27	34	7
14	1	1	1	A	5	21	16
15	2	1	1	C	40	51	11
16	1	1	1	C	40	51	11
17	1	1	1	A	5	21	16

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	C	D	211	2058	18	0.00	41	119	27.15	23.79	85.97	3.60	100	100	0.00	22.08
	2		1	1	D		74	2016	7	0.00	37	145	42.17	38.81	98.67	1.63	100	100	0.00	12.24
1x	1						283	Unrestricted	80	18.00	0	Unrestricted	13.64	0.00	0.00	0.00	100	100	0.00	0.00
2	2		1	1	A	B	79	2122	23	0.00	12	655	21.59	16.79	69.67	1.46	100	100	0.00	5.92
	3		1	1	B		88	1867	7	0.00	47	91	47.31	42.51	102.82	2.02	100	100	0.00	15.89
2x	1						797	Unrestricted	80	14.00	0	Unrestricted	9.56	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	92	2096	18	0.00	18	413	26.25	20.73	77.66	1.49	100	100	0.00	8.42
	3		1	1	D		102	1900	7	0.00	54	68	50.54	45.02	105.53	2.40	100	100	0.00	19.46
3x	1						419	Unrestricted	80	23.00	0	Unrestricted	9.77	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	A	B	307	2075	23	0.00	47	90	20.62	17.86	54.86	3.11	100	100	0.00	23.74
	2		1	1	B		22	2012	7	7.00	11	723	33.30	30.54	91.37	0.45	100	100	0.00	2.90
4x	1						169	Unrestricted	80	37.00	0	Unrestricted	11.07	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				210	2105	80	0.00	10	802	12.09	0.09	0.00	0.01	100	100	0.00	0.08
10	1		1				353	2174	80	0.00	16	454	12.16	0.16	0.00	0.02	100	100	0.00	0.22
11	1		1				673	2107	80	0.00	32	182	12.40	0.40	0.00	0.07	100	100	0.00	1.06
12	1		1				432	2203	80	21.78	27	234	15.82	3.82	30.82	3.29	100	100	0.00	8.19
13	3		1				167	2181	80	0.00	8	1075	6.07	0.07	0.00	0.00	100	100	0.00	0.05
14	1		1	1	A	C	186	1636	27	0.00	31	187	21.17	11.33	69.67	1.88	100	100	0.00	9.94
15	2		1	1	C	A	16	1687	27	27.00	3	3340	15.83	9.23	63.95	0.15	100	100	0.00	0.71
16	1		1	1	C	A	388	1646	27	0.00	65	38	21.38	17.30	84.63	4.59	100	100	0.00	30.59
17	1		1	1	A	C	103	1631	27	6.00	17	417	15.51	8.91	50.33	1.47	100	100	0.00	4.27

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	386.67	23.31	16.59	10.42	147.95	17.81	0.00	165.76
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	386.67	23.31	16.59	10.42	147.95	17.81	0.00	165.76

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A3 - AM Peak - 2024 DS
D1-3 - AM Peak - 2024 DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
3	18/07/2022 14:40:48	18/07/2022 14:40:48	08:00	100	172.32	10.84	68.06	16/1	0	0	16/1	11/1	16/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2024 DS		D1-3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2024 DS				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	80

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		6	5	6	6
	B	6		6	6	6
	C	6	6		6	6
	D	6	6	6		6
	E	10	10	10	10	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	5	21	16	1	7
	2	✓	2	B	27	34	7	1	7
	3	✓	3	C	40	51	11	1	7
	4	✓	4	D	57	64	7	1	7
	5	✓	5	E	70	75	5	1	5

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	C	40	51	11
1	2	1	1	D	57	64	7
2	2	1	1	A	5	21	16
2	3	1	1	B	27	34	7
3	1	1	1	C	40	51	11
3	3	1	1	D	57	64	7
4	1	1	1	A	5	21	16
4	2	1	1	B	27	34	7
14	1	1	1	A	5	21	16
15	2	1	1	C	40	51	11
16	1	1	1	C	40	51	11
17	1	1	1	A	5	21	16

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	C	D	220	2058	18	0.00	43	110	27.45	24.09	86.40	3.76	100	100	0.00	23.29
	2		1	1	D		78	2016	7	0.00	39	133	42.67	39.31	99.36	1.72	100	100	0.00	13.07
1x	1						292	Unrestricted	80	18.00	0	Unrestricted	13.64	0.00	0.00	0.00	100	100	0.00	0.00
2	2		1	1	A	B	79	2122	23	0.00	12	655	21.59	16.79	69.67	1.46	100	100	0.00	5.92
	3		1	1	B		91	1867	7	0.00	49	85	47.92	43.12	103.48	2.10	100	100	0.00	16.66
2x	1						815	Unrestricted	80	14.00	0	Unrestricted	9.56	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	94	2096	18	0.00	18	402	26.28	20.76	78.68	1.51	100	100	0.00	8.63
	3		1	1	D		102	1900	7	0.00	54	68	50.54	45.02	105.53	2.40	100	100	0.00	19.46
3x	1						428	Unrestricted	80	23.00	0	Unrestricted	9.77	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	A	B	307	2075	23	0.00	47	90	20.62	17.86	54.86	3.11	100	100	0.00	23.74
	2		1	1	B		22	2012	7	7.00	11	723	33.29	30.53	91.37	0.45	100	100	0.00	2.90
4x	1						173	Unrestricted	80	36.00	0	Unrestricted	11.07	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				212	2105	80	0.00	10	794	12.10	0.10	0.00	0.01	100	100	0.00	0.08
10	1		1				356	2175	80	0.00	16	450	12.16	0.16	0.00	0.02	100	100	0.00	0.23
11	1		1				704	2107	80	0.00	33	169	12.43	0.43	0.00	0.08	100	100	0.00	1.19
12	1		1				436	2203	80	21.76	27	231	15.83	3.83	30.92	3.32	100	100	0.00	8.28
13	3		1				170	2181	80	0.00	8	1055	6.07	0.07	0.00	0.00	100	100	0.00	0.05
14	1		1	1	A	C	186	1636	27	0.00	31	187	21.17	11.33	69.67	1.88	100	100	0.00	9.94
15	2		1	1	C	A	16	1687	27	27.00	3	3340	15.83	9.23	63.95	0.15	100	100	0.00	0.71
16	1		1	1	C	A	406	1646	27	0.00	68	32	22.35	18.27	87.81	5.18	100	100	0.00	33.72
17	1		1	1	A	C	107	1631	27	6.00	18	397	15.56	8.96	50.41	1.47	100	100	0.00	4.46

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	395.79	24.03	16.47	10.84	153.86	18.46	0.00	172.32
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	395.79	24.03	16.47	10.84	153.86	18.46	0.00	172.32

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A4 - AM Peak - 2039 DN
D1-4 - AM Peak - 2039 DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
4	18/07/2022 14:40:48	18/07/2022 14:40:48	08:00	100	208.97	13.18	75.10	16/1	0	0	16/1	11/1	16/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2039 DN		D1-4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2039 DN				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	80

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		6	5	6	6
	B	6		6	6	6
	C	6	6		6	6
	D	6	6	6		6
	E	10	10	10	10	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	5	21	16	1	7
	2	✓	2	B	27	34	7	1	7
	3	✓	3	C	40	51	11	1	7
	4	✓	4	D	57	64	7	1	7
	5	✓	5	E	70	75	5	1	5

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	C	40	51	11
1	2	1	1	D	57	64	7
2	2	1	1	A	5	21	16
2	3	1	1	B	27	34	7
3	1	1	1	C	40	51	11
3	3	1	1	D	57	64	7
4	1	1	1	A	5	21	16
4	2	1	1	B	27	34	7
14	1	1	1	A	5	21	16
15	2	1	1	C	40	51	11
16	1	1	1	C	40	51	11
17	1	1	1	A	5	21	16

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	C	D	244	2058	18	0.00	47	90	28.31	24.95	87.70	4.21	100	100	0.00	26.70
	2		1	1	D		86	2016	7	0.00	43	111	43.80	40.44	100.55	1.92	100	100	0.00	14.80
1x	1						328	Unrestricted	80	17.00	0	Unrestricted	13.64	0.00	0.00	0.00	100	100	0.00	0.00
2	2		1	1	A	B	92	2122	23	0.00	14	549	21.78	16.98	69.84	1.46	100	100	0.00	6.97
	3		1	1	B		102	1867	7	0.00	55	65	50.46	45.66	106.23	2.42	100	100	0.00	19.73
2x	1						920	Unrestricted	80	13.00	0	Unrestricted	9.56	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	106	2096	18	0.00	20	345	26.50	20.98	79.66	1.70	100	100	0.00	9.83
	3		1	1	D		118	1900	7	0.00	62	45	55.14	49.62	110.47	2.92	100	100	0.00	24.73
3x	1						484	Unrestricted	80	22.00	0	Unrestricted	9.77	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	A	B	354	2075	23	0.00	55	65	20.27	17.51	51.22	3.22	100	100	0.00	26.72
	2		1	1	B		25	2012	7	7.00	12	624	31.63	28.87	91.58	0.51	100	100	0.00	3.13
4x	1						197	Unrestricted	80	35.00	0	Unrestricted	11.07	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				243	2105	80	0.00	12	680	12.11	0.11	0.00	0.01	100	100	0.00	0.11
10	1		1				409	2174	80	0.00	19	378	12.19	0.19	0.00	0.02	100	100	0.00	0.31
11	1		1				778	2107	80	0.00	37	144	12.50	0.50	0.00	0.11	100	100	0.00	1.53
12	1		1				499	2203	80	26.63	34	165	17.88	5.88	39.82	4.80	100	100	0.00	14.05
13	3		1				194	2181	80	0.00	9	912	6.08	0.08	0.00	0.00	100	100	0.00	0.06
14	1		1	1	A	C	215	1636	27	0.00	36	148	21.71	11.87	70.51	2.19	100	100	0.00	11.96
15	2		1	1	C	A	19	1687	27	27.00	3	2797	15.84	9.24	63.99	0.17	100	100	0.00	0.85
16	1		1	1	C	A	448 <	1646	27	0.00	75	20	25.34	21.26	95.28	6.02 +	100	100	0.00	42.92
17	1		1	1	A	C	120	1631	27	6.00	20	344	14.81	8.21	45.02	1.48	100	100	0.00	4.56

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	447.30	28.09	15.92	13.18	187.21	21.76	0.00	208.97
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	447.30	28.09	15.92	13.18	187.21	21.76	0.00	208.97

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A5 - AM Peak - 2039 DS
D1-5 - AM Peak - 2039 DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
5	18/07/2022 14:40:48	18/07/2022 14:40:49	08:00	100	217.90	13.76	78.12	16/1	0	0	16/1	11/1	16/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM Peak - 2039 DS		D1-5	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM Peak - 2039 DS				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	80

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		6	5	6	6
	B	6		6	6	6
	C	6	6		6	6
	D	6	6	6		6
	E	10	10	10	10	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	5	21	16	1	7
	2	✓	2	B	27	34	7	1	7
	3	✓	3	C	40	51	11	1	7
	4	✓	4	D	57	64	7	1	7
	5	✓	5	E	70	75	5	1	5

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	C	40	51	11
1	2	1	1	D	57	64	7
2	2	1	1	A	5	21	16
2	3	1	1	B	27	34	7
3	1	1	1	C	40	51	11
3	3	1	1	D	57	64	7
4	1	1	1	A	5	21	16
4	2	1	1	B	27	34	7
14	1	1	1	A	5	21	16
15	2	1	1	C	40	51	11
16	1	1	1	C	40	51	11
17	1	1	1	A	5	21	16

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	C	D	253	2058	18	0.00	49	83	28.66	25.30	88.24	4.38	100	100	0.00	28.05
	2		1	1	D		89	2016	7	0.00	44	104	44.27	40.91	101.04	2.00	100	100	0.00	15.49
1x	1						337	Unrestricted	80	17.00	0	Unrestricted	13.64	0.00	0.00	0.00	100	100	0.00	0.00
2	2		1	1	A	B	92	2122	23	0.00	14	549	21.78	16.98	69.84	1.46	100	100	0.00	6.97
	3		1	1	B		105	1867	7	0.00	56	60	51.27	46.47	107.09	2.51	100	100	0.00	20.66
2x	1						938	Unrestricted	80	13.00	0	Unrestricted	9.56	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	108	2096	18	0.00	21	337	26.53	21.01	79.71	1.74	100	100	0.00	10.03
	3		1	1	D		118	1900	7	0.00	62	45	55.14	49.62	110.47	2.92	100	100	0.00	24.73
3x	1						493	Unrestricted	80	21.00	0	Unrestricted	9.77	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	A	B	354	2075	23	0.00	55	65	20.26	17.50	51.22	3.22	100	100	0.00	26.72
	2		1	1	B		25	2012	7	7.00	12	624	31.63	28.87	91.58	0.51	100	100	0.00	3.13
4x	1						200	Unrestricted	80	35.00	0	Unrestricted	11.07	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				245	2105	80	0.00	12	673	12.11	0.11	0.00	0.01	100	100	0.00	0.11
10	1		1				412	2175	80	0.00	19	375	12.19	0.19	0.00	0.02	100	100	0.00	0.31
11	1		1				808	2107	80	0.62	39	133	12.54	0.54	0.69	0.35	100	100	0.00	1.80
12	1		1				503	2203	80	26.62	34	163	17.89	5.89	39.87	4.84	100	100	0.00	14.20
13	3		1				197	2181	80	0.00	9	896	6.08	0.08	0.00	0.00	100	100	0.00	0.06
14	1		1	1	A	C	215	1636	27	0.00	36	148	21.71	11.87	70.51	2.19	100	100	0.00	11.96
15	2		1	1	C	A	19	1687	27	27.00	3	2797	15.84	9.24	63.99	0.17	100	100	0.00	0.85
16	1		1	1	C	A	466 <	1646	27	0.00	78	15	27.09	23.01	99.15	6.47 +	100	100	0.00	48.10
17	1		1	1	A	C	124	1631	27	6.00	21	329	14.85	8.25	45.10	1.48	100	100	0.00	4.74

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	456.20	28.96	15.75	13.76	195.35	22.55	0.00	217.90
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	456.20	28.96	15.75	13.76	195.35	22.55	0.00	217.90

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A6 - PM Peak - 2019
D2-1 - PM Peak - 2019*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
6	18/07/2022 14:40:49	18/07/2022 14:40:49	17:00	100	194.89	12.34	59.28	2/3	0	0	2/3	9/1	2/3	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2019		D2-1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2019				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	80

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		6	5	6	6
	B	6		6	6	6
	C	6	6		6	6
	D	6	6	6		6
	E	10	10	10	10	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	5	13	8	1	7
	2	✓	2	B	19	30	11	1	7
	3	✓	3	C	36	44	8	1	7
	4	✓	4	D	50	64	14	1	7
	5	✓	5	E	70	75	5	1	5

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	C	36	44	8
1	2	1	1	D	50	64	14
2	2	1	1	A	5	13	8
2	3	1	1	B	19	30	11
3	1	1	1	C	36	44	8
3	3	1	1	D	50	64	14
4	1	1	1	A	5	13	8
4	2	1	1	B	19	30	11
14	1	1	1	A	5	13	8
15	2	1	1	C	36	44	8
16	1	1	1	C	36	44	8
17	1	1	1	A	5	13	8

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	C	D	121	2058	22	0.00	20	359	21.54	18.18	74.27	1.81	100	100	0.00	9.81
	2		1	1	D		113	2016	14	0.00	30	201	33.37	30.01	86.27	2.17	100	100	0.00	14.60
1x	1						670	Unrestricted	80	12.00	0	Unrestricted	13.64	0.00	0.00	0.00	100	100	0.00	0.00
2	2		1	1	A	B	248	2122	19	0.00	45	102	28.42	23.62	85.10	4.17	100	100	0.00	25.76
	3		1	1	B		166	1867	11	0.00	59	52	45.74	40.94	101.16	3.74	100	100	0.00	28.91
2x	1						426	Unrestricted	80	20.00	0	Unrestricted	9.56	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	344	2096	22	0.00	55	65	29.73	24.21	97.48	5.79	100	100	0.00	37.05
	3		1	1	D		199	1900	14	0.00	56	61	41.39	35.87	94.00	4.16	100	100	0.00	30.50
3x	1						218	Unrestricted	80	31.00	0	Unrestricted	9.77	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	A	B	115	2075	19	0.00	21	326	23.14	20.38	78.45	1.82	100	100	0.00	10.38
	2		1	1	B		13	2012	11	11.00	4	1989	32.35	29.59	85.34	0.25	100	100	0.00	1.66
4x	1						455	Unrestricted	80	19.00	0	Unrestricted	11.07	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				637	2105	80	0.00	30	197	12.37	0.37	0.00	0.07	100	100	0.00	0.93
10	1		1				498	2213	80	0.00	23	300	12.24	0.24	0.00	0.03	100	100	0.00	0.46
11	1		1				346	2128	80	0.00	16	454	12.16	0.16	0.00	0.02	100	100	0.00	0.22
12	1		1				288	2224	80	0.00	13	595	12.12	0.12	0.00	0.01	100	100	0.00	0.14
13	3		1				414	2181	80	0.00	19	374	6.19	0.19	0.00	0.02	100	100	0.00	0.32
14	1		1	1	A	C	84	1616	16	0.00	23	290	25.07	15.23	81.18	1.48	100	100	0.00	5.90
15	2		1	1	C	A	94	1726	16	0.00	24	272	21.96	15.36	81.16	1.49	100	100	0.00	6.65
16	1		1	1	C	A	112	1676	16	0.00	30	203	20.16	16.08	82.47	1.51	100	100	0.00	8.26
17	1		1	1	A	C	160	1612	16	0.00	44	104	24.92	18.32	89.50	2.04	100	100	0.00	13.36

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	443.11	27.11	16.35	12.34	175.21	19.69	0.00	194.89
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	443.11	27.11	16.35	12.34	175.21	19.69	0.00	194.89

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A7 - PM Peak - 2024 DN
D2-2 - PM Peak - 2024 DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
7	18/07/2022 14:40:49	18/07/2022 14:40:49	17:00	100	219.63	13.92	64.27	2/3	0	0	2/3	9/1	2/3	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2024 DN		D2-2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2024 DN				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	80

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		6	5	6	6
	B	6		6	6	6
	C	6	6		6	6
	D	6	6	6		6
	E	10	10	10	10	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	5	13	8	1	7
	2	✓	2	B	19	30	11	1	7
	3	✓	3	C	36	44	8	1	7
	4	✓	4	D	50	64	14	1	7
	5	✓	5	E	70	75	5	1	5

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	C	36	44	8
1	2	1	1	D	50	64	14
2	2	1	1	A	5	13	8
2	3	1	1	B	19	30	11
3	1	1	1	C	36	44	8
3	3	1	1	D	50	64	14
4	1	1	1	A	5	13	8
4	2	1	1	B	19	30	11
14	1	1	1	A	5	13	8
15	2	1	1	C	36	44	8
16	1	1	1	C	36	44	8
17	1	1	1	A	5	13	8

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	C	D	131	2058	22	0.00	21	324	21.72	18.36	74.45	1.96	100	100	0.00	10.71
	2		1	1	D		123	2016	14	0.00	33	177	33.81	30.45	86.59	2.37	100	100	0.00	16.11
1x	1						727	Unrestricted	80	12.00	0	Unrestricted	13.64	0.00	0.00	0.00	100	100	0.00	0.00
2	2		1	1	A	B	269	2122	19	0.00	48	86	29.12	24.32	88.07	4.72	100	100	0.00	28.78
	3		1	1	B		180	1867	11	0.00	64	40	48.11	43.31	103.63	4.16	100	100	0.00	33.09
2x	1						463	Unrestricted	80	19.00	0	Unrestricted	9.56	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	373	2096	22	0.00	59	52	31.13	25.61	105.79	6.60	100	100	0.00	42.62
	3		1	1	D		216	1900	14	0.00	61	48	43.05	37.53	95.61	4.60	100	100	0.00	34.56
3x	1						236	Unrestricted	80	31.00	0	Unrestricted	9.77	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	A	B	125	2075	19	0.00	23	292	23.35	20.59	78.69	1.98	100	100	0.00	11.38
	2		1	1	B		14	2012	11	11.00	5	1840	32.38	29.62	85.36	0.27	100	100	0.00	1.79
4x	1						494	Unrestricted	80	18.00	0	Unrestricted	11.07	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				691	2105	80	0.00	33	174	12.42	0.42	0.00	0.08	100	100	0.00	1.14
10	1		1				540	2213	80	0.00	24	269	12.26	0.26	0.00	0.04	100	100	0.00	0.56
11	1		1				376	2128	80	0.00	18	409	12.18	0.18	0.00	0.02	100	100	0.00	0.27
12	1		1				313	2224	80	0.00	14	539	12.13	0.13	0.00	0.01	100	100	0.00	0.16
13	3		1				449	2181	80	0.00	21	337	6.21	0.21	0.00	0.03	100	100	0.00	0.38
14	1		1	1	A	C	91	1616	16	0.00	25	260	25.31	15.47	81.58	1.49	100	100	0.00	6.48
15	2		1	1	C	A	102	1726	16	0.00	26	243	22.19	15.59	81.58	1.50	100	100	0.00	7.32
16	1		1	1	C	A	122	1676	16	0.00	32	178	20.52	16.44	83.20	1.53	100	100	0.00	9.18
17	1		1	1	A	C	174	1612	16	0.00	48	88	25.71	19.11	91.04	2.25	100	100	0.00	15.10

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	480.90	29.95	16.06	13.92	197.61	22.02	0.00	219.63
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	480.90	29.95	16.06	13.92	197.61	22.02	0.00	219.63

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A8 - PM Peak - 2024 DS
D2-3 - PM Peak - 2024 DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
8	18/07/2022 14:40:49	18/07/2022 14:40:50	17:00	100	228.72	14.48	63.29	2/3	0	0	2/3	9/1	2/3	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2024 DS		D2-3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2024 DS				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	80

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		6	5	6	6
	B	6		6	6	6
	C	6	6		6	6
	D	6	6	6		6
	E	10	10	10	10	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	5	12	7	1	7
	2	✓	2	B	18	30	12	1	7
	3	✓	3	C	36	44	8	1	7
	4	✓	4	D	50	64	14	1	7
	5	✓	5	E	70	75	5	1	5

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	C	36	44	8
1	2	1	1	D	50	64	14
2	2	1	1	A	5	12	7
2	3	1	1	B	18	30	12
3	1	1	1	C	36	44	8
3	3	1	1	D	50	64	14
4	1	1	1	A	5	12	7
4	2	1	1	B	18	30	12
14	1	1	1	A	5	12	7
15	2	1	1	C	36	44	8
16	1	1	1	C	36	44	8
17	1	1	1	A	5	12	7

Final Prediction Table

Traffic Stream Results

			SIGNALS				FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	C	D	134	2058	22	0.00	22	315	21.77	18.41	74.51	2.00	100	100	0.00	10.98
	2		1	1	D		129	2016	14	0.00	34	164	34.07	30.71	86.80	2.49	100	100	0.00	17.03
1x	1						762	Unrestricted	80	11.00	0	Unrestricted	13.64	0.00	0.00	0.00	100	100	0.00	0.00
2	2		1	1	A	B	269	2122	19	0.00	48	86	29.52	24.72	95.03	4.72	100	100	0.00	29.43
	3		1	1	B		192	1867	12	0.00	63	42	46.12	41.32	100.89	4.32	100	100	0.00	33.72
2x	1						468	Unrestricted	80	19.00	0	Unrestricted	9.56	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	389	2096	22	0.00	62	45	31.96	26.44	108.92	6.94	100	100	0.00	45.88
	3		1	1	D		216	1900	14	0.00	61	48	43.05	37.53	95.61	4.60	100	100	0.00	34.56
3x	1						239	Unrestricted	80	31.00	0	Unrestricted	9.77	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	A	B	125	2075	19	0.00	23	292	23.35	20.59	78.69	1.98	100	100	0.00	11.38
	2		1	1	B		14	2012	12	12.00	4	2002	31.48	28.72	84.06	0.26	100	100	0.00	1.73
4x	1						500	Unrestricted	80	18.00	0	Unrestricted	11.07	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				707	2105	80	0.00	34	168	12.43	0.43	0.00	0.08	100	100	0.00	1.21
10	1		1				552	2214	80	0.00	25	261	12.27	0.27	0.00	0.04	100	100	0.00	0.59
11	1		1				390	2127	80	0.00	18	391	12.19	0.19	0.00	0.02	100	100	0.00	0.29
12	1		1				320	2225	80	0.00	14	526	12.14	0.14	0.00	0.01	100	100	0.00	0.17
13	3		1				461	2181	80	0.00	21	326	6.22	0.22	0.00	0.03	100	100	0.00	0.40
14	1		1	1	A	C	91	1609	15	0.00	27	238	25.86	16.02	83.45	1.50	100	100	0.00	6.70
15	2		1	1	C	A	102	1739	15	0.00	28	226	22.70	16.10	83.33	1.50	100	100	0.00	7.54
16	1		1	1	C	A	127	1686	15	0.00	35	154	21.33	17.25	86.95	1.59	100	100	0.00	10.03
17	1		1	1	A	C	181	1605	15	0.00	53	70	27.45	20.85	95.47	2.41	100	100	0.00	17.05

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	493.60	30.93	15.96	14.48	205.58	23.14	0.00	228.72
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	493.60	30.93	15.96	14.48	205.58	23.14	0.00	228.72

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A9 - PM Peak - 2039 DN
D2-4 - PM Peak - 2039 DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
9	18/07/2022 14:40:50	18/07/2022 14:40:50	17:00	100	277.30	17.57	71.36	3/1	0	0	3/1	9/1	3/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2039 DN		D2-4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2039 DN				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	80

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		6	5	6	6
	B	6		6	6	6
	C	6	6		6	6
	D	6	6	6		6
	E	10	10	10	10	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	5	13	8	1	7
	2	✓	2	B	19	31	12	1	7
	3	✓	3	C	37	44	7	1	7
	4	✓	4	D	50	64	14	1	7
	5	✓	5	E	70	75	5	1	5

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	C	37	44	7
1	2	1	1	D	50	64	14
2	2	1	1	A	5	13	8
2	3	1	1	B	19	31	12
3	1	1	1	C	37	44	7
3	3	1	1	D	50	64	14
4	1	1	1	A	5	13	8
4	2	1	1	B	19	31	12
14	1	1	1	A	5	13	8
15	2	1	1	C	37	44	7
16	1	1	1	C	37	44	7
17	1	1	1	A	5	13	8

Final Prediction Table

Traffic Stream Results

				SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	C	D	151	2058	21	0.00	26	253	22.86	19.50	76.34	2.31	100	100	0.00	13.06
	2		1	1	D		141	2016	14	0.00	37	141	34.62	31.26	87.25	3.01	100	100	0.00	18.93
1x	1						838	Unrestricted	80	10.00	0	Unrestricted	13.64	0.00	0.00	0.00	100	100	0.00	0.00
2	2		1	1	A	B	310	2122	20	0.00	53	69	29.88	25.08	93.32	5.38	100	100	0.00	34.29
	3		1	1	B		208	1867	12	0.00	69	31	48.98	44.18	103.86	4.83	100	100	0.00	38.96
2x	1						534	Unrestricted	80	17.00	0	Unrestricted	9.56	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	430 <	2096	21	0.00	71	26	36.65	31.13	124.28	8.03 +	100	100	0.00	59.50
	3		1	1	D		249	1900	14	0.00	70	29	47.29	41.77	102.49	5.70	100	100	0.00	44.23
3x	1						273	Unrestricted	80	29.00	0	Unrestricted	9.77	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	A	B	144	2075	20	0.00	25	257	22.90	20.14	77.64	2.24	100	100	0.00	12.84
	2		1	1	B		16	2012	12	12.00	5	1739	31.52	28.76	84.10	0.30	100	100	0.00	1.98
4x	1						569	Unrestricted	80	17.00	0	Unrestricted	11.07	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				797	2105	80	4.79	40	123	12.74	0.74	5.62	1.69	100	100	0.00	2.90
10	1		1				624	2213	80	0.00	28	219	12.32	0.32	0.00	0.06	100	100	0.00	0.79
11	1		1				433	2127	80	0.00	20	342	12.22	0.22	0.00	0.03	100	100	0.00	0.37
12	1		1				360	2224	80	0.00	16	456	12.16	0.16	0.00	0.02	100	100	0.00	0.22
13	3		1				518	2181	80	0.00	24	279	6.26	0.26	0.00	0.04	100	100	0.00	0.53
14	1		1	1	A	C	106	1623	15	0.00	31	193	26.40	16.56	84.44	1.52	100	100	0.00	8.04
15	2		1	1	C	A	118	1713	15	0.00	32	178	23.25	16.65	84.58	1.53	100	100	0.00	9.00
16	1		1	1	C	A	141	1666	15	0.00	40	126	22.06	17.98	89.40	1.78	100	100	0.00	11.58
17	1		1	1	A	C	200	1619	15	0.00	58	55	28.92	22.32	98.40	2.73	100	100	0.00	20.08

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	554.59	36.06	15.38	17.57	249.52	27.78	0.00	277.30
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	554.59	36.06	15.38	17.57	249.52	27.78	0.00	277.30

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A10 - PM Peak - 2039 DS
D2-5 - PM Peak - 2039 DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
10	18/07/2022 14:40:50	18/07/2022 14:40:50	17:00	100	291.29	18.46	74.01	3/1	0	0	3/1	9/1	3/1	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
PM Peak - 2039 DS		D2-5	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM Peak - 2039 DS				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	Signal		1	Manual	80

Controller Stream 1 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
1	Unspecified						Absolute

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	✓	✓	Offsets And Green Splits	✓	

Intergreen Matrix for Controller Stream 1

		To				
		A	B	C	D	E
From	A		6	5	6	6
	B	6		6	6	6
	C	6	6		6	6
	D	6	6	6		6
	E	10	10	10	10	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	5	13	8	1	7
	2	✓	2	B	19	31	12	1	7
	3	✓	3	C	37	44	7	1	7
	4	✓	4	D	50	64	14	1	7
	5	✓	5	E	70	75	5	1	5

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1	1	1	C	37	44	7
1	2	1	1	D	50	64	14
2	2	1	1	A	5	13	8
2	3	1	1	B	19	31	12
3	1	1	1	C	37	44	7
3	3	1	1	D	50	64	14
4	1	1	1	A	5	13	8
4	2	1	1	B	19	31	12
14	1	1	1	A	5	13	8
15	2	1	1	C	37	44	7
16	1	1	1	C	37	44	7
17	1	1	1	A	5	13	8

Final Prediction Table

Traffic Stream Results

			SIGNALS				FLOWS		PERFORMANCE				PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Second phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1		1	1	C	D	154	2058	21	0.00	26	246	22.92	19.56	76.40	2.36	100	100	0.00	13.36
	2		1	1	D		148	2016	14	0.00	39	130	34.97	31.61	87.53	3.02	100	100	0.00	20.08
1x	1						874	Unrestricted	80	9.00	0	Unrestricted	13.64	0.00	0.00	0.00	100	100	0.00	0.00
2	2		1	1	A	B	310	2122	20	0.00	53	69	29.88	25.08	93.32	5.38	100	100	0.00	34.29
	3		1	1	B		220	1867	12	0.00	73	24	51.71	46.91	108.69	5.39	100	100	0.00	43.71
2x	1						539	Unrestricted	80	17.00	0	Unrestricted	9.56	0.00	0.00	0.00	100	100	0.00	0.00
3	1		1	1	C	D	446 <	2096	21	0.00	74	22	37.82	32.30	124.14	8.26 +	100	100	0.00	63.76
	3		1	1	D		249	1900	14	0.00	70	29	47.07	41.55	102.41	5.70	100	100	0.00	44.01
3x	1						276	Unrestricted	80	29.00	0	Unrestricted	9.77	0.00	0.00	0.00	100	100	0.00	0.00
4	1		1	1	A	B	144	2075	20	0.00	25	257	22.90	20.14	77.64	2.24	100	100	0.00	12.84
	2		1	1	B		16	2012	12	12.00	5	1739	31.52	28.76	84.10	0.30	100	100	0.00	1.98
4x	1						576	Unrestricted	80	17.00	0	Unrestricted	11.07	0.00	0.00	0.00	100	100	0.00	0.00
9	1		1				813	2105	80	6.89	42	113	13.04	1.04	10.00	2.64	100	100	0.00	4.34
10	1		1				636	2213	80	0.00	29	213	12.33	0.33	0.00	0.06	100	100	0.00	0.82
11	1		1				448	2127	80	0.00	21	327	12.23	0.23	0.00	0.03	100	100	0.00	0.40
12	1		1				368	2225	80	0.00	17	444	12.16	0.16	0.00	0.02	100	100	0.00	0.23
13	3		1				530	2181	80	0.00	24	270	6.26	0.26	0.00	0.04	100	100	0.00	0.55
14	1		1	1	A	C	106	1623	15	0.00	31	193	26.40	16.56	84.44	1.52	100	100	0.00	8.04
15	2		1	1	C	A	118	1713	15	1.00	32	178	23.50	16.90	85.63	1.53	100	100	0.00	9.13
16	1		1	1	C	A	146	1666	15	0.00	41	118	22.31	18.23	89.92	1.85	100	100	0.00	12.15
17	1		1	1	A	C	208	1619	15	0.00	60	49	29.71	23.11	100.56	2.88	100	100	0.00	21.59

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	567.77	37.39	15.19	18.46	262.18	29.11	0.00	291.29
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	567.77	37.39	15.19	18.46	262.18	29.11	0.00	291.29

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: Junction 6 - Access.j9
Path: C:\Users\wian.marais\Documents\Projects - Local\Z040 - Blackglen Road TIA\Models
Report generation date: 18/07/2022 15:08:48

»Analysis - 2024 DS, AM
»Analysis - 2024 DS, PM
»Analysis - 2039 DS, AM
»Analysis - 2039 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Analysis - 2024 DS									
Stream B-C	D7	0.1	8.13	0.05	A	D8	0.0	9.34	0.03	A
Stream B-A		0.2	12.15	0.16	B		0.1	13.99	0.11	B
Stream C-AB		0.0	4.29	0.03	A		0.1	5.50	0.07	A
	Analysis - 2039 DS									
Stream B-C	D9	0.1	8.33	0.05	A	D10	0.0	10.02	0.03	B
Stream B-A		0.2	13.34	0.18	B		0.1	16.93	0.13	C
Stream C-AB		0.0	4.07	0.04	A		0.2	5.30	0.08	A

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

File summary

File Description

Title	Junction 6
Location	Blackglen/Access
Site number	Access
Date	17/09/2021
Version	
Status	
Identifier	
Client	Zolbury Limited
Jobnumber	Z040
Enumerator	OCSC\wian.marais
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

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2024 DS	AM	ONE HOUR	08:00	09:30	15
D8	2024 DS	PM	ONE HOUR	17:00	18:30	15
D9	2039 DS	AM	ONE HOUR	08:00	09:30	15
D10	2039 DS	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Analysis	100.000

Analysis - 2024 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

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

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	6.00	4.00	4.00	4.00	4.00		1.00	0	0

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	528	0.096	0.243	0.153	0.347
B-C	546	0.084	0.212	-	-
C-B	574	0.222	0.222	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)

D7	2024 DS	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	254	100.000
B		✓	75	100.000
C		✓	628	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	15	239
	B	53	0	22
	C	619	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	**B**	**C**
From	**A**	0	0	2
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	8.13	0.1	A
B-A	0.16	12.15	0.2	B
C-AB	0.03	4.29	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	495	0.033	16	0.0	7.525	A
B-A	40	410	0.097	39	0.1	9.718	A
C-AB	15	860	0.017	15	0.0	4.282	A
C-A	458			458			
A-B	11			11			
A-C	180			180			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	483	0.041	20	0.0	7.765	A
B-A	48	386	0.123	48	0.1	10.620	B
C-AB	21	918	0.022	21	0.0	4.034	A
C-A	544			544			
A-B	13			13			
A-C	215			215			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	467	0.052	24	0.1	8.128	A
B-A	58	355	0.165	58	0.2	12.133	B
C-AB	31	1000	0.031	31	0.0	3.740	A
C-A	660			660			
A-B	17			17			
A-C	263			263			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	467	0.052	24	0.1	8.134	A
B-A	58	355	0.165	58	0.2	12.149	B
C-AB	31	1000	0.031	31	0.0	3.742	A
C-A	660			660			
A-B	17			17			
A-C	263			263			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	483	0.041	20	0.0	7.774	A
B-A	48	387	0.123	48	0.1	10.638	B
C-AB	21	918	0.022	21	0.0	4.038	A
C-A	544			544			
A-B	13			13			
A-C	215			215			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	494	0.034	17	0.0	7.539	A
B-A	40	410	0.097	40	0.1	9.748	A
C-AB	15	860	0.017	15	0.0	4.286	A
C-A	458			458			
A-B	11			11			
A-C	180			180			

Analysis - 2024 DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.65	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)
D8	2024 DS	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	609	100.000
B		✓	39	100.000
C		✓	489	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	57	552
	B	28	0	11
	C	470	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	13
	B	0	0	0
	C	16	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	9.34	0.0	A
B-A	0.11	13.99	0.1	B
C-AB	0.07	5.50	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	445	0.019	8	0.0	8.245	A
B-A	21	364	0.058	21	0.1	10.476	B
C-AB	28	733	0.038	27	0.1	5.464	A
C-A	340			340			
A-B	43			43			
A-C	416			416			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	425	0.023	10	0.0	8.668	A
B-A	25	332	0.076	25	0.1	11.718	B
C-AB	38	769	0.050	38	0.1	5.308	A
C-A	402			402			
A-B	51			51			
A-C	496			496			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	398	0.030	12	0.0	9.336	A
B-A	31	288	0.107	31	0.1	13.980	B
C-AB	57	820	0.069	57	0.1	5.138	A
C-A	481			481			
A-B	63			63			
A-C	608			608			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	398	0.030	12	0.0	9.340	A
B-A	31	288	0.107	31	0.1	13.993	B
C-AB	57	820	0.070	57	0.1	5.168	A
C-A	481			481			
A-B	63			63			
A-C	608			608			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	425	0.023	10	0.0	8.676	A
B-A	25	332	0.076	25	0.1	11.734	B
C-AB	38	769	0.050	38	0.1	5.378	A
C-A	401			401			
A-B	51			51			

A-C	496			496			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	444	0.019	8	0.0	8.255	A
B-A	21	364	0.058	21	0.1	10.499	B
C-AB	28	733	0.038	28	0.1	5.504	A
C-A	340			340			
A-B	43			43			
A-C	416			416			

Analysis - 2039 DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.92	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)
D9	2039 DS	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	292	100.000
B		✓	75	100.000
C		✓	725	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	15	277
	B	53	0	22
	C	716	9	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	8.33	0.1	A
B-A	0.18	13.34	0.2	B
C-AB	0.04	4.07	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	488	0.034	16	0.0	7.629	A
B-A	40	391	0.102	39	0.1	10.217	B
C-AB	17	907	0.018	17	0.0	4.067	A
C-A	529			529			
A-B	11			11			
A-C	209			209			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	475	0.042	20	0.0	7.903	A
B-A	48	365	0.131	48	0.1	11.339	B
C-AB	24	975	0.025	24	0.0	3.808	A
C-A	628			628			
A-B	13			13			
A-C	249			249			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	456	0.053	24	0.1	8.327	A
B-A	58	328	0.178	58	0.2	13.321	B
C-AB	38	1071	0.035	38	0.0	3.508	A
C-A	761			761			
A-B	17			17			
A-C	305			305			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	456	0.053	24	0.1	8.334	A
B-A	58	328	0.178	58	0.2	13.343	B
C-AB	38	1071	0.035	38	0.0	3.512	A
C-A	761			761			
A-B	17			17			
A-C	305			305			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	475	0.042	20	0.0	7.914	A
B-A	48	365	0.131	48	0.2	11.368	B
C-AB	24	975	0.025	24	0.0	3.811	A
C-A	628			628			
A-B	13			13			

A-C	249			249			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	488	0.034	17	0.0	7.645	A
B-A	40	391	0.102	40	0.1	10.250	B
C-AB	17	907	0.018	17	0.0	4.071	A
C-A	529			529			
A-B	11			11			
A-C	209			209			

Analysis - 2039 DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.65	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)
D10	2039 DS	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	715	100.000
B		✓	39	100.000
C		✓	585	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	57	658
	B	28	0	11
	C	566	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	13
	B	0	0	0
	C	16	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	10.02	0.0	B
B-A	0.13	16.93	0.1	C
C-AB	0.08	5.30	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	428	0.019	8	0.0	8.583	A
B-A	21	334	0.063	21	0.1	11.496	B
C-AB	32	773	0.041	32	0.1	5.255	A
C-A	409			409			
A-B	43			43			
A-C	495			495			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	404	0.024	10	0.0	9.123	A
B-A	25	296	0.085	25	0.1	13.291	B
C-AB	45	818	0.055	45	0.1	5.072	A
C-A	481			481			
A-B	51			51			
A-C	592			592			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	372	0.033	12	0.0	10.013	B
B-A	31	243	0.127	31	0.1	16.895	C
C-AB	71	884	0.081	71	0.2	4.880	A
C-A	573			573			
A-B	63			63			
A-C	724			724			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	371	0.033	12	0.0	10.021	B
B-A	31	243	0.127	31	0.1	16.928	C
C-AB	71	884	0.081	71	0.2	4.911	A
C-A	573			573			
A-B	63			63			
A-C	724			724			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	404	0.024	10	0.0	9.136	A
B-A	25	296	0.085	25	0.1	13.320	B
C-AB	46	818	0.056	46	0.1	5.143	A
C-A	480			480			
A-B	51			51			

A-C	592			592			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	427	0.019	8	0.0	8.596	A
B-A	21	334	0.063	21	0.1	11.523	B
C-AB	32	773	0.041	32	0.1	5.299	A
C-A	408			408			
A-B	43			43			
A-C	495			495			