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Traffic Impact Assessment

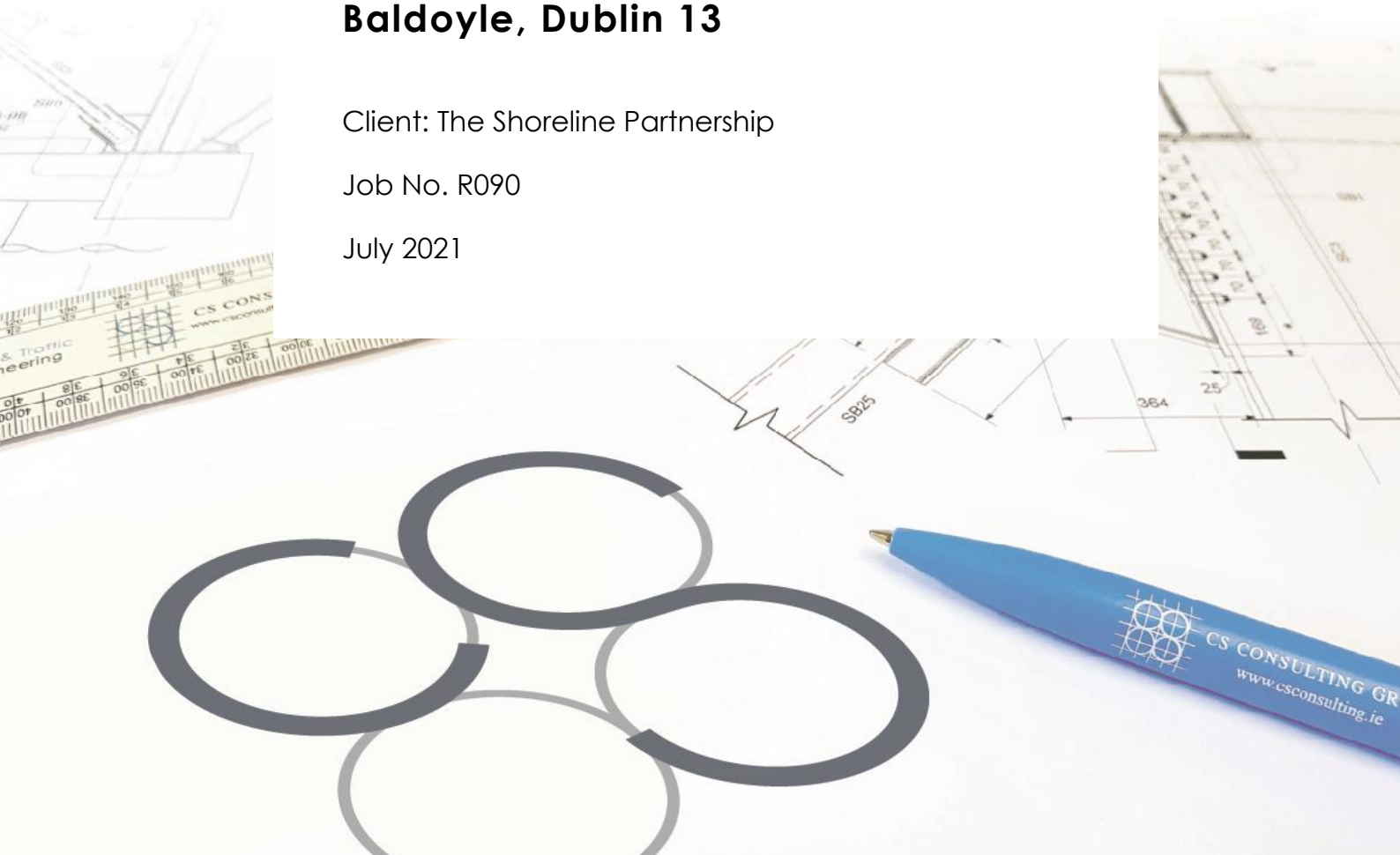
Strategic Housing Development

Baldoyle-Stapolin Growth Area 3, Baldoyle, Dublin 13

Client: The Shoreline Partnership

Job No. R090

July 2021



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TRAFFIC IMPACT ASSESSMENT

STRATEGIC HOUSING DEVELOPMENT

BALDOYLE-STAPOLIN GROWTH AREA 3, BALDOYLE, DUBLIN 13

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BS 1192 FIELD	**BD-CSC-ZZ-G3-RP-C-0103-P4**

Job Ref.	Author	Reviewed By	Authorised By	Issue Date	Rev. No.
R090	GF	NB	OS	07.07.2021	P4
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1.0 INTRODUCTION

1.1 Scope

Cronin & Sutton Consulting Engineers (CS Consulting) have been commissioned by The Shoreline Partnership to prepare a Traffic Impact Assessment for a proposed Strategic Housing Development at Baldoyle, Dublin 13.

In preparing this report, CS Consulting has made reference to the following:

- Fingal Development Plan 2017–2023
- Baldoyle-Stapolin Local Area Plan 2013–2019 (as extended)
- The Institute of Highways and Transportation Guidelines for Traffic Impact Assessments
- TII Project Appraisal Guidelines 2011
- TII Traffic and Transport Assessment Guidelines
- Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities)
- The Institution of Structural Engineers (IStructE)
  Design recommendations for multi-storey and underground car parks
- National Cycle Manual 2011
- Greater Dublin Area Cycle Network Plan
- Trip Rate Information Computer System (TRICS)
- Design Manual for Urban Roads and Streets
- CSO 2016 Census data

1.2 Objective

The objective of this report is to examine the traffic implications associated with the proposed development, in terms of integration with existing traffic in the area. The report determines the impact of the proposed development on the existing road network, in particular through the

operational assessment of key existing junctions along Grange Road and Coast Road in the vicinity of the subject development site.

The report also examines the proposed development's vehicular access arrangements, car parking provision, site layout, and facilities for pedestrians and cyclists.

1.3 Study Methodology

The assessment methodology adopted for this report is summarised as follows:

- Traffic flow data – 12-hour classified vehicular traffic count surveys were undertaken on Thursday the 23rd of January 2020 by Irish Traffic Surveys (ITS) on behalf of CS Consulting. The surveys were conducted between 07:00 and 19:00 at 9no. existing junctions along Grange Road and Coast Road/Main Street in Baldoyle.
- Trip generation – A development trip generation assessment has been carried out using TRICS data, to determine the potential vehicular trips to and from the proposed development site during peak hours. The potential trip generation of other known committed and planned developments in the area has also been established.
- Trip distribution – Based upon existing traffic characteristics and the surrounding road network, an appropriate distribution has been assigned to site development vehicular trips across the road network, as described in sub-section 4.1. Under 'with development' assessment scenarios, the redistribution of existing traffic between grange Road and Coast Road has also been accounted for.
- Existing junction assessment – A spreadsheet model was created which contains the base year do-nothing traffic count data described above. These traffic count data were used to develop:

- a TRANSYT model of the existing 4-arm signalised junction of Grange Road (R139) with Longfield Road and Grange Rise (Baldoyle Industrial Estate access);
- an ARCADY model of the existing 3-arm roundabout junction of Coast Road (R106) with Red Arches Road; and
- an ARCADY model of the existing 4-arm roundabout junction of Hole in the Wall Road with Grange Road and Clarehall Avenue.

- Future junction operation assessments – Future year traffic forecasts were derived from TII growth factors, development trip generation figures, and predicted redistribution of existing traffic. These traffic flows were applied to the TRANSYT and ARCADY models described above. The performances of the junctions in these models were assessed for the survey year (2020), the proposed year of opening (2023), 5 years after opening, and 15 years after opening (the Design Year Assessment).
- Parking – Car parking and bicycle parking provisions within the proposed development have been assessed with reference to the parking standards set out in the Local Authority development plan and in the 2020 *Design Standards for New Apartments*.

1.4 Structure of Report

As outlined above, this traffic impact assessment report seeks to establish the traffic impact generated by the proposed development on the surrounding road network and subsequently ascertain the future operational performance of the local road network.

The structure of this report corresponds to the various stages outlined above, and the key tasks summarised below:

- Section 2 describes the proposed development location, existing land use, and the development proposals.

- Section 3 provides an overview of the existing traffic conditions and the local road network, identifying any existing issues related to traffic flow or road infrastructure of particular relevance to this transport appraisal.
- Sections 4 and 5 detail the analysis as described in the study methodology above. The analysis examines trip generation, trip distribution, and resulting junction operational performance with the development in place.
- Section 6 assesses the proposed car parking provision for the development, with reference to Local Authority standards and to the 2020 *Design Standards for New Apartments*.
- Section 7 addresses the development's internal layout and access for motor vehicles, pedestrians and cyclists.
- Section 8 provides an overview of the relevant opinions and recommendations received from An Bord Pleanála and from Fingal County Council in the course of the Strategic Housing Development application process to date, and details the measures taken in response to these comments.
- Section 9 presents the conclusions of the report.

2.0 SITE LOCATION AND PROPOSED DEVELOPMENT

2.1 Site Location

The proposed development site is located at Baldoyle-Stapolin Growth Area 3, Baldoyle, Dublin 13, in the administrative jurisdiction of Fingal County Council. The area enclosed by the application boundary extends to 6.89ha.

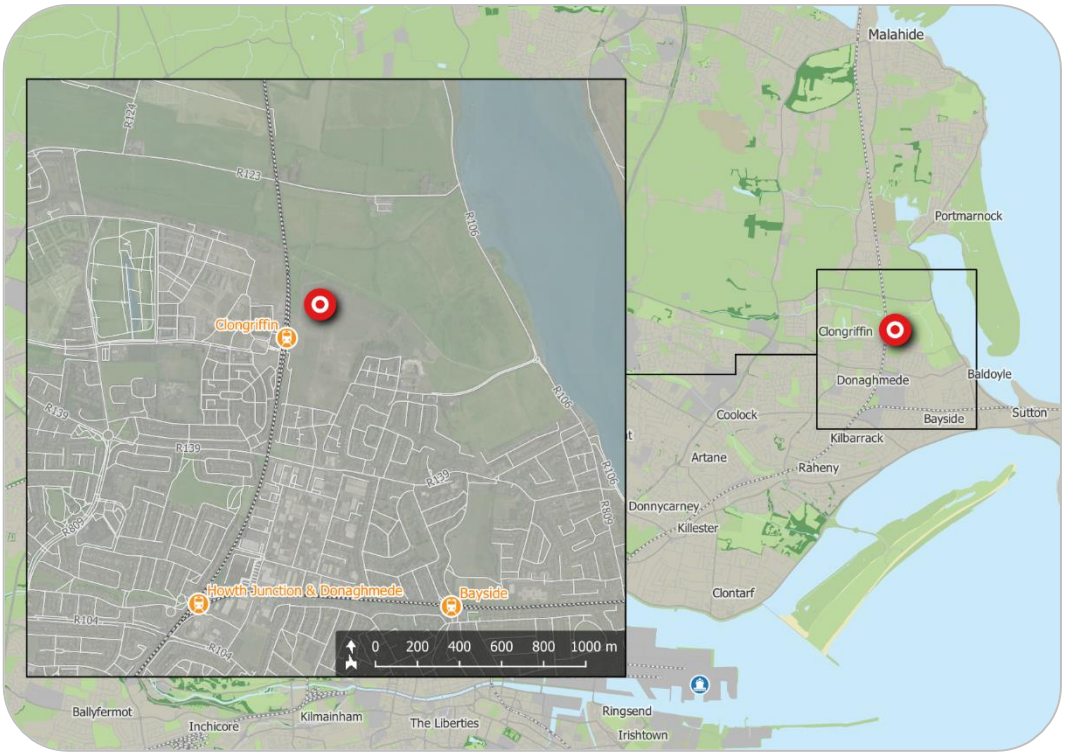

Figure 1 – Location of proposed development site
(*map data & imagery: EPA, OSi, OSM Contributors, Google*)

The location of the proposed development site is shown in Figure 1 above; the indicative extents of the development site, as well as relevant elements of the surrounding road network, are shown in more detail in Figure 2.

The site is bounded generally to the west by The Dublin-Belfast rail line, to the south and east by further zoned development lands, and to the north by lands zoned as High Amenity. There is currently no vehicular access to the subject site from the public road network. However, permitted and

planned developments to the east and south (see sub-sections 3.5 and 3.6) propose to extend both Longfield Road and Red Arches Avenue northward, providing access to the subject site via these two roads. Longfield Road connects to Grange Road (R139) approx. 650m to the south of the subject site; Red Arches Avenue connects to Red Arches Road, which in turn connects to Coast Road (R106) approx. 950m to the east of the subject site.

Figure 2 – Site extents and environs
(*map data & imagery: NTA, OSi, OSM Contributors, Google*)

2.2 Existing Land Use

The subject site is undeveloped and generates no vehicular traffic.

2.3 Description of Proposed Development

The proposed development will consist of the development of 1,221 no. residential apartment/duplex dwellings in 11 no. blocks ranging in height

from 2 to 15 storeys and including for residential tenant amenity, restaurant/cafe, crèche, car and bicycle parking and public realm. Residential Tenant Amenity Facilities are located in Blocks E3, E4, G3, G4 & G5 and external communal amenity space is provided at ground, podium and terrace levels throughout the scheme. Car Parking is provided in a mix of undercroft for Blocks E1-E2, F1 and F2 and at basement level for Blocks G1-G3 and G4-G5. Cycle parking spaces are provided for residents, visitors and commercial uses, in secure locations and within the public realm throughout the scheme. A new central public space between Blocks E1-E2 and E3 and E4 and a new linear space between Blocks G2-G3 and G4-G5 provides pedestrian and cycle connectivity from Longfield Road to the proposed future Racecourse Park to the north. A proposed new bus, cycle, pedestrian and taxi ramp to the south of the site and north of Stapolin Square provides access from Longfield Road to Clongriffin Train Station. For a full description of the development please see the Statutory Notices.

For the purposes of the present assessment, it is assumed that the proposed development shall be completed and operational by the year 2023.

3.0 RECEIVING ENVIRONMENT

3.1 Existing Traffic Flows

Full turning movement classified traffic counts were carried out by Irish Traffic Surveys (ITS), on behalf of CS Consulting, over a 12-hour period (07:00–19:00) on Thursday the 23rd of January 2020. Count information was obtained at the following 9no. sites (see Figure 3):

J1. Grange Road (R139) / Longfield Road / Grange Rise
(4-arm signal-controlled junction)

J2. Coast Road (R106) / Red Arches Road
(3-arm priority-controlled roundabout)

J3. Main Street (R106) / Willie Nolan Road (R139) / Coast Road (R106)
(3-arm signal-controlled junction)

J4. Main Street (R106) / Strand Road (R106) / Main Street (R809)
(3-arm priority-controlled junction)

J5. Strand Road (R106) / The Mall
(3-arm priority-controlled junction)

J6. Main Street (R809) / The Mall / Warrenhouse Rd (R809) / Dublin Street
(4-arm signal-controlled junction)

J7. Grange Road (R139) / Willie Nolan Road (R139) / Brookstone Road
(3-arm signal-controlled junction with slip)

J8. Grange Road (R139) / Grange Park / Abbey Park
(staggered 4-arm signal-controlled junction)

J9. Hole in the Wall Road / R138 / R809
(4-arm priority-controlled roundabout)

The peak hour traffic flows across all 9no. survey sites were found to be between 08:00 and 09:00 (AM peak hour) and between 15:30 and 16:30 (PM peak hour).

Raw data from these traffic surveys are provided in Appendix A. The traffic movements at each surveyed junction during the peak hours have been isolated from the count data and are included in the traffic flow matrices given in Appendix C. Total peak hour flows at the surveyed junctions are also given in Table 1.

Table 1 – Existing Weekday Peak Hour Traffic Flows at Surveyed Junctions

Time Period	Total Junction Traffic Movements (Passenger Car Units)								
	J1	J2	J3	J4	J5	J6	J7	J8	J9
AM Peak Hour	1711	1343	1393	1236	903	1124	1045	1110	2983
PM Peak Hour	1745	1101	1230	1089	815	1162	1004	1745	3117

Figure 3 – Surveyed road junction sites
(map data & imagery: OSM Contributors, Microsoft)

3.2 Existing Road Network Characteristics

3.2.1 Grange Road

Figure 4 – Grange Road (view to west through Longfield Rd junction)

- Single carriageway road with a pavement width of 13m in the vicinity of the subject development.
- Regional road with an east-west alignment overall, leading to Baldoyle village centre in the east and connecting to Clarehall Avenue in the west.
- Subject to a 50km/h speed limit.
- Raised footpaths are present along both sides of Grange Road. Advisory cycle tracks are present in both directions.
- On-street parking is generally not prohibited along Grange Road however no such parking has been observed.

3.2.2 Red Arches Road

- Single carriageway road with a pavement width of approximately 7m in the vicinity of the subject development site.

- Local road with an east-west alignment generally, leading to the subject development in the east and connecting to Coast Road in the west.
- Subject to an 50km/h speed limit.
- Raised footpaths are present along both sides of Red Arches Road.
- No cycle tracks or bus lanes are present along Red Arches Road.
- On-street parking is present on Red Arches Road in the form of recessed parking bays, and parking on the carriageway is not prohibited in the vicinity of the subject site.

Figure 5 – Red Arches Road (view to east)

3.2.3 Longfield Road

- Single carriageway road with a pavement width of approx. 7m generally in the vicinity the subject development site.
- Local road with a north-south alignment generally, connecting to Grange Road in the south and to the subject development site in the north.
- Subject to an 50km/h speed limit.
- Raised footpaths are present along both sides of Longfield Road.

- An 80m-long southbound bus lane is present on the southernmost section of Longfield Road, on the approach to its junction with Grange Road. This is currently unused, as Longfield Road carries no scheduled bus traffic, and does not have any associated signal phase at the Grange Road junction.
- On-street parking is present on Longfield Road in the form of recessed parking bays.

Figure 6 – Longfield Road (view to south from subject site)

Figure 7 – Longfield Road (view to south to Grange Rd junction)

3.3 Road Traffic Collision Data

Figure 8 – Recorded road traffic collisions on surrounding road network
(*map data & imagery: RSA, OSM Contributors, Google*)

3.4 Proposed Local Infrastructure Improvements

As part of the *Cycle Network Plan for the Greater Dublin Area*, administered by the National Transport Authority, it is proposed that secondary cycle route 1A be implemented along Grange Road in the vicinity of the subject development site. Additionally, it is proposed to implement feeder routes linking the subject development site to the aforementioned route. No information is yet publicly available on the proposed design or delivery timeframe of the aforementioned objectives.

It is proposed under the BusConnects Dublin Area Revised Bus Network scheme to implement new Spine routes D1 and D3 along Clongriffin Main Street in the vicinity of the proposed Project Site. These routes will operate

at a midday frequency of 15 minutes between Dublin's southwestern suburbs and Clongriffin via Dublin city centre.

The *Fingal Development Plan 2017–2023* and the *Baldoyle-Stapolin Local Area Plan 2013–2019* (as extended) propose a number of important new road infrastructure schemes in the area surrounding the subject development site. The delivery of these identified objectives will significantly enhance accessibility levels across the region particularly for vehicular journeys to/from the subject development.

3.4.1 Baldoyle Public Transport Bridge

An extension of Red Arches Road and bridge over the rail line at Clongriffin DART station and connection with the east-west link of Clongriffin Main Street to accommodate buses, pedestrians and cyclists. This road objective will be constructed as part of the subject development (see sub-section 7.4).

3.4.2 Hole in the Wall Road Upgrade

A proposed realignment of the northern end of the Hole in the Wall Road to tie in at the R123 Moyne Road at a four-arm crossroads junction. This will address the existing deficient visibility at the existing junctions on the Moyne Road with the Hole in the Wall Road and the Drumnigh Road. This road objective is currently under construction.

3.4.3 Baldoyle Link Road (within Clongriffin-Belmayne LAP)

An extension of Clongriffin Main Street to the west of Hole in the Wall Road and connecting to the R107 Malahide Road to the north of the existing Clare Hall traffic signals.

3.4.4 R107 Malahide Road Realignment

A realignment of the existing Malahide Road from Belcamp Lane to north of Chapel Road. The proposed new link is a dual carriageway with a new grade-separated junction with the R139 (old N32).

3.4.5 R139 (old N32) Upgrade

Upgrade of the R139 (old N32) to dual carriageway from the existing Malahide Road to Clonshaugh Road.

3.4.6 East-West Distributor Road

A new link road from the existing Malahide Road at Balgriffin Road to the R132 Swords Road at Collinstown Cross, incorporating a bridge over the M1 and facilitating access to new development lands at Belcamp and Clonshaugh.

3.5 Nearby Committed Developments

3no. active planning permissions have been identified that are considered sufficiently close to the subject development site to have a potential influence on the traffic flows at the 3no. junctions subject to detailed assessment in this report, if developed as permitted:

(A) Reg. ref. F16A/0412 / ABP ref. PL06F.248970
(as amended under reg. refs. F20A/0258 and F21A/0046)
Residential development at Baldoyle-Stapolin Growth Area 1, comprising 159no. houses (99no. of which are currently under construction), 385no. apartments, 837m^2 GFA of retail space, an 880m^2 GFA crèche, and a 200m^2 GFA café, with 958no. car parking spaces and vehicular access assumed solely to/from Longfield Road.

(B) Reg. refs. F11A/0290 and F11A/0290/E1 / ABP ref. PL06F.239732
Residential development at Baldoyle-Stapolin Growth Area 2, comprising 70no. houses, 330no. apartments, retail units with a

combined GFA of 356m², and a 430m² GFA crèche, with 852no. car parking spaces and vehicular access to/from Red Arches Road (connecting to Coast Road).

(C) Reg. ref. F19A/0461

16-classroom primary school (Roll Number 20519G) with 22no. car parking spaces and vehicular access to/from Myrtle Road (connecting to Longfield Road).

Figure 9 – Relevant nearby committed developments
(*map data & imagery: Fingal County Council, OSi, OSM Contributors, Microsoft*)

For the purposes of this Traffic Impact Assessment, it has been assumed that the above-listed permitted developments shall all proceed and shall be operational by the year 2023. The projected traffic to be generated by these developments has been included in the future year junction assessments, as described in sub-section 4.6 of this report.

3.6 Planned Amendments to Permitted GA1 Development

As previously noted, the subject site forms part of Baldoyle-Stapolin Growth Area 3 (GA3), as defined by the *Baldoyle-Stapolin Local Area Plan 2013–2019* (as extended). The subject site is bounded to the south by further zoned development lands within Baldoyle-Stapolin Growth Area 1 (GA1), which are also in the applicant's ownership.

As described in sub-section 3.5, planning permission has been granted (reg. ref. F16A/0412 / ABP ref. PL06F.248970, as amended under reg. refs. F20A/0258 and F21A/0046) for a mixed-use development on these GA1 lands. As currently permitted, this development – referred to in this report as committed development (A) – comprises the following:

- 159no. houses;
- 385no. apartments;
- retail units with a total gross floor area of 837m^2;
- a crèche with a gross floor area of 880m^2; and
- a café with a gross floor area of 200m^2.

99no. houses permitted under this application, located in the south-east corner of the site, are currently under construction.

An SHD application (ABP ref. TA06F.310418) has been made to An Bord Pleanála for permission to amend the permitted development to comprise the following (excluding the 99no. houses currently under construction):

- 135no. dwelling houses;
- 747no. apartments;
- convenience retail units with a total gross floor area of 1,027m^2;
- a medical centre with a gross floor area of 462m^2;
- a pharmacy with a gross floor area of 268m^2;
- a crèche with a gross floor area of 539m^2;
- a restaurant/café with a gross floor area of 485m^2; and
- a gym with a gross floor area of 411m^2.

The full extents of the currently permitted GA1 development, as well as the extents of the area subject to the above amendment application, are shown in Figure 10.

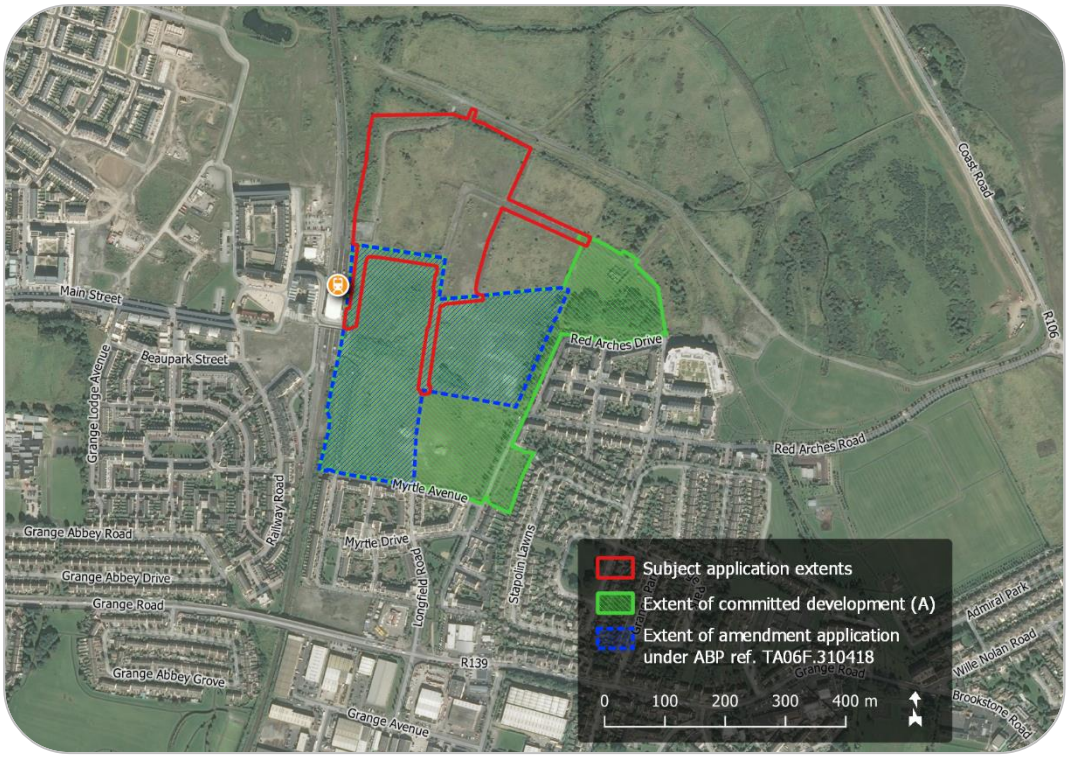

Figure 10 – Planned amendments to development within GA1
(*map data & imagery: OSM Contributors, OSi, Microsoft*)

A decision by An Bord Pleanála on this amendment application is due in September 2021. To account for the potential approval of this application, and the corresponding changes to the makeup of the permitted GA1 development, a separate trip generation and junction modelling exercise has been undertaken as part of this Traffic Impact Assessment (see sub-sections 4.7 and 5.8 of this report).

There is overlap between the application boundaries of the subject GA3 application and the pending GA1 amendment application. This overlap represents the extents of:

- the continuation of Longfield Road northward to serve both sites (see sub-section 7.1); and
- the proposed new bus ramp and its connecting service road from Longfield Road, which shall link the two sites to Clongriffin railway station (see sub-section 7.4).

Each of these applications shall therefore independently ensure the provision of this necessary infrastructure.

4.0 TRAFFIC GENERATION & TRIP DISTRIBUTION

4.1 Existing Traffic Distribution

The existing peak hour directional splits recorded by the traffic survey at site J1 (Grange Road / Longfield Road / Grange Rise junction) and site J2 (Coast Road / Red Arches Road roundabout) are given in Table 2 and Table 3.

Table 2 – Existing Surveyed Traffic Splits at Survey Site J1
Grange Road (R139) / Longfield Road / Grange Rise junction

Departures FROM Longfield Road				
To	R139 East	Grange Rise	R139 West	TOTAL
AM Peak	43%	7%	50%	100%
PM Peak	38%	10%	52%	100%
Arrivals TO Longfield Road				
From	R139 East	Grange Rise	R139 West	TOTAL
AM Peak	36%	5%	59%	100%
PM Peak	41%	15%	44%	100%

Table 3 – Existing Surveyed Traffic Splits at Survey Site J2
Coast Road (R106) / Red Arches Road roundabout

Departures FROM Red Arches Road			
To	R106 South	R106 North	TOTAL
AM Peak	56%	44%	100%
PM Peak	58%	42%	100%
Arrivals TO Red Arches Road			
From	R106 South	R106 North	TOTAL
AM Peak	56%	44%	100%
PM Peak	64%	36%	100%

These junction directional splits have been used to determine indicative distributions across the wider road network of the existing peak hour traffic to and from Longfield Road and Red Arches Road, in terms of the

proportions departing to and arriving from the following destinations/origins:

- to/from the west along Grange Road (R139);
- to/from the south (Baldoyle Industrial Estate) via Grange Rise;
- to/from the north along Coast Road (R106); and
- to/from the south-east along Brookstone Road or Main Street.

Figure 11 – Indicative distribution of existing traffic to/from Longfield Road (background *map data: OSi, OSM Contributors*)

These network origin/destination distributions (shown in Figure 11 and Figure 12) are based upon the following assumptions:

- that the proportion of departing traffic from Longfield Road that travels to the east along Grange Road is subsequently distributed to the north (to Coast Road, via Willie Nolan Road) and to the south-east (via Brookstone Road and Dublin Street) in the same proportions as the north/south split for traffic departing from Red Arches Road; and

- that the proportion of departing traffic from Red Arches Road that travels to the south along Coast Road is subsequently distributed to the west (to Grange Road, via Willie Nolan Road) and to the south (to Grange Rise, via Willie Nolan Road and Grange Road) in the same proportions as traffic departing from Longfield Road, with the remainder being distributed to the south-east (via Main Street).

These assumptions also apply in reverse for traffic arriving to Longfield Road and Red Arches Road.

Figure 12 – Indicative distribution of existing traffic to/from Red Arches Road

4.2 Subject Development Trip Generation

Trip generation factors from the TRICS database have been used to predict the trip generation to and from the proposed development, for both the

AM and PM peak hour periods. Full details of the TRICS information used in the assessments are provided in Appendix B.

The subject development comprises the following elements relevant to vehicular trip generation:

- 1,221no. apartments (including studios and duplex units);
- a crèche with a gross floor area of 452m^2; and
- a café unit with a gross floor area of 205m^2.

For a full schedule of the proposed development, please refer to the architectural documentation prepared by Henry J. Lyons Architects.

Due to its small size and the fact that it is expected to serve exclusively the subject development (or those already passing through it), the development's café unit is not considered to have any potential to generate external vehicular trips to and from the development. It has therefore been excluded from the trip generation calculations detailed here.

The TRICS sub-categories '03 Residential / C – Flats Privately Owned' and '04 Education / D – Nursery' have been employed, being the most appropriate for the significant elements of this development. These sub-categories are described in the TRICS land use category definitions as follows:

Flats Privately Owned

"Housing developments where at least 75% of households are privately owned. Of the total number of units, 75% must also be flats (sum of flats in blocks and "split" houses), with no more than 25% of the total units being "non-split" houses. Includes properties that are privately owned and then privately rented. Note that "Help to Buy" dwellings or any other where residents have equity in a property are considered to be privately owned. Trip rates are calculated by Site Area, Dwellings, Housing Density, or Total Bedrooms."

Nursery

"Pre-school centres. Trip rates are calculated by Gross Floor Area, Pupils, or Employees."

The TRICS trip rates for the proposed development have been selected from the above sub-category, restricted insofar as possible to similar suburban locations, and further refined with reference to 2016 CSO census data on the basis of:

- the population within 1 mile of the development site (32,000 approx.);
- the population within 5 miles of the development site (250,000 approx.);
- the aggregate mean car ownership rate within 5 miles of the development site (1.2 cars per household).

The trip rates selected are given in Table 4 and Table 5.

Table 4 – TRICS Apartment Trip Generation Rates

	Arrivals per hour per dwelling	Departures per hour per dwelling
AM Peak	0.046	0.165
PM Peak	0.111	0.076

Table 5 – TRICS Crèche Trip Generation Rates

	Arrivals per hour per 100m² GFA	Departures per hour per 100m² GFA
AM Peak	3.466	2.741
PM Peak	1.492	2.015

Trip numbers in this instance have been calculated as a function of the TRICS trip rates given in Table 4 and Table 5, the total numbers of dwellings (1,221no.) within the proposed development, and the crèche gross floor area. The resultant trip generation figures obtained are given in Table 6.

Table 6 – Subject Development Trip Generation

	Arrivals	Departures	Total Trips
Apartments			
AM Peak	56	201	257
PM Peak	135	93	228
Crèche			
AM Peak	16	12	28
PM Peak	7	9	16
Development Totals			
AM Peak	72	213	285
PM Peak	142	102	244

It should be noted that (similarly to the café unit) the crèche within the proposed development may also be expected to serve primarily the development itself, as well as the existing established residential developments to the south and east. For this reason, it is likely that the true numbers of vehicular trips generated by this element of the development shall be lower than those indicated in Table 6.

In order to ensure a robust assessment of the development's traffic impact, however, and as it is not possible to predict the extent to which trips shall be made between the subject development and the adjacent existing residential areas, no discount has been applied to the trip generation figures for this element of the proposed development.

4.3 Subject Development Trip Distribution

The subject development's internal road network shall connect to the existing surrounding road network both at Longfield Road and at Red Arches Road (via the adjacent development currently under construction). Vehicular traffic departing from and arriving to the subject development shall therefore travel either via traffic survey site J1 (Grange Road /

Longfield Road / Grange Rise junction) or via survey site J2 (Coast Road / Red Arches Road roundabout). The predicted distribution of traffic to/from the subject development is shown in Figure 13.

Figure 13 – Predicted distribution of subject development traffic

As for the existing traffic described in sub-section 4.1, the predicted distribution of peak hour development traffic across the wider road network has been established in terms of the proportions departing to and arriving from the following destinations/origins:

- to/from the west along Grange Road (R139);
- to/from the south (Baldoyle Industrial Estate) via Grange Rise;
- to/from the north along Coast Road (R106); and
- to/from the south-east along Brookstone Road or Main Street.

It has been assumed that the proportion of development traffic travelling to and from each of these destinations/origins is the mean average of the respective proportions of existing traffic to/from Longfield Road (Figure 11)

and to/from Red Arches Road (Figure 12). It has further been assumed that 50% of development traffic departing to or arriving from the south-east shall travel via Longfield Road, Grange Road, and Brookstone Road, while 50% shall travel via Red Arches Road, Coast Road, and Main Street.

Development traffic departing or arriving along Red Arches Road, Coast Road, and Main Street shall also pass through traffic survey site J4 (the junction of Main Street with Strand Road). At this junction, it is assumed that all development traffic shall be distributed according to the existing surveyed peak hour directional splits, which are given in Table 7.

Table 7 – Existing Surveyed Traffic Splits at Survey Site J4
Main Street / Strand Road junction

Departures FROM Main Street (North)			
To	Strand Road	Main St. (South)	TOTAL
AM Peak	56%	44%	100%
PM Peak	55%	45%	100%
Arrivals TO Main Street (North)			
From	Strand Road	Main St. (South)	TOTAL
AM Peak	33%	67%	100%
PM Peak	33%	67%	100%

Development traffic departing or arriving along Longfield Road, Grange Road, Brookstone Road, and Dublin Street shall pass through traffic survey site J6 (the junction of Main Street, The Mall, Warrenhouse Road, and Dublin Street) from/to the west. At this junction, it has been assumed that all development traffic shall follow the existing east/south splits (discounting the existing traffic proportion to/from the north); these are given in Table 8.

Table 8 – Adjusted Traffic Splits at Survey Site J6
Main Street / The Mall / Warrenhouse Road (R809) / Dublin Street junction

Departures FROM Dublin Street				
To	Main Street	The Mall	Warrenhouse Rd	TOTAL
AM Peak	n/a	29%	71%	100%
PM Peak	n/a	25%	75%	100%
Arrivals TO Dublin Street				
From	Main Street	The Mall	Warrenhouse Rd	TOTAL
AM Peak	n/a	43%	57%	100%
PM Peak	n/a	46%	54%	100%

4.4 Reallocation of Existing Traffic

As the subject development shall create a new link between Longfield Road and Red Arches Road, it is expected to influence the distribution of existing traffic currently travelling between Grange Road and Coast Road. In particular, it is expected that:

- traffic currently leaving the existing residential developments on Longfield Road and ultimately heading northward along Coast Road shall in future travel via the subject development and access Coast Road via Red Arches Road (and vice versa in the case of arriving traffic); and that
- traffic currently leaving the existing residential developments on Red Arches Road and ultimately heading westward along Grange Road shall in future travel via the subject development and access Grange Road via Longfield Road (and vice versa in the case of arriving traffic).

Predicted future distributions of such traffic have therefore been established, and are shown in Figure 14 and Figure 15. The existing traffic flows to/from Longfield Road and to/from Red Arches Road have been redistributed accordingly under all future year 'with development' assessment scenarios.

Figure 14 – Predicted future distribution of existing Longfield Road traffic

Figure 15 – Predicted future distribution of existing Red Arches Road traffic

These future distributions have been determined in the same manner as the predicted distribution of traffic to/from the subject development (Figure 13), with the following exceptions:

- all traffic generated by the existing developments accessed via Longfield Road, which departs to or arrives from the south-east, is assumed to continue travelling via Longfield Road, Grange Road, Brookstone Road, and Dublin Street; whereas
- all traffic generated by the existing developments accessed via Red Arches Road, which departs to or arrives from the south-east, is assumed to continue travelling via Red Arches Road, Coast Road, and Main Street.

4.5 Proportional Increases in Traffic

Table 9 shows the absolute and proportional increases in peak hour traffic flows that shall result from the proposed development at each of the 9no. surveyed junctions shown in Figure 3 (page 9). The additional trips at each of these junctions are the sum of:

- vehicular trips directly generated by the subject development; and
- existing traffic on the surrounding road network that shall be redistributed as a result of being able to travel between Grange Road and Coast Road via the subject development.

The TII *Traffic and Transport Assessment Guidelines* (PE-PDV-02045) advise that Transport Assessments should generally be applied where traffic to and from a development is predicted to exceed 10% of the existing background traffic on the adjoining road (or 5% at sensitive locations). As shown in Table 9, the subject development shall not result in an increase of more than 10% in total traffic flows at any location in either peak hour period. Surveyed junction J1 (the junction of Grange Road with Longfield Road and Grange Rise) shall however experience increases of over 5% in total traffic flows in

both peak hour periods; this should be considered a sensitive location, as it constitutes the only existing vehicular access to the established residential developments located on Longfield Road.

Table 9 – Changes in Traffic Flows at Surveyed Junctions

Surveyed Junction No.	Background Traffic Flows at Junction (Year 2020) [1]		Additional Trips Through Junction [2]		Proportional Change	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
J1	1711	1745	132	131	+7.7%	+7.5%
J2	1343	1101	56	41	+4.2%	+3.7%
J3	1393	1230	-65	-42	-4.7%	-3.4%
J4	1236	1089	33	30	+2.7%	+2.8%
J5	903	815	28	24	+3.1%	+2.9%
J6	1124	1162	50	47	+4.4%	+4.0%
J7	1045	1004	-64	-42	-6.1%	-4.2%
J8	1110	1745	-64	-42	-5.8%	-2.4%
J9	2983	3117	117	93	+3.9%	+3.0%

Within the scope of this report, therefore, only existing junction J1 requires detailed operational assessment (as described in Section 5). All other surveyed junctions are considered at low risk of detrimental effects as a result of the proposed development, given the generally lower proportional increases (or indeed net reductions) in traffic flows that it shall give rise to at these locations.

Given its key location however, surveyed junction J2 (the junction of Coast Road with Red Arches Road) has been included in the operational

[1] Total surveyed vehicle movements (PCU/hour), with no additional development traffic.
[2] Traffic generated by subject development, plus existing traffic redistributed via new link between Grange Road and Coast Road.

assessments detailed in Section 5 of this report. At the request of Fingal County Council, full assessment of surveyed junction J9 (the existing roundabout junction of Hole in the Wall Road with Grange Road and Clarehall Avenue) has also been carried out.

4.6 Committed Development Trip Generation and Distribution

The vehicular trips predicted to be generated by the 3no. committed developments identified in sub-section 3.5 have been included in the background traffic flows for all future assessment years.

Trip generation for the committed development (A) has been calculated from the apartment and crèche trip rates given in Table 4 and Table 5 (page 24), as well as further TRICS trip rates under the sub-categories '03 Residential / A – Houses Privately Owned', '01 Retail / I – Shopping Centre - Local Shops', and '06 – Hotel, Food & Drink / B – Restaurants'. These additional sub-categories are described in the TRICS land use category definitions as follows:

Houses Privately Owned

"Housing developments where at least 75% of units are privately owned. Of the total number of units, 75% must also be houses (sum of "non-split" terraced, detached, semi-detached, bungalows, etc), with no more than 25% of the total units being flats. Includes properties that are privately owned and then privately rented. Note that "Help to Buy" dwellings or any other where residents have equity in a property are considered to be privately owned. Trip rates are calculated by Site Area, Dwellings, Housing Density, or Total Bedrooms."

Local Shops

"A collection of small local shops within close proximity, possibly with shared parking facilities. Would include a superstore with accompanying small shops if the small shops exceed 15% of the total

floor space of the site. If the shops are within one building include as 01/M. If the separate shops are superstores include as 01/J or 01/K. Trip rates are calculated by Gross Floor Area, Retail Floor Area, or Employees."

Restaurants

"Single restaurants. If a pub/restaurant then include as 06/C. If road-side food such as Little Chef then include as 06/E. If the site includes a drive-through facility then include as 06/D. Trip rates are calculated by Gross Floor Area, Seats, Employees, or Parking Spaces."

The selected TRICS trip rates for houses are given in Table 10. The selected trip rates for the non-residential elements of committed development (A) are given in Table 11.

Table 10 – TRICS House Trip Generation Rates

	Arrivals per hour per dwelling	Departures per hour per dwelling
AM Peak	0.185	0.374
PM Peak	0.285	0.195

Table 11 – Additional TRICS Non-Residential Trip Generation Rates

	Arrivals per hour per 100m² GFA		Departures per hour per 100m² GFA	
	Retail Units	Café	Retail Units	Café
AM Peak	2.424	0.000	2.051	0.000
PM Peak	3.224	1.152	3.230	0.909

Trip generation figures for committed development (B) have likewise been calculated from the trip rates for apartments and houses given in Table 4 (page 24) and Table 10, while the trip generation of committed development (C) has been sourced from the Traffic and Transport Statement submitted under reg. ref. F19A/0461.

The peak hour trip generation figures for all three committed developments are given in Table 12.

Table 12 – Committed Development Trip Generation

Committed Development [3]	Peak Period	Arrivals	Departures	Total Trips
(A)	AM	98	164	262
	PM	130	107	237
(B)	AM	28	81	109
	PM	56	39	95
(C)	AM	68	68	136
	PM	0	0	0

Under the 'without development' assessment scenarios (i.e. without the proposed new link between Grange Road and Coast Road, via the subject development):

- all trips to be generated by committed developments (A) and (C) have been distributed across the surrounding road network in accordance with the distribution of existing traffic to and from Longfield Road (see Figure 11); and
- all trips to be generated by committed development (B) have been distributed in accordance with the distribution of existing traffic to and from Red Arches Road (see Figure 12).

Under the 'with development' assessment scenarios (i.e. including the proposed new link between Grange Road and Coast Road):

- all trips to be generated by committed development (A) have been distributed across the surrounding road network in the same manner as those to/from the subject development (see sub-section 4.3);

[3] See Figure 9, page 13.

- all trips to and from committed development (B) have been distributed in the same manner as the reallocated existing traffic to/from Red Arches Road (see sub-section 4.4); and
- all trips to be generated by committed development (C) have been distributed across the surrounding road network in the same manner as those to/from the subject development, with the exception that no AM peak arrival trips are assumed to originate in the Baldoyle Industrial Estate (see Figure 16).

Figure 16 – Predicted distribution of future school traffic with link road

4.7 Amended GA1 Trip Generation and Distribution

As described in sub-sections 3.5 and 3.6, planning permission has been granted (reg. ref. F16A/0412 / ABP ref. PL06F.248970, as amended under reg. refs. F20A/0258 and F21A/0046) for a mixed-use development on the GA1 lands immediately to the south of the subject site. As currently

permitted, this development – referred to in this report as committed development (A) – comprises the following:

- 159no. houses;
- 385no. apartments;
- retail units with a total gross floor area of 837m^2;
- a crèche with a gross floor area of 880m^2; and
- a café with a gross floor area of 200m^2.

99no. houses permitted under this application, located in the south-east corner of the site, are currently under construction.

An SHD application (ABP ref. TA06F.310418) has been made to An Bord Pleanála for permission to amend the permitted development to comprise the following (excluding the 99no. houses currently under construction):

- 135no. dwelling houses;
- 747no. apartments;
- convenience retail units with a total gross floor area of 1,027m^2;
- a medical centre with a gross floor area of 462m^2;
- a pharmacy with a gross floor area of 268m^2;
- a crèche with a gross floor area of 539m^2;
- a restaurant/café with a gross floor area of 485m^2; and
- a gym with a gross floor area of 411m^2.

The peak hour vehicular trip generation of the permitted GA1 development – calculated as described in sub-section 4.6 – is given in Table 13.

Table 13 – Currently Permitted GA1 Development Trip Generation

	Arrivals			Departures		
	Resi.	Non-Resi.	TOTAL	Resi.	Non-Resi.	TOTAL
AM Peak	47	51	98	123	41	164
PM Peak	88	42	130	60	47	107

Trip generation for the proposed amended GA1 development has been calculated in the same manner. For those elements (medical centre and gym) not present in the currently permitted development, TRICS trip rates under the sub-categories '05 Health / G – GP Surgeries' and '07 Leisure / K – Fitness Club (Private)' have been used. These additional sub-categories are described in the TRICS land use category definitions as follows:

GP Surgeries

"Doctor's surgeries, not to be confused with clinics or dental surgeries. Trip rates are calculated by Gross Floor Area, Doctors, or Employees."

Fitness Club

"Private membership-only fitness club. Trip rates are calculated by Site Area, Gross Floor Area, Employees, or Parking Spaces."

The selected TRICS trip rates for these additional sub-categories are given in Table 14.

Table 14 – TRICS Additional Non-Residential Trip Generation Rates

	Arrivals per hour per 100m² GFA		Departures per hour per 100m² GFA	
	Medical Centre	Gym	Medical Centre	Gym
AM Peak	2.964	0.854	1.491	0.493
PM Peak	2.261	1.140	2.504	0.766

Including the 99no. houses currently under construction, the resultant total amended GA1 development trip generation is as follows:

Table 15 – Proposed Amended GA1 Development Trip Generation

	Arrivals			Departures		
	Resi.	Non-Resi.	TOTAL	Resi.	Non-Resi.	TOTAL
AM Peak	77	67	144	211	50	261
PM Peak	149	70	219	102	72	174

The increases in GA1 vehicular trip generation that would result from the proposed amendments are given in Table 16.

Table 16 – Increases in GA1 Development Trip Generation

	Arrivals			Departures		
	Resi.	Non-Resi.	TOTAL	Resi.	Non-Resi.	TOTAL
AM Peak	30	16	46	88	9	97
PM Peak	61	28	89	42	25	67

The above increases in vehicular traffic are applied under the Design Year Sensitivity Assessment scenario detailed in sub-section 5.8. Under this assessment scenario, all trips to and from Growth Area 1 have been distributed across the surrounding road network in the same manner as those to/from the subject development (see sub-section 4.3).

4.8 Future Year Background Traffic Growth

The operational impact of traffic on the road network within the proposed development's area of influence has been assessed for the following years:

- 2020 Baseline year (surveyed traffic flows)
- 2023 Proposed opening year
- 2028 5 years after opening
- 2038 Design year (15 years after opening)

Unit 5.3 of the TII *Project Appraisal Guidelines* (PE-PAG-02017 *Travel Demand Projections*) has been used to apply growth factors to the existing surveyed traffic flows for the future year junction assessments. The net cumulative growth factors applied are given in Table 17.

Table 17 – Predicted Background Traffic Growth [4]

2023 Year of opening	2028 5 years after opening	2038 15 years after opening
+ 4.94%	+ 13.72%	+ 22.31%

[4] Cumulative percentage increases over 2020 background traffic levels.

5.0 OPERATIONAL ASSESSMENT

5.1 Introduction

To determine the likely traffic impact of the proposed development, operational assessments of 3no. key junctions giving access to the subject site have been undertaken using the industry-standard TRL computer programs TRANSYT and ARCADY, for both the weekday AM peak hour and the weekday PM peak hour.

The following junctions have been modelled and assessed:

J1. Longfield Road / Grange Road / Grange Rise
(existing 4-arm signal-controlled junction)

J2. Coast Road / Red Arches Road
(existing 3-arm priority-controlled roundabout)

J9. Hole in the Wall Road / R138 / R809
(4-arm priority-controlled roundabout)

Figure 17 – Modelled road junctions
(map data & imagery: OSM Contributors, Microsoft)

Junction performance is assessed based upon the five metrics defined in sub-section 5.3. Full TRANSYT and ARCADY outputs are provided in Appendix D.

5.2 Assessment Scenarios

The performances of these junctions have been assessed under the following primary scenarios, using the existing and predicted traffic flows given in Appendix C:

- 2020 – surveyed traffic conditions;
- 2023 (planned year of opening) – with & without subject development;
- 2028 – with & without subject development; and
- 2038 (design year) – with & without subject development.

In addition to the above primary assessment scenarios, a sensitivity assessment has been carried out for the design year 2038, which takes into account the effects of the proposed amendments to the extant planning permissions on the adjacent GA1 zoned lands to the south of the subject site (as described in sub-section 4.7). The results of this sensitivity assessment are presented in sub-section 5.8.

5.3 Definitions

Degree of Saturation:

The ratio of current traffic flow to ultimate capacity (also known as RFC) on a link or traffic stream. Account is taken of the green time given to the link per cycle when calculating this value (for signalised junction approaches), as well blocking effects and oversaturation effects.

Mean Maximum Queue

The highest estimated mean number of Passenger Car Units (PCUs) queued in any lane of a junction approach link, averaged over the entire analysis period.

Maximum Queue at End of Red:

The maximum length of queue in any lane of a signal-controlled junction approach link by the end of the red signal phase for that approach, measured in Passenger Car Units (PCUs).

Mean Delay per PCU:

The average delay incurred by a vehicle on a junction approach link or traffic stream, as a result of having to queue at signals or having to give way at a priority junction.

Practical Reserve Capacity:

The percentage by which the arriving traffic flow on a stream could increase before the stream would reach its effective capacity (i.e. 90% saturation).

5.4 Junction 1 Modelling Parameters

Assessed junction no. 1 (the existing signal-controlled junction of Longfield Road with Grange Road and Grange Rise) has been replicated in a TRANSYT model matching the junction's existing physical configuration and operational characteristics. The following parameters incorporated in the model should be noted.

5.4.1 Cycle time

Networked signal-controlled junctions typically operate with a cycle time of between 100 seconds and 120 seconds. Traffic survey footage indicates however that this junction has a variable cycle time, which averaged 183 seconds in the busiest 15 minutes of the AM peak hour

and 187 seconds in the busiest 15 minutes of the PM peak hour. The TRANSYT model was therefore configured to operate with a cycle time of 180 seconds in both peak hours.

5.4.2 Signal phasing

The existing junction is observed to operate with six signal phasing stages, running sequentially in the order given below. One or more of these stages may be omitted in a given cycle if demand on the relevant junction approach(es) is low.

- Stage 1: Dedicated green on all approaches from east; filter green on right-turn approach from west.
- Stage 2: Dedicated green on left-turn/straight-on approach from east; dedicated green on left-turn/straight-on approach from west; filter green on right-turn approach from west.
- Stage 3: Dedicated green on all approaches from west; dedicated green on left-turn approach from south.
- Stage 4: Dedicated green on all approaches from south.
- Stage 5: Dedicated green on all approaches from north.
- Stage 6: Green for pedestrian crossings on all junction arms.

The existing signal head facing traffic entering the junction from Longfield Road comprises both a general signal and a right-turn arrow, indicating that the left-turn/straight-on traffic stream and the right-turn traffic stream could be governed by separate signal phases if required by the controller. Under existing traffic conditions, this is not required for an optimal use of signal time. However, to account for this possibility under predicted future traffic flow patterns (in particular an increase in traffic approaching from the north along Longfield Road), an additional signal stage was provided in the TRANSYT model following the existing Stage 5 (see Figure 18); this new stage gives green time only to right-turning traffic from the north. TRANSYT was

permitted to automatically optimize the distribution of signal green time between the existing Stage 5 and this new stage.

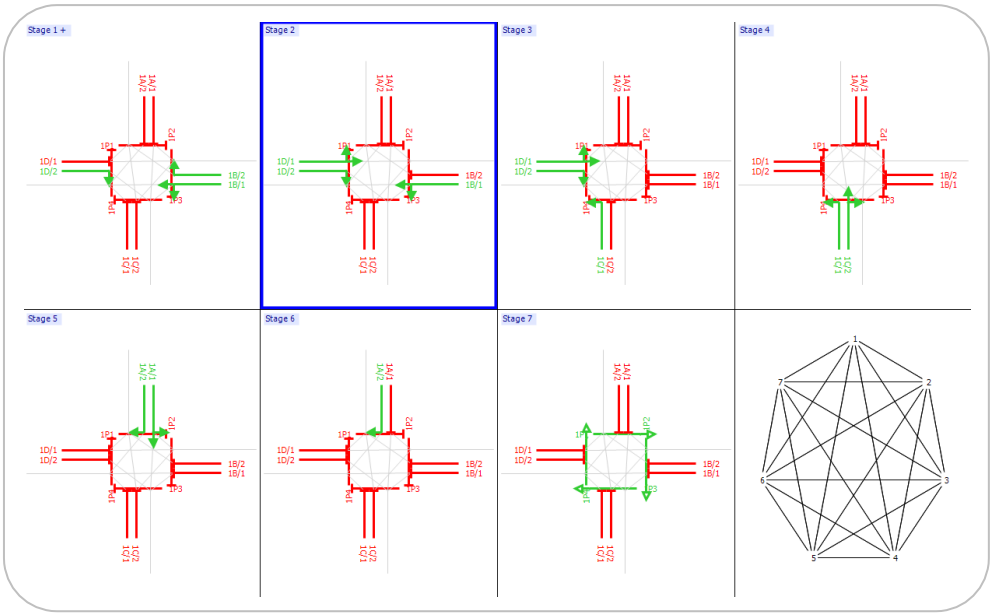

Figure 18 – Modelled TRANSYT signal phase sequence

5.4.3 Pedestrian signal calls

Traffic survey footage indicates that signal green time is given simultaneously to all pedestrian crossings at the existing junction, provided that this signal stage has been requested by a call button on any one of these crossings. The pedestrian signal stage always comprises 8 seconds of green time and 8 seconds of amber time, followed by 2 seconds of all-red time before the following vehicle signal stage begins.

During the busiest 15-minute period in each of the peak hours, it was observed that the pedestrian signal phase was called in every operational cycle. The TRANSYT model has therefore been configured to include this stage within each cycle, using the fixed signal durations given above.

5.5 Junction 1 Primary Assessment Results

The following tables give the TRANSYT modelling results, for each of the primary assessment scenarios, at the existing signal-controlled junction of Longfield Road with Grange Road (R139) and Grange Rise (Baldoyle Industrial Estate access). Under each of the 'with development' scenarios, the assessment includes the effects of existing traffic being redirected as a result of creating a new link between Grange Road and Coast Road (R106), as described in sub-section 4.4. Full TRANSYT outputs are provided in Appendix D.

- Arm A: Longfield Road (to north)
- Arm B: Grange Road [R139] (to east)
- Arm C: Grange Rise (to south)
- Arm D: Grange Road [R139] (to west)

The assessment results show that this junction currently operates within its effective capacity on all approaches during both the AM and PM peak periods. Moderate vehicle queues are experienced on the majority of junction approach streams during peak hour periods, with more significant queues experienced:

- on the left-turn/straight-on approach from the east, during both AM and PM peak hours;
- on the left-turn approach from the south, during the PM peak hour; and
- on the right-turn approach from the west, during the AM peak hour.

Mean vehicle delays vary considerably and are higher on less saturated junction approaches, as a result of the long signal cycle time and the allocation of less green time to less busy approaches.

Table 18 – Junction 1 Primary Assessment Results

Junction Approach Arm and Traffic Stream [5]		Degree of Saturation (%)		Mean Maximum Queue (PCU)		Maximum Queue at End of Red (PCU)		Mean Delay per PCU (seconds)		Practical Reserve Capacity (%)	
Arm	Stream	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
2020 – base year assessment – surveyed traffic flows											
A	S / L	30	45	3	2	3	1	77	109	200	100
	R	30	41	3	2	3	2	76	102	205	117
B	S / L	77	70	27	21	18	16	51	53	17	29
	R	40	60	1	2	1	2	105	136	125	50
C	L	22	53	4	15	4	12	50	43	317	69
	S / R	29	38	3	7	3	6	75	61	209	138
D	S / L	42	48	12	15	10	11	26	30	112	87
	R	75	35	18	7	9	4	56	33	20	158
2023 – opening year assessment – WITHOUT subject development											
A	S / L	52	53	8	4	7	4	71	93	73	69
	R	52	54	8	4	8	4	71	91	72	67
B	S / L	88	79	33	24	22	18	64	60	3	14
	R	71	71	5	5	5	5	116	116	27	27
C	L	29	61	5	17	5	13	60	49	213	48
	S / R	56	46	4	8	4	7	96	65	59	95
D	S / L	63	69	21	22	15	16	39	46	42	30
	R	90	42	23	8	12	5	86	43	0	114
2023 – opening year assessment – WITH subject development in place											
A	S / L	36	33	6	3	5	3	63	78	153	169
	R	82	70	17	8	14	7	87	96	9	28
B	S / L	79	75	27	22	19	17	55	58	15	20
	R	53	70	3	3	3	3	105	132	69	29
C	L	31	65	5	18	5	14	63	54	190	39
	S / R	74	57	5	10	4	9	129	72	22	57
D	S / L	63	72	21	25	15	17	37	46	44	25
	R	85	42	21	8	11	5	72	42	6	117

[5] S = straight ahead, L = left turn, R = right turn

Table 19 – Junction 1 Primary Assessment Results (continued)

Junction Approach Arm and Traffic Stream		Degree of Saturation (%)		Mean Maximum Queue (PCU)		Maximum Queue at End of Red (PCU)		Mean Delay per PCU (seconds)		Practical Reserve Capacity (%)	
Arm	Stream	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
2028 assessment – WITHOUT subject development											
A	S / L	55	59	9	4	8	4	73	98	63	54
	R	56	59	9	5	8	4	73	96	62	53
B	S / L	96	85	41	28	28	20	88	67	-6	6
	R	62	72	5	5	5	5	101	118	45	24
C	L	30	65	5	19	5	14	59	50	202	38
	S / R	61	47	5	9	4	8	99	63	48	90
D	S / L	68	75	23	25	16	18	42	50	31	20
	R	97	48	28	9	16	5	114	47	-7	88
2028 assessment – WITH subject development in place											
A	S / L	38	34	6	3	6	3	65	79	136	161
	R	86	71	18	8	15	7	94	97	5	26
B	S / L	88	81	32	25	22	19	67	64	2	11
	R	56	74	3	4	3	4	108	140	62	22
C	L	31	70	5	20	5	15	61	56	188	28
	S / R	79	61	5	11	5	9	141	73	14	47
D	S / L	66	77	22	27	15	18	38	49	36	17
	R	90	46	24	9	13	5	83	45	0	96
2038 – design year assessment – WITHOUT subject development											
A	S / L	61	61	9	5	8	4	78	99	48	48
	R	61	61	9	5	8	5	77	98	48	48
B	S / L	101	91	54	33	38	23	129	79	-11	-1
	R	64	82	5	6	5	6	102	143	42	10
C	L	31	70	6	21	5	16	58	53	187	29
	S / R	64	51	5	9	5	8	103	64	40	77
D	S / L	71	79	25	28	17	19	42	52	27	14
	R	103	53	36	10	23	6	164	51	-12	71
2038 – design year assessment – WITH subject development in place											
A	S / L	39	38	6	3	6	3	65	81	128	138
	R	87	77	19	9	16	8	97	105	3	18
B	S / L	96	88	41	29	29	21	94	72	-7	3
	R	58	78	3	4	3	4	110	149	56	16
C	L	33	74	6	22	5	16	60	58	173	21
	S / R	85	62	6	11	6	10	160	72	6	46
D	S / L	70	83	25	31	17	20	40	54	29	9
	R	98	52	31	10	18	6	122	50	-8	74

The majority of junction approach streams are shown to continue operating within their effective capacities past the year 2038, despite a projected increase in background traffic levels (including committed developments). All approach streams shall remain within ultimate capacity past the year 2038 under the 'with development' scenarios: the highest modelled degree of saturation for the year 2038 on any junction approach under this scenario, in either peak hour period, is 98%.

In each of the years assessed, the addition of the vehicular traffic generated by the proposed development (in conjunction with the redistribution of existing traffic between Grange Road and Coast Road) is shown to have a relatively minor net impact on junction performance. In the development's opening year of 2023, development traffic shall result in a maximum increase of 9 PCU in vehicle queue length on any junction approach and a maximum increase of 33 seconds in the mean vehicle delay on any junction approach. As a result of traffic redistribution and signal timing changes, however, other junction approaches shall benefit from reductions of up to 6 PCU in vehicle queue length and up to 14 seconds in mean vehicle delay.

The changes in traffic flows resulting from the subject development shall not be the cause of any junction approach exceeding either its effective capacity (90% degree of saturation) or its ultimate capacity (100% degree of saturation) in any of the assessment years.

5.6 Junction 2 Primary Assessment Results

The following table gives the ARCADY modelling results, for each of the assessment scenarios, at the existing roundabout junction of Red Arches Road with Coast Road (R106). Under each of the 'with development' scenarios, the assessment includes the effects of existing traffic being redirected as a result of creating a new link between Grange Road and

Coast Road (R106), as described in sub-section 4.4. Full ARCADY outputs are provided in Appendix D.

- Arm A: Coast Road [R106] (to south)
- Arm B: Red Arches Road (to west)
- Arm C: Coast Road [R106] (to north)

Table 20 – Junction 2 Primary Assessment Results

Junction Approach Arm	Degree of Saturation (%)		Mean Maximum Queue (PCU)		Mean Delay per PCU (seconds)		Practical Reserve Capacity (%)	
	AM	PM	AM	PM	AM	PM	AM	PM
2020 – base year assessment – surveyed traffic flows								
A	34	44	1	1	3	4	31	112
B	15	5	0	0	4	3		
C	69	40	2	1	10	5		
2023 – opening year assessment – WITHOUT subject development								
A	40	50	1	1	4	5	16	84
B	24	10	0	0	4	4		
C	78	46	3	1	15	6		
2023 – opening year assessment – WITH subject development in place								
A	36	49	1	1	4	5	12	78
B	35	15	1	0	5	4		
C	81	51	4	1	17	6		
2028 assessment – WITHOUT subject development								
A	43	54	1	1	4	5	8	71
B	26	11	0	0	4	4		
C	84	50	5	1	21	6		
2028 assessment – WITH subject development in place								
A	39	53	1	1	4	5	4	66
B	37	16	1	0	5	4		
C	88	54	7	1	26	7		
2038 – design year assessment – WITHOUT subject development								
A	46	58	1	1	4	6	0	60
B	28	11	0	0	5	4		
C	91	53	9	1	33	7		
2038 – design year assessment – WITH subject development in place								
A	42	57	1	1	4	6	-3	57
B	39	17	1	0	5	4		
C	94	58	12	1	44	7		

The assessment results show that this junction currently operates within its effective capacity on all approaches during both the AM and PM peak periods, with minimal mean vehicle queues and delays experienced on all junction approaches. All junction approach streams are shown to continue operating within their effective capacities through the year 2028, with vehicle queues on all junction approaches remaining low. The junction's northern approach is forecast to marginally exceed effective capacity in the year 2038, due to background traffic growth and the influence of nearby committed developments, but shall remain within ultimate capacity.

In each of the years assessed, the addition of the vehicular traffic generated by the proposed development, along with the redirection of traffic via the new link between Grange Road and Coast Road, are shown to have a minimal impact on junction performance. In the development's opening year of 2023, these changes in traffic flows shall result in a maximum increase of 1 PCU in vehicle queue length on any junction approach and a maximum increase of 3 seconds in mean delay per PCU. The changes in traffic flows resulting from the subject development shall not be the cause of any junction approach exceeding its effective capacity (i.e. 90% degree of saturation) in any of the assessment years.

5.7 Junction 9 Primary Assessment Results

The following table gives the ARCADY modelling results, for each of the assessment scenarios, at the existing roundabout junction of Hole in the Wall Road with Grange Road (R139/R809) and Clarehall Avenue (R139). Full ARCADY outputs are provided in Appendix D.

- Arm A: Hole in the Wall Road (to north)
- Arm B: Grange Road [R139] (to east)
- Arm C: Grange Road [R809] (to south)
- Arm D: Clarehall Avenue [R139] (to west)

Table 21 – Junction 9 Primary Assessment Results

Junction Approach Arm	Degree of Saturation (%)		Mean Maximum Queue (PCU)		Mean Delay per PCU (seconds)		Practical Reserve Capacity (%)	
	AM	PM	AM	PM	AM	PM	AM	PM
2020 – base year assessment – surveyed traffic flows								
A	50	48	1	1	7	5	12	4
B	56	77	1	3	7	13		
C	65	85	2	5	8	21		
D	78	65	4	2	11	7		
2023 – opening year assessment – WITHOUT subject development								
A	60	54	1	1	9	7	1	-4
B	73	88	3	7	12	24		
C	73	96	3	13	11	50		
D	89	73	7	3	21	9		
2023 – opening year assessment – WITH subject development in place								
A	61	56	2	1	9	7	0	-6
B	79	91	4	9	15	31		
C	75	98	3	18	12	65		
D	90	75	8	3	22	10		
2028 assessment – WITHOUT subject development								
A	69	61	2	2	12	8	-7	-12
B	81	98	4	19	17	62		
C	81	107	4	46	15	139		
D	98	79	19	4	49	12		
2028 assessment – WITH subject development in place								
A	69	63	2	2	13	8	-8	-13
B	87	102	6	29	24	86		
C	83	110	5	56	17	166		
D	99	81	22	4	55	13		
2038 – design year assessment – WITHOUT subject development								
A	76	68	3	2	16	10	-13	-18
B	88	109	6	61	26	163		
C	88	116	7	88	24	298		
D	107	85	60	5	126	17		
2038 – design year assessment – WITH subject development in place								
A	76	70	3	2	16	11	-14	-19
B	94	113	12	79	44	203		
C	90	117	8	96	28	336		
D	108	87	66	6	136	19		

The assessment results show that this junction currently operates within its effective capacity on all approaches during both the AM and PM peak periods, with moderate mean vehicle queues and delays experienced on all junction approaches.

Under the influence of background traffic growth, however:

- the southern arm is predicted to exceed effective capacity during the PM peak hour by the year 2023 and shall exceed ultimate capacity during the PM peak by the year 2028;
- the eastern arm shall exceed effective capacity during the PM peak by the year 2023 and shall exceed ultimate capacity during the PM peak by the year 2038; and
- the western arm shall exceed effective capacity during the AM peak by the year 2028 and shall exceed ultimate capacity during the AM peak by the year 2038.

In the development's opening year of 2023 (in either peak hour period), traffic generated by the subject development shall result in maximum increases of:

- 0 seconds in mean delay and 0 PCU in mean queue length on the northern arm;
- 7 seconds in mean delay and 2 PCU in mean queue length on the eastern arm;
- 15 seconds in mean delay and 5 PCU in mean queue length on the southern arm; and
- 2 seconds in mean delay and 1 PCU in mean queue length on the western arm.

5.8 Design Year Sensitivity Assessment

The sensitivity assessment constitutes an additional modelling scenario for the design year 2038, in which the following traffic flows are included:

- background traffic flows scaled using TII growth factors;
- existing traffic redistributed via the new connection between Grange Road and Coast Road (see sub-section 4.4);
- vehicular trips generated by the 3no. committed developments described in sub-section 3.5 (see also sub-section 4.6);
- vehicular trips generated by the subject proposed development (see sub-sections 4.2 and 4.3); and
- the effects of the proposed amendments to the extant planning permissions on the adjacent GA1 zoned lands to the south of the subject site (see sub-section 4.7).

The results of the sensitivity assessment show that all approaches to Junctions 1 and 2 remain within their ultimate capacities under this scenario, with a maximum degree of saturation of 98% reached on any junction approach in either peak hour period.

Table 22 – Junction 1 Sensitivity Assessment Results

Junction Approach Arm and Traffic Stream		Degree of Saturation (%)		Mean Maximum Queue (PCU)		Maximum Queue at End of Red (PCU)		Mean Delay per PCU (seconds)		Practical Reserve Capacity (%)	
Arm	Stream	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
2038 – design year sensitivity assessment – including GA1 amendments											
A	S / L	43	38	7	4	7	4	65	78	110	136
	R	95	78	24	10	20	9	122	102	-5	15
B	S / L	96	88	41	29	29	21	94	72	-7	3
	R	63	91	3	6	3	6	116	206	42	-1
C	L	34	78	6	23	5	17	61	63	167	16
	S / R	97	68	8	12	8	11	231	77	-7	32
D	S / L	72	88	26	35	17	22	41	61	25	2
	R	98	53	31	10	19	6	123	51	-8	69

Table 23 – Junction 2 Sensitivity Assessment Results

Junction Approach Arm	Degree of Saturation (%)		Mean Maximum Queue (PCU)		Mean Delay per PCU (seconds)		Practical Reserve Capacity (%)	
	AM	PM	AM	PM	AM	PM	AM	PM
2038 – design year sensitivity assessment – including GA1 amendments								
A	43	59	1	1	4	6	-5	50
B	43	20	1	0	6	4		
C	96	60	15	1	54	8		

At Junction 9, the results of the sensitivity assessment are similar to those of the primary assessment for the year 2038, as given in Table 21.

Table 24 – Junction 9 Sensitivity Assessment Results

Junction Approach Arm	Degree of Saturation (%)		Mean Maximum Queue (PCU)		Mean Delay per PCU (seconds)		Practical Reserve Capacity (%)	
	AM	PM	AM	PM	AM	PM	AM	PM
2038 – design year sensitivity assessment – including GA1 amendments								
A	77	71	3	2	17	11	-15	-20
B	98	115	18	92	62	234		
C	92	119	9	103	31	364		
D	109	88	75	7	152	21		

5.9 Supplementary Assessment of Junction 1

At the request of Fingal County Council's Transportation Planning Department, a supplementary 'stress test' assessment has been carried out of Junction 1. This represents an extreme worst-case scenario whereby:

- existing traffic currently travelling to/from Red Arches Road via Coast Road is redistributed via the new link such that approx. 60% of this traffic instead travels to/from Longfield Road via Grange Road (through Junction 1);
- all existing traffic currently travelling to/from Longfield Road via Grange Road (through Junction 1) continues to do so, despite a new link to Coast Road; and

- all traffic generated by the subject proposed development and the 3no. identified committed developments travels to/from Longfield Road via Grange Road (through Junction 1).

The results of this supplementary stress test assessment are given in the technical note provided as Appendix F.

6.0 PARKING

The proposed development comprises the following elements relevant to car and bicycle parking provision:

- 503no. 1-bedroom apartments/studios;
- 636no. 2-bedroom apartments/duplexes;
- 82no. 3-bedroom apartments/duplexes;
- a crèche with a gross floor area of 452m^2, provisionally assumed to contain 8no. classrooms; and
- a café unit with a gross floor area of 205m^2.

For a full schedule of the proposed development, please refer to the architectural documentation prepared by Henry J. Lyons Architects.

The development shall have a total of 669no. car parking spaces. These shall include:

- 636no. internal (basement and undercroft) car parking spaces for residents and for crèche staff (of which 9no. shall be disabled-accessible and 63no. shall be equipped with EV charging facilities); and
- 33no. external (surface level on-street) car parking spaces for residents (of which 6no. shall be disabled-accessible, 10no. shall be reserved for shared cars, and 1no. shall be equipped with EV charging facilities).

In addition to the above car parking provision, 4no. on-street set-down spaces shall be provided to serve the proposed crèche.

Refer to CS Consulting drawings BD-CSC-ZZ-G3-DR-C-0129 and BD-CSC-ZZ-G3-DR-C-0130 for details of the locations and uses of all car parking spaces within the development.

The development shall also initially include:

- 2,021no. long-term bicycle parking spaces for residents;
- 306no. short-stay bicycle parking spaces for visitors;
- 4no. bicycle parking spaces to serve the proposed crèche; and

- 2no. bicycle parking spaces to serve the proposed café unit.

6.1 Residential Car Parking Provision

The proposed development shall include a total of 665no. car parking spaces to serve the 1,221no. residential units within the scheme. These comprise:

- 152no. internal car parking spaces at undercroft level within Zone E (in the south-west of the site);
- 101no. internal car parking spaces at undercroft level within Zone F (in the south-east of the site);
- 379no. internal car parking spaces at basement level within Zone G (in the north of the site); and
- 33no. external on-street car parking spaces located on Longfield Road in proximity to apartment buildings.

The above figures include disabled-accessible spaces, EV charging facilities, and car-sharing spaces (see sub-sections 6.6 and 7.9). The development's overall residential parking provision ratio is of 0.54 spaces per residential unit.

Table 25 – Overall Residential Car Parking Provision

Zone	Residential Quantum	Internal Spaces	External Spaces	Total Spaces	Car Parking Ratio
E	306 units	152	16	168	0.55 spaces/unit
F	213 units	101	15	116	0.54 spaces/unit
G	702 units	379	2	381	0.54 spaces/unit
TOTAL	1,221 units	636	33	665	0.54 spaces/unit

The policy document *Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities)*, published by the Department of Housing, Planning and Local Government in December 2020, gives the following guidance on the provision of residential car parking:

> *"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. The policies above would be particularly applicable in highly accessible areas such as in or adjoining city cores or at a confluence of public transport systems such [as] rail and bus stations located in close proximity.*
>
> *"These locations are most likely to be in cities, especially in or adjacent to (i.e. within 15 minutes walking distance of) city centres or centrally located employment locations. This includes 10 minutes walking distance of DART, commuter rail or Luas stops or within 5 minutes walking distance of high frequency (min 10 minute peak hour frequency) bus services."*

It is submitted that the development's proposed car parking provision ratio of 0.54no. spaces per residential unit is appropriate to the context of the development, in particular given its proximity to high quality and high frequency public transport services into and through Dublin City. A reduced car parking provision shall also serve to promote and maintain a lower rate of private car use among apartment residents, supporting planning objectives of encouraging a shift to more sustainable modes of transport.

The development site is within a 10-minute walk of Clongriffin railway station, to which a direct pedestrian and cyclist link shall be maintained through the adjacent proposed development on GA1 lands. This station is served

by frequent DART trains operating between Malahide and Bray/Greystones, via Dublin city centre. As noted in the Residential Travel Plan (RTP) associated with the subject development, the development site is also within convenient walking distance of 2no. Dublin Bus routes, one of which (within a 5-minute walk) operates at intervals of 10 minutes during peak hours.

As also noted in the RTP, a number of improvements are proposed to public transport and cycling infrastructure and services in the vicinity of the development site, which shall further improve the viability of sustainable transport modes locally and enable a reduced dependency on private car use.

6.1.1 Proposed rail network improvements

As part of Irish Rail's DART expansion project, it is proposed to increase the capacity of the northern line (on which Clongriffin station is located) from circa 10,500 passengers in the morning peak hour to approx. 15,000 passengers by 2035. Train frequency shall be increased from the present 10-minute headway to a headway of 5 minutes, and all trains shall be lengthened to 8 carriages. Detailed design studies are being undertaken at present to inform the full delivery programme for DART expansion.

6.1.2 Proposed bus service improvements

Under the NTA's BusConnects Dublin Area Revised Bus Network proposals, new Spine routes D1 and D3 are to be implemented along Clongriffin Main Street in the vicinity of the subject development site. These routes will operate at a midday frequency of 15 mins between Dublin's southwestern suburbs and Clongriffin, via Dublin city centre.

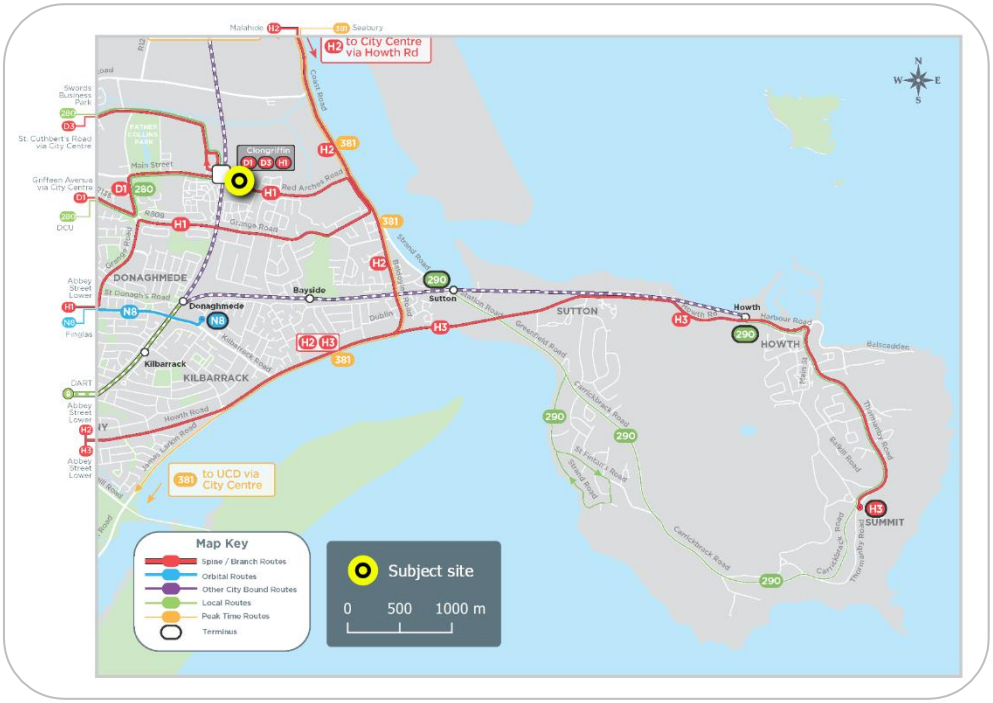

Figure 19 – BusConnects route proposals
(*source: NTA*)

6.1.3 Proposed cycling infrastructure improvements

As part of the Cycle Network Plan for the Greater Dublin Area, administered by the National Transport Authority, it is proposed that secondary cycle route 1A be implemented along Grange Road in the vicinity of the subject development site. Additionally, it is proposed to implement feeder routes linking the subject development site to this route.

6.2 Crèche Car Parking Provision

Car parking for staff of the development's crèche facility shall be accommodated by the provision of 4no. spaces within the basement car park of Block G. As shown in Table 26, this is compliant with the applicable maximum car parking standard given in the *Fingal Development Plan 2017–2023*.

Table 26 – Crèche Car Parking Provision

Land Use	Car Parking Maximum	Quantum	Maximum Car Parking Provision	Proposed Car Parking Provision
Crèche	0.5 spaces per classroom	8 classrooms	4 spaces	4 spaces

The crèche shall also be served by an additional 4no. on-street set-down spaces, located on Longfield Road. These shall not function as long-term car parking spaces.

6.3 Café Car Parking Provision

The proposed café unit within the development shall not be assigned any car parking spaces. As noted in sub-section 4.2 of this report (page 22), the café is expected to serve exclusively the subject development (or those already passing through it), and is not considered to have the potential to generate external vehicular trips to and from the development.

6.4 Disabled-Accessible Car Parking Provision

Table 27 – Accessible Car Parking Provision

Parking Location & Function	Proposed Car Spaces	Minimum Required Proportion	Accessible Spaces Required	Accessible Spaces Proposed
Zone E undercroft	152 spaces	1%	2	3
Zone F undercroft	101 spaces		1	2
Zone G basement	383 spaces		4	4
External residential	33 spaces		0	6
TOTALS			7	15

The *Fingal Development Plan 2017–2023* sets out the minimum requirement for the provision of disabled-accessible parking in new developments, as a proportion of the total development car parking provision. Table 27 applies this requirement to the proposed development. The development shall include a total of 15no. disabled-accessible spaces, exceeding the requirements of the *Fingal Development Plan 2017–2023*.

6.5 Electric Vehicle Charging Provision

The *Fingal Development Plan 2017–2023* stipulates that a minimum of one car parking space in every hundred provided in new developments should be "reserved for electric vehicles with charging facilities". Table 28 applies this requirement to the proposed development.

Table 28 – Reserved Electric Vehicle Parking Provision

Parking Location & Function	Proposed Car Spaces	Minimum Required Proportion	Reserved EV Spaces Required	Reserved EV Spaces Proposed
Zone E undercroft	152 spaces	1%	2	15
Zone F undercroft	101 spaces		1	10
Zone G basement	383 spaces		4	38
External residential	33 spaces		0	1
TOTALS			7	64

Of the 669no. car parking spaces within the development, 64no. parking spaces shall be equipped with electric vehicle charging points and shall be reserved for use by electric vehicles. The development thereby exceeds the requirements of the *Fingal Development Plan 2017–2023*.

Refer to documentation prepared by O'Connor Sutton Cronin (mechanical & electrical engineering consultants) for the proposed locations of individual EV charging-equipped parking spaces.

6.6 Residential Car-Share Parking

It is proposed to establish a car-sharing club for residents of the development. 10no. dedicated shared vehicles shall be provided and maintained by an external service provider under agreement with the development's management company; 10no. on-street car parking spaces shall be reserved for these vehicles.

A recent study of car clubs in Scotland, commissioned and published by CoMoUK [6], concluded that a single shared car may replace ownership of 14 private cars. On this basis, the 10no. shared car parking spaces may therefore be considered to reduce parking demand within the development by the equivalent of 130no. spaces.

Further details of the proposed residential car club arrangements are provided in sub-section 7.9 of this report.

6.7 Car Parking Management

Access to the undercroft and basement residential car parking areas shall be regulated by means of barrier control systems. Authorised occupants shall gain access by means of an RFID key fob or similar automated system. Refer to CS Consulting drawing BD-CSC-ZZ-G3-DR-C-0130 for details of the internal car parking arrangements.

[6] *Car Club Annual Survey for Scotland 2019/2020*, available from https://como.org.uk/shared-mobility/shared-cars/why/

It is proposed that all surface-level roadways within the development be taken in charge by the Local Authority. However, footpaths and on-street car parking spaces within the development shall not be taken in charge and shall remain under the control of the Management Company responsible for upkeep of the development's public areas. The Management Company shall implement suitable measures to prevent unauthorised use of surface-level car parking spaces.

It is recognised that there is potential for undisciplined informal parking along the development's internal road network. The development's internal road network includes physical design features such as kerb buildouts to prevent such informal parking, and the implementation of on-street car parking along the internal road network shall provide a further deterrent. At locations where neither such measure is practical, it is proposed that on-street parking be prohibited by double yellow line road markings.

6.8 Bicycle Parking Provision

The proposed development shall include a total initial provision of 2,333no. bicycle parking spaces. These comprise:

- 508no. secure internal long-term bicycle storage spaces for residents within Zone E (in the south-west of the site);
- 348no. secure internal long-term bicycle storage spaces for residents within Zone F (in the south-east of the site);
- 1,165no. secure internal long-term bicycle storage spaces for residents within Zone G (in the north of the site);
- 306no. publicly accessible bicycle parking spaces for visitors;
- 4no. bicycle parking spaces to serve the proposed crèche; and
- 2no. bicycle parking spaces to serve the proposed café unit.

The bicycle parking provision of the proposed development has been assessed in the first instance with respect to the *Fingal Development Plan 2017–2023*, which defines the standard norms for bicycle parking provision in new developments. Table 29 shows the standards applicable to the proposed development.

Table 29 – Bicycle Parking Provision (Fingal Development Plan)

Land Use	Cycle Parking Norm	Quantum	Standard Provision (spaces)	Proposed Provision (spaces)
Apartment (1 bedroom) [7]	1 per unit + 1 visitor per 5 units	503 units	604	630
Apartment (other)	n/a	718 units	n/a	1,697
Crèche	0.5 spaces per classroom	8 classrooms	4	4
Café	1 space per 150m² GFA	205m² GFA	1	2
TOTAL			609	2,333

The proposed development's bicycle parking provision therefore significantly exceeds the requirements of the Local Authority development plan. The development's long-term residential bicycle parking provision also complies with the recommendations of the December 2020 policy document *Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities)*, as shown in Table 30.

A phased approach is taken to the provision of visitor bicycle parking to serve the development's residential units. Publicly accessible short-stay visitor bicycle parking shall initially be provided at the rate of 1 space per 4

[7] The *Fingal Development Plan 2017–2023* does not specify a standard bicycle parking provision for residential units with more than one bedroom.

apartment units (50% of the Apartment Guidelines recommendation), as given in Table 30.

Designated areas shall however be set aside for the future provision of additional visitor bicycle parking, up to the full quantum recommended by the Apartment Guidelines, as shown on CS Consulting drawings BD-CSC-ZZ-G3-DR-C-0129 and BD-CSC-ZZ-G3-DR-C-0130. The usage of visitor bicycle parking shall be monitored by the development's Residential Travel Plan Coordinator as part of the Residential Travel Plan, and additional visitor cycle parking facilities shall be installed in response to identified demand.

Table 30 – Residential Bicycle Parking Provision (Apartment Guidelines)

Cycle Parking Recommendation	Quantum	Recommended Provision	Proposed Initial Provision
Long-term bicycle storage			
1 storage space per bedroom	2,021 bedrooms	2,021 spaces	2,021 spaces
Short-stay bicycle parking			
1 visitor parking space per 2 units	1,221 units	611 spaces	306 spaces
Total bicycle parking			
TOTALS		2,632 spaces	2,327 spaces

7.0 ACCESS, LAYOUT, PEDESTRIANS & CYCLISTS, SERVICING, PUBLIC TRANSPORT

7.1 Development Access

Figure 20 – Vehicular access to subject development
(*map data & imagery: OSi, OSM Contributors, Henry J. Lyons, Microsoft*)

The subject development's internal road network shall tie into the existing surrounding road network at a total of 4no. locations to the south and west to give vehicular access to the development (see Figure 20), with provision made for a further connection to future road infrastructure immediately to the east.

The development's 3no. primary vehicular access points are:

(A) the northward continuation of Longfield Road (via adjacent GA1 lands), which originates at Grange Road approx. 440m to the south;

(B) the westward continuation of Red Arches Road (via adjacent GA1 lands), which originates at Coast Road approx. 1,000m to the east; and

(C) the continuation to the north and west of the existing Red Arches Avenue (via adjacent GA1 lands), which connects to Red Arches Road.

A further vehicular access point shall be located on the western boundary of the development:

(D) a ramp rising to meet the existing podium-level roadway at Clongriffin railway station, providing a link to Station Hill and to Clongriffin Main Street (this shall be restricted to use by public service vehicles, cyclists, and pedestrians – see sub-section 7.4).

In addition to the above connections to the existing road network and to roads currently under construction, provision has also been made for:

(E) future connectivity to adjacent development lands in Growth Area 2, immediately to the east of the subject site.

All connections between the development's internal road network and the existing external road network have been designed in accordance with the requirements of the *Design Manual for Urban Roads and Streets*.

For further detail of the development's proposed internal road network and provisions for vehicular access to/from the surrounding road network, refer to the accompanying Road Infrastructure Design Report prepared by CS Consulting, as well as the following to CS Consulting drawings:

- BD-CSC-ZZ-G3-DR-C-0100 (Overall Site Layout)
- BD-CSC-ZZ-G3-DR-C-0116 & BD-CSC-ZZ-G3-DR-C-0117 (Road Layouts)

- BD-CSC-ZZ-G3-DR-C-0118 & BD-CSC-ZZ-G3-DR-C-0119 (Road Markings)

7.2 Internal Site Layout and Road Hierarchy

The internal road network of the proposed development comprises link roads along the north-south and east-west axes, allowing circulation into and through the development site, as well as a local access spur (Stapolin Way) in the north of the site which provide access to the individual blocks within the development.

The primary link road through the development is the continuation of Longfield Road, which shall extend northward through the site via the permitted and planned developments in Growth Area 1, immediately to the south. This shall have a carriageway width of 7.0m, comprising one traffic lane in either direction, and shall be flanked to either side by a 2.6m-wide pedestrian footpath. Limited on-street car parking shall be provided along Longfield Road in the form of recessed parallel parking bays.

For further detail of the development's proposed internal road network and road hierarchy, refer to the accompanying Road Infrastructure Design Report prepared by CS Consulting, as well as the following to CS Consulting drawings:

- BD-CSC-ZZ-G3-DR-C-0100 (Overall Site Layout)
- BD-CSC-ZZ-G3-DR-C-0116 & BD-CSC-ZZ-G3-DR-C-0117 (Road Layouts)
- BD-CSC-ZZ-G3-DR-C-0118 & BD-CSC-ZZ-G3-DR-C-0119 (Road Markings)
- BD-CSC-ZZ-G3-DR-C-0120 (Road Profiles)
- BD-CSC-ZZ-G3-DR-C-0121 & BD-CSC-ZZ-G3-DR-C-0122 (Road Details)
- BD-CSC-ZZ-G3-DR-C-0123 (Road Cross Sections)
- BD-CSC-ZZ-G3-DR-C-0124 to BD-CSC-ZZ-G3-DR-C-0128 (Swept Paths)
- BD-CSC-ZZ-G3-DR-C-0129 & BD-CSC-ZZ-G3-DR-C-0130 (Parking Layouts)

7.3 Road Alignments and Traffic Calming Measures

All internal roads within the development have been designed for a vehicular traffic speed of 30km/h. Kerb radii at internal junctions have been restricted to a maximum of 4.5m, in order to discourage high vehicle speeds, except where larger radii are required to facilitate bus movements At all internal road junctions, it has been ensured that forward visibility splays of at least 24m are achieved, in compliance with the *Design Manual for Urban Roads and Streets* (DMURS) requirements (see CS Consulting drawings BD-CSC-ZZ-G3-DR-C-0135 and BD-CSC-ZZ-G3-DR-C-0136).

The presence of parallel on-street parking bays along significant portions of the internal road network shall have a natural traffic calming effect, as through traffic shall have to be alert to (and accommodate) parking manoeuvres into and out of these spaces. Kerb buildouts, which shall be provided at key points to prevent informal on-street parking, shall likewise perform a traffic calming function by forming a horizontal constraint to the carriageway.

7.4 Bus Ramp

As noted in sub-section 3.4, the *Fingal Development Plan 2017–2023* and the *Baldoyle-Stapolin Local Area Plan 2013–2019* (as extended) provide for a road link across the railway line at Clongriffin railway station, between Clongriffin and Stapolin, to allow for the east-west passage of public transport. The existing road on the western side is ramped up to the level of the railway station podium (approx. 16m AOD), where it terminates. As part of the subject development, it is proposed to provide a similar ramped road connection on the eastern side to complete the road link. The provision of this bus ramp is also included in the associated planned development application for Growth Area 1 (see sub-section 3.6), such that neither application is dependent on the other for provision of this infrastructure.

The proposed ramp shall have a maximum gradient of 1:20 and shall be restricted to the use of pedestrians, cyclists, and public service vehicles. In compliance with TII design standard DN-REQ-03034, a high containment vehicle restraint barrier shall be provided along either side of the bus ramp, extending a minimum distance of 45m from the existing station podium.

Refer to CS Consulting drawing BD-CSC-ZZ-G3-DR-C-0133 for further details of the proposed bus ramp connection. CS Consulting has liaised with Irish Rail as part of the design process for the bus ramp, to ensure that Irish Rail requirements are integrated into the design.

7.5 Pedestrians & Cyclists

The development layout ensures a high degree of pedestrian and cyclist permeability into and through the site. Pedestrian and cyclist access to the development shall be possible along the full length of the site's southern boundaries, as well as via the proposed bus ramp (and associated lift) to/from Clongriffin railway station at the site's western boundary. The development layout also allows for convenient future pedestrian and cyclist access to the lands north of the subject site where a future cycle link is proposed as part of the *Baldoyle-Stapolin Local Area Plan 2013–2019* (as extended).

Access to Clongriffin railway station for pedestrians and cyclists from the eastern side of the railway line is currently possible via lifts and stairs located adjacent to the subject site. As part of the associated planned development application for Growth Area 1 (see sub-section 3.6), new lifts and stairs shall be provided to give access to the railway station. The existing lifts and stairs shall be maintained in operation until such time as the proposed new lifts and stairs have been completed.

Raised pedestrian footpaths are provided along all internal roads within the development, as well as a comprehensive network of off-street footpaths

ensuring effective pedestrian permeability through the site. A total of 2,333no. bicycle parking spaces shall initially be provided within the development; these shall include 2,021no. secure and sheltered internal cycle storage spaces for development residents, as well as 306no. publicly accessible short-stay visitor bicycle parking spaces at surface level (of which 154no. shall be covered), 4no. bicycle parking spaces to serve the development's crèche, and 2no. bicycle parking spaces to serve its café unit.

7.6 Servicing and Waste Collection

The internal layout of the development has been designed to accommodate incoming servicing requirements such as deliveries, as well as to facilitate efficient waste collection. An Operational Waste Management Plan has been prepared by AWN Consulting and is submitted separately in support of this application. Refer to this document for full details of the development's anticipated waste generation and its planned waste collection arrangements.

7.7 Swept Path Analysis

Swept path analyses have been carried out for cars manoeuvring within the proposed development, as well as for a refuse vehicle and a fire tender. These analyses, provided on drawings BD-CSC-ZZ-G3-DR-C-0124 to BD-CSC-ZZ-G3-DR-C-0128 within this planning application, indicate that the design of the development accesses and internal layout can accommodate these vehicle movements where required.

7.8 Public Transport

The development site is in close proximity to Clongriffin railway station, which is served by frequent DART trains operating between Malahide and

Bray/Greystones via Dublin city centre. In addition, the development site is within convenient walking distance of 2no. Dublin Bus routes, one of which (within a 5-minute walk) operates at intervals of 10 minutes during peak hours.

For further details of the existing public transport provision in the vicinity of the development site, refer to the Residential Travel Plan associated with the subject development.

7.9 Residential Car-Share Scheme

A residential car sharing club shall be established within the development, allowing residents the common use of a small vehicle pool based permanently within the site. Private cars are parked for the vast majority of the time, whereas shared cars are in use far more frequently and therefore make more efficient use of parking spaces: a single shared car may replace ownership of 14no. private cars.

An early model of residential car club entailed the purchase and maintenance of a vehicle pool by a development's management company; the high initial outlay and capital risk therefore restricted such schemes primarily to very large developments. With the advent of publicly-accessible car sharing schemes, residential and office developments now have the opportunity to 'host' a number of shared cars from a larger fleet, the use of which is restricted to development occupants. In this model, vehicle supply and maintenance, as well as driver insurance, are all organised by an external car-sharing company and do not need to be arranged by the development's management company.

It is intended to provide 10no. shared cars for the sole use of the development's residents. 10no. on-street car parking spaces within the development shall be reserved for these vehicles. GoCar, Ireland's largest and longest-established car-sharing service, has indicated a willingness to

supply and manage these vehicles, operating them following the model described above. Refer to Appendix E for a supporting letter of intent provided by GoCar.

7.10 Independent Quality Audit

An independent Quality Audit of the proposed development layout and access arrangements has been conducted by Roadplan Consulting on behalf of CS Consulting. This incorporates the following four components:

- access audit
- cycling audit
- walking audit
- road safety audit

The Quality Audit was completed in March 2021. Design changes have been made in response to the recommendations of the Quality Audit and the measures adopted have been accepted by the audit team. Refer to CS Consulting drawings BD-CSC-ZZ-G3-DR-C-0135 and BD-CSC-ZZ-G3-DR-C-0136 for details of these design changes.

The Quality Audit report document issued by Roadplan Consulting, together with the audit response form, are provided as an appendix to the accompanying Road Infrastructure Design Report.

8.0 COMMENTS RECEIVED FROM PLANNING AUTHORITIES

Both An Bord Pleanála and Fingal County Council have reviewed the planning documentation submitted in respect of the proposed development during the pre-application consultation phase of the SHD process (including a previous version of the present Traffic Impact Assessment). A tripartite pre-application consultation meeting has also been held with An Bord Pleanála and Fingal County Council.

The relevant opinions of An Bord Pleanála that pertain to traffic and transport matters, as communicated to the applicant, are reproduced below; also examined in this section are the recommendations of Fingal County Council's Transportation Planning Department, which were issued to An Bord Pleanála. In each case, we describe measures taken by the design team in response to these opinions and recommendations.

8.1 Opinions Issued by An Bord Pleanála

An Bord Pleanála has in March 2021 issued an opinion enumerating the items of specific information that should be submitted with any application for permission. The following item among these is of relevance to this Traffic Impact Assessment:

12. *"A report addressing the issues raised in the planning authority's Transportation Planning Section's report dated 10th December 2020."*

8.1.1 Response to ABP Item 12

Responses to points raised by Fingal County Council's Transportation Planning Division are provided in sub-section 8.2.

8.2 Recommendations of Fingal County Council

Fingal County Council has issued an opinion, informed by the internal report of its Transportation Planning Department, making the following recommendations relating to transportation.

8.2.1 FCC Point 1 – visitor parking

"Given the scale of development it is considered that some level of visitor parking that is properly integrated into the design and that avoids the potential for ad-hoc on-street parking that may cause issue particularly with regard to access for emergency services on the narrower internal roads should be provided."

Response to FCC Point 1

The omission of visitor parking from the proposed development is intended as a demand control measure, and is consistent with the overall goal of deterring unnecessary private car trips to and from the development.

As noted in sub-section 6.7 of this report, it is recognised that there is potential for undisciplined informal parking along the development's internal road network. The development's internal road network therefore includes physical design features such as kerb buildouts to prevent such informal parking, as well as double yellow line road markings where necessary.

8.2.2 FCC Point 2 – crèche parking provision

"Additional staff car-parking and a larger set down area to serve the creche is required. Given the scale of the creche the provision of a 4 car set down area is considered to be very small. The entrance to the creche is also relatively distant from the set-down facility which would increase the drop-off turnaround for young children which may further

reduce the availability of set down spaces. The applicant should be requested to address these concerns."

Response to FCC Point 2

As described in sub-section 6.2 of this report, 4no. car parking spaces for crèche staff shall be provided within the basement car park of Block G. This represents the maximum car parking provision permitted by the *Fingal Development Plan 2017–2023*.

The proposed development shall have a relatively high residential density and it is anticipated that its crèche facility will almost exclusively serve residents of the development itself (as well as some residents of existing adjacent developments), all of whom will live within convenient walking distance of the crèche. It is therefore submitted that the 4no. proposed crèche set-down spaces are sufficient to meet the demand for truly necessary vehicular drop-off and collection trips to and from the crèche, while also deterring unnecessary private car trips. We further note that the provision of DMURS-compliant sightlines at internal junctions (see CS Consulting drawing BD-CSC-ZZ-G3-DR-C-0135) precludes the extension of the current crèche set-down area beyond 4no. parallel bays in length.

8.2.3 FCC Point 3 – Clongriffin Station ramp

"Similar to the consecutive SHD application, the proposed development includes the remaining section of the ramp providing a connection for the bus service to Clongriffin station is to be constructed. Construction details of the ramp including build up and construction methods need to be provided. There is insufficient information provided in the current submission. The ramp will be taken in charge by the Council and so must meet the Council's Standards in this regard. The applicant should also liaise with Dublin Bus and Irish

Rail as part of the construction of the ramp as works may be restricted at certain times by Irish Rail."

Response to FCC Point 3

Refer to CS Consulting drawing BD-CSC-ZZ-G3-DR-C-0133 for structural and road build-up details of the proposed bus ramp to Clongriffin Station. The construction methodology and scheduling for this ramp will be discussed in detail with both Iarnród Éireann and Dublin Bus prior to the commencement of works, as described in the accompanying Outline Construction Management Plan.

8.2.4 FCC Point 4 – Donaghmede roundabout assessment

"The Transportation Planning Section has concerns that the roundabout junction at Donaghmede (the junction of the R139/R809 and the Hole-in-the-wall Road) has not been assessed fully as part of the submitted Traffic & Transport Assessment. A revised Traffic & Transport Assessment with an assessment of the capacity of this junction should be carried out."

Response to FCC Point 4

The present Traffic Impact Assessment report now includes the operational assessment of the existing roundabout junction at Donaghmede (the junction of the R139/R809 and the Hole-in-the-Wall Road). The results of this assessment are presented in sub-section 5.7.

It is noted also that the internal report of the Transportation Planning Department states:

"It is likely that most AM traffic will head west and south for links to the M1, M50, Dublin Airport and the City Centre direct particularly as travel to these destinations via junction 2 (the existing roundabout junction of Red Arches Road and Coast Road) would add significantly to journey time and distance. Consequently, the

scenario where the majority of all new, committed and existing development heads to Junction 1 (Longfield Road with Grange Road (R809) and Grange Rise) should also be assessed as a stress test."

A supplementary stress test of Junction 1, which corresponds to the above scenario, has been conducted and the results of this are provided within Appendix F to this report.

8.2.5 FCC Point 5 – Road Safety Audit

"Road Safety Audits should be carried out as part of the proposed development at the relevant stages as outlined in current edition of Transportation Infrastructure Ireland guidelines GE-STY-1027."

Response to FCC Point 5

As described in sub-section 7.10 of this report, an independent Quality Audit of the proposed development layout and access arrangements (incorporating a Road Safety Audit) has been conducted by Roadplan Consulting on behalf of CS Consulting.

Design changes have been made in response to the recommendations of the Quality Audit and the measures adopted have been accepted by the audit team. Refer to CS Consulting drawings BD-CSC-ZZ-G3-DR-C-0135 and BD-CSC-ZZ-G3-DR-C-0136 for details of these design changes.

8.2.6 FCC Point 5 – basement and undercroft car park design

"Basement car park should be designed in accordance with the requirements of the latest edition of the Design recommendations for multi-storey and underground car parks published by the IStructE. It is noted that the Transportation Planning Section have highlighted a number of concerns over the layout and design of all the basement and podium levels. This needs further consideration."

The internal report of the Transportation Planning Department identifies the following specific concerns with regard to the design of the development's basement and undercroft parking areas:

(a) Parking spaces 4.8m long by 2.4m wide are not considered sufficient to accommodate larger cars; spaces 5.0m long by 2.5m wide should instead be provided.

(b) Details should be provided in respect of the access ramps to basement car parks, in particular clearance heights and gradients (including transitions); sectional views of these ramps should be provided.

Response to FCC Point 5

(a) The development's basement and undercroft car parking areas have been designed in accordance with the current (4th) edition of the IStructE *Design recommendations for multi-storey and underground car parks*, which state that: "recommended practice is to design for normal use by the standard car and for occasional use by the large car".

Table 4.2 of this guidance document stipulates a standard car parking bay length of 4.8m under all circumstances, and a standard bay width of 2.4m for mixed occupancy use (increasing to 2.5m use for short-stay use of less than 2 hours, and potentially decreasing to 2.3m for long-stay use involving only one movement per day).

(b) Longitudinal sections of the 2no. access ramps to the Block G basement car parks are shown on CS Consulting drawing BD-CSC-ZZ-G3-DR-C-0123. These provide details of ramp gradients and perpendicular clearances.

8.2.7 FCC Point 6 – bus stop locations, crossing facilities, and junction priority

"The proposed location of the bus stops at the end of the ramp coming from Clongriffin Station needs some consideration. The stops are perhaps too close to the end of the ramp and the bend of the ramp as well as the slope of the ramp may cause issue with the sightlines on the approach the stops when approaching from the station side. The applicant should liaise with Dublin Bus in this regard as there may be further issues with regard to passengers alighting from the busses and crossing into the proposed development that need to be addressed. The provision of a signalised pedestrian crossing or at the very least an uncontrolled pedestrian and bicycle crossing should be incorporated into the design at a suitable location close to the bus stops and the bottom of the ramp. Details of the access road tie-in junctions illustrating which road has priority should be provided to ensure there is no ambiguity in the final design for road users."

Response to FCC Point 6

The locations of the bus stops on the ramp up to Clongriffin railway station are those proposed under the GA1 SHD amendment application (ABP ref. TA06F.310418). To ensure consistency, it is not proposed to change these locations under the present application. Existing pedestrian crossings with dropped kerbs and tactile paving are in place at the top of the ramp, facing the railway station; as these are on the level but are also close to the proposed bus stops, they provide the most suitable designated crossing locations. The ramp itself shall be restricted to use by public service vehicles and shall therefore carry very limited vehicular traffic; the provision of further pedestrian crossing points along its length is therefore not considered necessary on safety grounds.

As shown on CS Consulting drawing BD-CSC-ZZ-G3-DR-C-0119, a stop-controlled junction is indicated where Longfield Avenue meets Stapolin Avenue; this is the only junction at which the development's internal road network ties in to the existing/permitted external road network.

9.0 SUMMARY & CONCLUSIONS

This report examines the impact of a proposed Strategic Housing Development at Stapolin Growth Area 3, Baldoyle, Dublin 13 on the performance of the surrounding road network and assesses the development's internal layout, car and bicycle parking provision, cyclist and pedestrian facilities, and servicing arrangements.

The main observations and conclusions of this study are as follows:

- The proposed development shall not generate excessive vehicular traffic flows. Total vehicle trips (arrivals and departures combined) of 285 PCU are predicted during the AM peak hour (08:00-09:00), and total vehicle trips of 244 PCU in the PM peak hour (15:30-16:30).
- The development shall connect Longfield Road and Red Arches Road, creating a new link that shall result in some redistribution of existing traffic between Grange Road (to the south) and Coast Road (to the east). It is demonstrated that this redistribution of traffic shall not in itself have any detrimental effect on the operation of surrounding road junctions.
- The 2no. modelled existing junctions closest to the development site on the public street network (located on Grange Road and Coast Road) currently operate within their effective capacities on all approaches and shall continue to do so in 2023, when the development is completed, and in 2028, 5 years after opening. Both junctions shall continue to operate within ultimate capacity on all approaches past the year 2038, 15 years after development completion, with the subject development in place. Traffic related to the proposed development shall have a relatively minor net impact on the operation of these junctions, resulting in a maximum increase of 9 PCU in vehicle queues on any junction approach and a maximum increase of 33 seconds in the mean vehicle delay on any junction approach in the development's opening year of 2023.

- The existing roundabout junction of Hole in the Wall Road with Grange Road (R139/R809) and Clarehall Avenue (R139) currently operates within effective capacity but is expected to exceed effective capacity on at least one approach by the year 2023, under the influence of background traffic growth. In the development's opening year of 2023, traffic generated by the subject development shall result in a maximum increase of 5 PCU in vehicle queue length on any junction approach and a maximum increase of 15 seconds in the mean vehicle delay on any junction approach.
- Vehicular traffic related to the proposed development shall result in a maximum increase of 4.4% in total traffic flows at any other road junction, in either peak hour period.
- The proposed provision of car and bicycle parking within the development (including disabled-accessible car parking spaces) is compliant with the guidance set out in the 2020 policy document *Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities)* and with the standards of the *Fingal Development Plan 2017–2023*, as appropriate.
- Swept path analyses have been conducted for cars manoeuvring within the proposed development, as well as for a refuse vehicle and a fire tender. These indicate that the design of the development access and its internal layout can accommodate these vehicle movements where required.
- An independent Quality Audit of the proposed development layout and access arrangements has been conducted by Roadplan Consulting on behalf of CS Consulting. Design changes have been made in response to the recommendations of the Quality Audit and the measures adopted have been accepted by the audit team. Refer to CS Consulting drawings BD-CSC-ZZ-G3-DR-C-0135 and BD-CSC-ZZ-G3-DR-C-0136 for details of these design changes.

In summary, the assessment indicates that the proposed development can be supported by the existing road infrastructure, that the parking provision for the proposed development is compliant with applicable guidelines, and that the development's access arrangement and internal layout are fit for purpose and comply with the *Design Manual for Urban Roads and Streets*.

Appendix A

Traffic Survey Data

CS CONSULTING
GROUP

Survey Name :	J-389 Baldoyle
Site:	1
Date:	23.01.20
Time:	07:00-19:00
Location:	53.3975117,-6.1489037
Classification:	CAR, LGV, OGV1, OGV2, PSV, M/C, P/C.

Irish Traffic Surveys

	A => A								A => B								A => C								A => D							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
07:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	13
07:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	14	0	0	0	0	0	1	15
07:30	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	1	1	0	0	0	0	0	2	19	1	0	0	0	0	0	20
07:45	0	0	0	0	0	0	0	0	6	0	0	0	0	0	2	8	1	0	0	0	0	0	0	1	21	0	0	0	0	0	1	22
H/TOT	0	0	0	0	0	0	0	0	12	0	0	0	0	0	2	14	3	1	0	0	0	0	0	4	66	2	0	0	0	0	2	70
08:00	0	0	0	0	0	0	0	0	12	0	1	0	0	0	0	13	0	1	0	0	0	0	0	1	22	0	0	0	0	0	2	24
08:15	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	3	1	0	0	0	0	0	4	14	0	0	0	0	0	0	14
08:30	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	15	1	0	0	0	0	0	1	2	18	1	0	0	0	0	0	19
08:45	0	0	0	0	0	0	0	0	10	1	0	0	0	0	1	12	2	0	0	0	0	0	0	2	5	1	0	0	0	1	1	8
H/TOT	0	0	0	0	0	0	0	0	49	1	1	0	0	0	1	52	6	2	0	0	0	0	1	9	59	2	0	0	0	1	3	65
09:00	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	13	2	0	0	0	0	0	0	2	13	0	0	0	0	0	0	13
09:15	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	17	1	0	0	0	0	0	18
09:30	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	6	0	0	0	0	0	0	1	1	4	2	0	0	0	0	0	6
09:45	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2
H/TOT	0	0	0	0	0	0	0	0	32	3	1	0	0	0	0	36	3	0	0	0	0	0	1	4	36	3	0	0	0	0	0	39
10:00	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	7	2	0	0	0	0	0	0	2	5	1	0	0	1	0	0	7
10:15	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	2	1	0	0	0	0	0	3	8	1	0	0	0	0	0	9
10:30	0	0	0	0	0	0	0	0	5	3	0	0	0	0	0	8	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6
10:45	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	1	0	0	0	0	0	0	1	3	2	0	0	0	0	0	5
H/TOT	0	0	0	0	0	0	0	0	17	6	0	0	0	0	0	23	5	1	0	0	0	0	0	6	22	4	0	0	1	0	0	27
11:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	4	0	0	0	0	0	0	4
11:15	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	1	0	0	0	0	0	0	1	6	1	0	0	0	0	0	7
11:30	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	3	0	0	0	0	0	0	1	1	3	1	0	0	0	0	0	4
11:45	0	0	0	0	0	0	0	0	4	1	0	0	0	0	1	6	0	0	0	0	0	0	0	0	5	0	0	0	0	0	1	6
H/TOT	0	0	0	0	0	0	0	0	9	2	0	0	0	0	2	13	3	0	0	0	0	0	1	4	18	2	0	0	0	0	1	21
12:00	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	12
12:15	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	2	0	0	0	0	0	0	2	4	0	1	0	0	0	0	5
12:30	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	1	0	0	0	0	0	0	1	8	0	0	0	0	0	0	8
12:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	3	0	0	0	0	0	0	3	10	1	0	0	0	0	0	11
H/TOT	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	19	6	0	0	0	0	0	0	6	32	3	1	0	0	0	0	36
13:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	1	1	0	0	0	0	2	12	1	0	0	0	0	1	14
13:15	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
13:30	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	1	2	0	0	0	0	0	3	4	0	0	0	0	0	0	4
13:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	8	1	0	0	0	0	0	9
H/TOT	0	0	0	0	0	0	0	0	15	1	0	0	0	0	0	16	2	3	1	0	0	0	0	6	27	2	0	0	0	0	1	30
14:00	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	1	0	0	0	0	0	0	1	13	0	0	0	0	0	0	13
14:15	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	2	0	0	0	0	0	0	2	5	2	0	0	0	1	0	8
14:30	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	1	0	0	0	0	0	0	1	5	0	0	0	0	0	0	5
14:45	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5
H/TOT	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15	4	0	0	0	0	0	0	4	27	3	0	0	0	1	0	31
15:00	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	1	0	0	0	0	0	0	1	7	1	0	0	0	0	0	8
15:15	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	1	0	0	0	0	0	0	1	3	1	0	0	0	0	0	4
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15:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	7	2	0	0	0	0	0	9
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16:15	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	1	1	0	0	0	0	0	2	5	1	0	0	0	0	0	6
16:30	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7
16:45	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6	3	0	0	0	0	0	0	3	4	0	0	0	0	0	0	4
H/TOT	0	0	0	0	0	0	0	0	24	1	0	0	0	0	0	25	6	1	0	0	0	0	0	7	21	2	0	0	0	0	0	23
17:00	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	1	0	0	0	0	0	0	1	8	1	0	0	0	0	1	10
17:15	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	1	0	0	0	0	0	1	2	0	1	0	0	0	0	0	1
17:30	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6
17:45	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	1	0	0	0	0	0	0	1	9	0	0	0	0	0	0	9
H/TOT	0	0	0	0	0	0	0	0	34	0	0	0	0	0	0	34	3	0	0	0	0	0	1	4	23	2	0	0	0	0	1	26
18:00	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	2	0	0	0	0	0	0	2	9	0	0	0	0	0	0	9
18:15	0	0	0	0	0	0	0	0	7	2	0	0	0	0	0	9	1	0	0	0	0	0	0	1	6	0	0	0	0	0	0	6
18:30	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
18:45	0	0	0	0	0	0	0	0	13	1	0	0	0	0	2	16	3	0	0	0	0	0	0	3	13	0	0	0	0	0	0	13
H/TOT	0	0	0	0	0	0	0	0	33	3	0	0	0	0	2	38	6	0	0	0	0	0	0	6	36	0	0	0	0	0	0	36
12 TOT	0	0	0	0	0	0	0	0	280	18	2	0	0	0	7	307	51	8	1	0	0	0	4	64	392	29	1	0	1	2	8	433

B => A								B => B								B => C								B => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	51	10	0	0	2	0	3	66
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	11	4	0	0	0	0	0	15	56	6	1	0	1	0	2	66
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	21	6	0	0	0	0	0	27	54	7	0	0	1	0	3	65
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	22	3	0	0	0	0	0	25	65	4	1	0	2	0	2	74
22	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	58	14	0	0	0	0	0	72	226	27	2	0	6	0	10	271
8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	39	11	1	0	0	0	0	51	83	5	2	0	2	0	2	94
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	35	4	0	0	0	0	0	39	87	8	0	0	1	1	1	98
8	2	0	0	0	0	0	10	0	0	0	0	0	0	0	0	35	7	0	0	0	0	0	42	122	6	1	0	3	1	0	133
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	35	2	3	0	0	0	1	41	85	9	1	0	1	1	1	98
22	2	0	0	0	0	0	24	0	0	0	0	0	0	0	0	144	24	4	0	0	0	1	173	377	28	4	0	7	3	4	423
11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	21	9	0	1	1	0	0	32	85	9	0	0	2	0	1	97
11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	17	3	0	0	0	0	0	20	85	7	0	0	2	0	0	94
5	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	23	8	2	3	0	0	0	36	84	9	1	0	2	0	0	96
4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	32	5	1	0	0	0	0	38	85	7	2	0	0	0	1	95
31	2	1	0	0	0	0	34	0	0	0	0	0	0	0	0	93	25	3	4	1	0	0	126	339	32	3	0	6	0	2	382
6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	20	8	1	0	0	0	0	29	67	5	2	1	1	0	1	77
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	24	6	1	0	0	0	0	31	60	9	1	0	1	1	0	72
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	25	2	2	0	0	0	0	29	71	3	3	1	0	0	1	79
1	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0	19	4	1	0	0	0	0	24	73	12	1	0	1	0	0	87
15	2	0	0	0	0	0	17	0	0	0	0	0	0	0	0	88	20	5	0	0	0	0	113	271	29	7	2	3	1	2	315
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5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	18	8	1	0	0	0	0	27	50	8	1	0	1	0	1	61
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	13	10	0	0	0	0	0	23	68	10	1	0	0	1	0	80
9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	19	3	5	0	0	0	0	27	73	9	5	0	1	1	0	89
16	1	0	0	0	0	0	17	0	0	0	0	0	0	0	0	68	26	6	0	0	0	0	100	256	32	8	0	3	2	1	302
6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	25	3	0	0	0	0	0	28	75	7	2	0	1	1	0	86
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	12	5	1	0	0	0	0	18	64	11	1	1	1	0	0	78
4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	22	11	2	0	0	0	0	35	66	8	3	0	2	0	1	80
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14	1	0	0	0	0	0	15	0	0	0	0	0	0	0	0	76	25	3	0	0	0	0	104	286	35	6	1	5	1	1	335
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2	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0	25	4	0	0	0	0	0	29	78	15	1	0	1	0	0	95
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	13	4	1	0	0	0	0	18	67	9	2	1	1	1	2	83
9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	21	5	0	0	0	0	0	26	80	10	2	1	2	0	1	96
19	2	0	0	0	0	0	21	0	0	0	0	0	0	0	0	82	15	1	0	0	0	0	98	297	48	8	3	5	2	5	368
0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	22	5	0	0	0	0	1	28	78	13	2	0	1	1	0	95
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	24	5	1	0	0	0	0	30	69	7	1	0	0	2	5	84
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13	0	0	0	0	1	0	14	0	0	0	0	0	0	0	0	22	7	1	0	0	1	0	31	78	5	3	1	3	0	0	90
16	0	0	0	0	1	1	18	0	0	0	0	0	0	0	0	97	23	2	0	0	1	1	124	289	34	9	1	5	3	5	346
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	30	2	1	0	0	0	0	33	80	10	2	0	1	0	1	94
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	19	3	1	0	1	2	0	26	72	8	2	0	1	2	2	87
11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	10	4	1	0	0	0	0	15	68	8	1	1	1	0	2	81
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	12	1	1	0	0	0	0	14	78	6	1	1	1	1	1	89
21	1	0	0	0	0	0	22	0	0	0	0	0	0	0	0	71	10	4	0	1	2	0	88	298	32	6	2	4	3	6	351
6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	29	3	1	0	0	0	0	33	106	13	1	0	3	0	3	126
7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	14	3	1	0	0	0	0	18	87	10	0	0	1	0	2	100
9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	16	5	0	0	0	0	0	21	70	12	2	0	0	2	1	87
12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	21	4	0	0	0	0	0	25	69	16	0	0	1	0	0	86
34	2	0	0	0	0	0	36	0	0	0	0	0	0	0	0	80	15	2	0	0	0	0	97	332	51	3	0	5	2	6	399
15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0	11	2	1	0	0	0	0	14	59	6	0	0	1	0	2	68
10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	11	63	16	0	0	1	0	2	82
13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10	103	6	0	0	1	1	1	112
7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	12	63	7	0	0	2	0	2	74
45	2	0	0	0	0	0	47	0	0	0	0	0	0	0	0	41	5	1	0	0	0	0	47	288	35	0	0	5	1	7	336
7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	15	1	1	0	0	0	0	17	107	9	0	0	2	0	3	121
11	0	0	0	0	0	1	12	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	12	68	5	0	0	1	0	0	74
15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0	8	1	1	0	0	0	0	10	82	12	1	0	2	1	4	102
8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	15	1	0	0	0	0	1	17	80	11	0	0	2	0	1	94
41	1	0	0	0	0	1	43	0	0	0	0	0	0	0	0	49	4	2	0	0	0	1	56	337	37	1	0	7	1	8	391
296	16	1	0	0	1	2	316	0	0	0	0	0	0	0	0	947	206	33	4	2	3	3	1198	3596	420	57	9	61	19	57	4219

C => A								C => B								C => C								C => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	41	8	0	1	0	0	0	50
1	0	0	0	0	0	0	1	3	6	0	0	0	0	0	9	0	0	0	0	0	0	0	0	9	4	2	1	0	0	0	16
0	1	0	0	0	0	0	1	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	10	6	5	0	0	0	1	22
1	0	1	0	0	0	0	2	3	8	1	0	0	0	0	12	0	0	0	0	0	0	0	0	6	14	3	2	0	0	0	25
2	1	1	0	0	0	0	4	15	16	1	0	0	0	0	32	0	0	0	0	0	0	0	0	66	32	10	4	0	0	1	113
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0	0	0	0	0	0	0	0	5	4	0	0	0	0	0	9	0	0	0	0	0	0	0	0	17	11	3	2	0	0	0	33
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4	1	0	0	0	0	0	5	95	25	3	0	0	1	1	125	0	0	0	0	0	0	0	0	163	86	23	9	1	2	0	284
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0	0	0	0	0	0	0	0	30	4	0	0	0	0	0	34	0	0	0	0	0	0	0	0	46	13	1	2	0	0	0	62
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0	0	0	0	0	0	0	0	19	6	0	0	0	0	0	25	0	0	0	0	0	0	0	0	38	18	4	2	0	0	0	62
1	0	0	0	0	0	0	1	19	6	2	0	0	0	1	28	0	0	0	0	0	0	0	0	53	15	4	1	0	0	1	74
0	0	0	0	0	0	0	0	19	8	0	0	1	0	0	28	0	0	0	0	0	0	0	0	32	17	6	1	0	0	0	56
1	0	0	0	0	0	0	1	73	21	3	0	1	0	1	99	0	0	0	0	0	0	0	0	166	60	17	7	0	0	1	251
0	0	0	0	0	0	0	0	23	5	1	0	0	0	0	29	0	0	0	0	0	0	0	0	55	17	3	0	0	0	0	75
0	0	0	0	0	0	0	0	29	2	0	0	0	0	0	31	0	0	0	0	0	0	0	0	108	11	8	2	1	1	1	132
2	0	0	0	0	0	0	2	34	7	0	0	0	0	0	41	0	0	0	0	0	0	0	0	74	12	0	2	0	1	1	90
3	1	0	0	0	0	0	4	36	5	1	0	0	0	0	42	0	0	0	0	0	0	0	0	88	8	3	1	0	0	0	100
5	1	0	0	0	0	0	6	122	19	2	0	0	0	0	143	0	0	0	0	0	0	0	0	325	48	14	5	1	2	2	397
3	0	0	0	0	0	0	3	28	4	0	0	0	0	0	32	0	0	0	0	0	0	0	0	93	13	1	2	0	0	1	110
1	1	0	0	0	0	0	2	28	4	0	0	0	0	0	32	0	0	0	0	0	0	0	0	63	14	3	2	1	0	0	83
0	1	0	0	0	0	0	1	29	4	0	0	0	0	0	33	0	0	0	0	0	0	0	0	74	16	1	2	0	0	0	93
3	0	0	0	0	0	0	3	34	5	0	0	0	0	0	39	0	0	0	0	0	0	0	0	77	8	1	1	0	2	0	89
7	2	0	0	0	0	0	9	119	17	0	0	0	0	0	136	0	0	0	0	0	0	0	0	307	51	6	7	1	2	1	375
1	0	0	0	0	0	0	1	37	3	0	0	0	0	0	40	0	0	0	0	0	0	0	0	104	11	1	0	1	1	1	119
1	0	0	0	0	0	1	2	33	4	0	0	0	0	0	37	0	0	0	0	0	0	0	0	75	10	0	0	0	0	0	85
3	1	0	0	0	0	0	4	36	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	98	7	0	0	0	0	2	107
1	0	0	0	0	0	0	1	24	4	0	0	0	0	0	28	0	0	0	0	0	0	0	0	50	6	0	0	1	1	0	58
6	1	0	0	0	0	1	8	130	11	0	0	0	0	0	141	0	0	0	0	0	0	0	0	327	34	1	0	2	2	3	369
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2	1	0	0	0	0	0	3	64	1	0	0	0	0	0	65	0	0	0	0	0	0	0	0	172	15	0	0	0	2	1	190
47	12	1	0	1	0	1	62	887	233	18	0	3	1	2	1144	0	0	0	0	0	0	0	0	2040	596	151	62	11	14	14	2888

D => A								D => B								D => C								D => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
11	0	0	0	0	0	0	11	29	4	2	0	0	0	0	35	41	10	2	2	0	0	1	56	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	5	33	8	2	0	3	0	0	46	54	7	1	0	0	1	1	64	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	57	13	2	0	1	0	0	73	67	10	2	1	0	1	0	81	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	5	57	11	1	0	1	0	2	72	54	14	1	0	0	0	0	69	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	23	176	36	7	0	5	0	2	226	216	41	6	3	0	2	2	270	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	9	71	6	1	0	1	0	1	80	72	19	1	2	0	0	0	94	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	5	77	6	0	0	3	0	3	89	96	15	4	0	0	0	0	115	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	10	100	9	3	0	0	1	9	122	67	13	1	0	0	1	1	83	0	0	0	0	0	0	0	0
15	0	0	0	0	1	0	16	66	11	3	0	2	0	2	84	65	17	0	0	0	0	0	82	0	0	0	0	0	0	0	0
38	1	0	0	0	1	0	40	314	32	7	0	6	1	15	375	300	64	6	2	0	1	1	374	0	0	0	0	0	0	0	0
9	0	0	0	0	1	0	10	63	14	2	0	0	0	0	79	70	20	5	2	0	0	1	98	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	7	64	9	0	1	2	0	0	76	53	19	3	1	0	0	0	76	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	46	6	2	1	1	0	0	56	60	14	3	1	0	1	0	79	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	5	56	5	1	0	1	2	0	65	42	13	5	2	0	1	0	63	0	0	0	0	0	0	0	0
22	1	0	0	0	1	0	24	229	34	5	2	4	2	0	276	225	66	16	6	0	2	1	316	0	0	0	0	0	0	0	0
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1	0	0	0	0	0	0	1	58	12	2	0	1	0	0	73	37	17	5	0	0	0	0	59	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	66	4	2	0	1	0	0	73	35	24	6	1	0	0	0	66	0	0	0	0	0	0	0	0
12	1	0	0	0	0	0	13	64	8	1	0	1	1	0	75	31	17	9	0	0	1	0	58	0	0	0	0	0	0	0	0
18	1	0	0	0	0	0	19	239	33	6	0	3	1	1	283	126	73	26	1	0	2	0	228	0	0	0	0	0	0	0	0
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7	0	1	0	0	0	0	8	75	5	0	0	1	0	1	82	42	28	4	7	0	0	0	81	0	0	0	0	0	0	0	0
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5	1	0	0	0	0	0	6	78	10	0	1	2	0	1	92	27	16	3	2	0	2	0	50	0	0	0	0	0	0	0	0
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7	0	0	0	0	0	0	7	87	11	1	0	1	0	0	100	34	9	1	2	0	0	0	46	0	0	0	0	0	0	0	0
6	2	0	0	0	0	0	8	79	6	3	2	1	0	1	92	42	18	2	2	0	0	1	65	0	0	0	0	0	0	0	0
24	4	0	0	0	0	0	28	335	28	7	4	5	0	2	381	125	49	13	9	0	0	1	197	0	0	0	0	0	0	0	0
9	2	0	0	0	0	0	11	73	7	1	0	1	0	0	82	52	13	3	0	0	0	1	69	0	0	0	0	0	0	0	0
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13	0	0	0	0	0	0	13	73	11	2	0	1	1	0	88	51	19	4	1	0	0	0	75	0	0	0	0	0	0	0	0
33	2	0	0	0	0	0	35	309	35	3	0	6	1	0	354	211	63	12	5	0	0	1	292	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	6	92	6	0	0	1	1	0	100	40	15	3	3	1	0	0	62	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	13	103	9	1	0	3	1	1	118	20	6	2	1	2	0	1	32	0	0	0	0	0	0	0	0
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37	0	0	0	0	0	0	37	378	29	3	0	7	2	3	422	120	42	10	6	3	0	1	182	0	0	0	0	0	0	0	0
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8	0	0	0	0	0	1	9	85	8	1	0	0	0	3	97	23	11	2	0	0	0	0	36	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	7	97	11	0	0	1	0	2	111	18	5	3	0	0	0	0	26	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	12	113	9	0	0	1	0	0	123	23	4	1	1	0	1	0	30	0	0	0	0	0	0	0	0
33	0	0	0	0	0	1	34	390	34	2	0	5	3	6	440	95	34	10	1	0	1	0	141	0	0	0	0	0	0	0	0
14	1	0	0	0	0	0	15	112	6	0	0	1	0	3	122	32	3	2	0	0	0	0	37	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	12	111	7	0	0	0	0	3	121	22	1	1	1	0	0	0	25	0	0	0	0	0	0	0	0
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11	2	0	0	0	0	0	13	103	6	0	0	0	0	1	110	11	5	0	0	0	1	1	18	0	0	0	0	0	0	0	0
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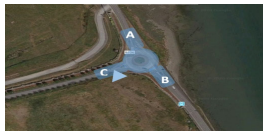
8	0	0	0	0	0	0	8	116	6	0	0	1	1	1	125	39	3	0	0	0	0	0	42	0	0	0	0	0	0	0	0
12	2	0	0	0	0	0	14	105	3	0	0	1	1	1	111	26	3	1	0	0	0	0	30	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	9	88	3	0	0	2	1	1	95	37	2	0	0	0	0	0	39	0	0	0	0	0	0	0	0
39	2	0	0	0	0	1	42	413	16	0	0	5	3	5	442	140	12	1	1	0	0	0	154	0	0	0	0	0	0	0	0
347	17	2	0	0	2	2	370	3715	367	51	8	58	14	48	4261	1908	601	134	57	3	11	8	2722	0	0	0	0	0	0	0	0

Survey Name :	J-389 Baldoyle
Site:	2
Date:	23.01.20
Time:	07:00-19:00
Location:	53.4020086,-6.1321201
Classification:	CAR, LGV, OGV1, OGV2, PSV, M/C, P/C.

Irish Traffic Surveys



	A => A								A => B								A => C							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
07:00	0	0	0	0	0	0	0	0	48	1	0	0	1	0	0	50	0	1	0	0	0	0	0	1
07:15	0	0	0	0	0	0	0	0	82	0	0	0	1	1	0	84	0	2	0	0	0	0	0	2
07:30	0	0	0	0	0	0	0	0	82	1	1	0	2	0	0	86	0	2	0	0	0	0	0	2
07:45	0	0	0	0	0	0	0	0	130	0	1	0	0	0	3	134	0	4	0	0	0	0	0	4
H/TOT	0	0	0	0	0	0	0	0	342	2	2	0	4	1	3	354	0	9	0	0	0	0	0	9
08:00	0	0	0	0	0	0	0	0	174	5	1	0	3	0	0	183	3	1	0	0	0	0	0	4
08:15	0	0	0	0	0	0	0	0	163	10	2	1	3	0	0	179	2	0	0	0	0	0	0	2
08:30	1	0	0	0	0	0	0	1	133	7	3	0	3	0	0	146	4	1	0	0	0	0	0	5
08:45	0	0	0	0	0	0	0	0	130	12	2	4	1	0	0	149	7	1	0	0	0	0	0	8
H/TOT	1	0	0	0	0	0	0	1	600	34	8	5	10	0	0	657	16	3	0	0	0	0	0	19
09:00	0	0	0	0	0	0	0	0	98	19	1	0	1	0	4	123	6	0	0	0	0	0	0	6
09:15	0	1	0	0	0	0	0	1	70	13	3	0	1	1	1	89	2	2	0	0	0	0	0	4
09:30	0	1	0	0	0	0	0	1	70	14	5	0	1	0	3	93	3	0	0	0	0	0	0	3
09:45	1	0	0	0	0	0	0	1	73	16	2	2	2	1	2	98	6	2	0	0	0	0	0	8
H/TOT	1	2	0	0	0	0	0	3	311	62	11	2	5	2	10	403	17	4	0	0	0	0	0	21
10:00	0	0	0	0	0	0	0	0	54	12	0	1	0	0	0	67	4	1	0	0	0	0	0	5
10:15	0	0	0	0	0	0	0	0	57	11	0	0	2	0	0	70	2	0	0	0	0	0	0	2
10:30	0	0	0	0	0	0	0	0	43	8	3	1	0	0	3	58	2	1	0	0	0	0	0	3
10:45	0	0	0	1	0	0	0	1	65	10	1	0	1	0	0	77	0	1	0	0	0	0	0	1
H/TOT	0	0	0	1	0	0	0	1	219	41	4	2	3	0	3	272	8	3	0	0	0	0	0	11
11:00	0	0	0	0	0	0	0	0	49	8	1	0	1	0	1	60	5	1	0	0	0	0	1	7
11:15	0	1	0	0	0	0	0	1	54	9	1	0	3	0	2	69	5	0	0	0	0	0	0	5
11:30	0	0	0	0	0	0	0	0	50	13	1	0	1	0	0	65	4	0	0	0	0	0	0	4
11:45	0	0	0	0	0	0	0	0	63	7	1	0	0	2	1	74	7	1	0	0	0	0	0	8
H/TOT	0	1	0	0	0	0	0	1	216	37	4	0	5	2	4	268	21	2	0	0	0	0	1	24
12:00	1	0	0	0	0	0	0	1	56	8	1	0	2	1	4	72	0	0	1	0	0	0	0	1
12:15	0	0	0	0	0	0	0	0	79	13	2	0	1	0	1	96	5	1	0	0	0	0	0	6
12:30	0	0	0	0	0	0	0	0	64	9	1	1	1	0	4	80	2	0	0	0	0	0	0	2
12:45	0	0	0	0	0	0	0	0	85	17	1	1	1	0	0	105	5	1	0	0	0	0	1	7
H/TOT	1	0	0	0	0	0	0	1	284	47	5	2	5	1	9	353	12	2	1	0	0	0	1	16
13:00	0	0	0	1	0	0	0	1	48	6	0	1	0	0	1	56	5	0	0	0	0	0	0	5
13:15	3	0	0	0	0	0	0	3	61	7	3	0	2	0	0	73	6	0	0	0	0	0	0	6
13:30	0	0	0	0	0	0	0	0	70	5	1	0	0	0	1	77	3	0	0	0	0	0	0	3
13:45	0	0	0	0	0	0	0	0	84	9	0	0	0	1	2	96	3	0	0	0	0	0	0	3
H/TOT	3	0	0	1	0	0	0	4	263	27	4	1	2	1	4	302	17	0	0	0	0	0	0	17
14:00	1	0	0	0	0	0	0	1	86	13	1	0	1	0	1	102	4	0	0	0	0	0	0	4
14:15	0	0	0	0	0	0	0	0	71	7	2	1	2	0	2	85	3	0	0	0	0	0	0	3
14:30	0	1	0	0	0	0	0	1	85	9	4	1	1	0	2	102	8	0	0	0	0	0	0	8
14:45	0	0	0	0	0	0	0	0	75	5	1	2	0	0	0	83	3	1	0	0	0	0	0	4
H/TOT	1	1	0	0	0	0	0	2	317	34	8	4	4	0	5	372	18	1	0	0	0	0	0	19
15:00	0	0	0	0	0	0	0	0	107	10	2	1	1	0	0	121	5	0	0	0	0	0	0	5
15:15	1	0	0	0	0	0	0	1	89	5	0	0	1	0	1	96	3	0	0	0	0	0	0	3
15:30	1	0	0	0	0	0	0	1	81	5	1	0	1	0	2	90	3	0	0	0	0	0	0	3
15:45	0	0	0	0	0	0	0	0	88	8	1	1	1	0	2	101	8	0	0	0	0	1	0	9
H/TOT	2	0	0	0	0	0	0	2	365	28	4	2	4	0	5	408	19	0	0	0	0	1	0	20
16:00	0	0	0	1	0	0	0	1	77	5	0	0	1	0	1	84	5	0	0	0	0	0	0	5
16:15	1	0	0	0	0	0	0	1	95	7	1	0	0	1	2	106	14	1	0	0	0	0	0	15
16:30	1	0	0	0	0	0	0	1	74	8	1	0	1	0	0	84	10	0	0	0	0	0	0	10
16:45	1	0	0	0	0	0	0	1	81	6	0	0	1	0	1	89	2	0	0	0	0	0	0	2
H/TOT	3	0	0	1	0	0	0	4	327	26	2	0	3	1	4	363	31	1	0	0	0	0	0	32
17:00	1	0	0	0	0	0	0	1	76	9	0	0	1	0	1	87	7	0	0	0	0	0	0	7
17:15	0	0	0	0	0	0	0	0	102	1	0	0	1	0	1	105	6	1	0	0	0	0	0	7
17:30	0	0	0	0	0	0	0	0	80	7	0	0	1	0	2	90	13	0	0	0	0	0	0	13
17:45	0	0	0	0	0	0	0	0	79	8	2	0	0	1	2	92	6	1	0	0	0	0	0	7
H/TOT	1	0	0	0	0	0	0	1	337	25	2	0	3	1	6	374	32	2	0	0	0	0	0	34
18:00	0	0	0	0	0	0	0	0	86	1	1	0	3	0	1	92	7	1	0	0	0	0	0	8
18:15	0	0	0	0	0	0	0	0	85	1	0	0	1	0	0	87	12	2	0	0	0	0	0	14
18:30	0	0	0	0	0	0	0	0	88	5	0	0	1	0	3	97	13	0	0	0	0	0	0	13
18:45	0	0	0	0	0	0	0	0	73	4	0	0	4	1	1	83	10	4	0	0	0	0	0	14
H/TOT	0	0	0	0	0	0	0	0	332	11	1	0	9	1	5	359	42	7	0	0	0	0	0	49
12 TOT	13	4	0	3	0	0	0	20	3913	374	55	18	57	10	58	4485	233	34	1	0	0	1	2	271

B => A								B => B								B => C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
32	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
46	0	0	0	3	0	0	49	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	1
57	0	0	0	0	0	0	57	0	0	0	0	2	0	0	2	5	0	0	0	0	0	0	5
83	1	1	0	4	0	0	89	0	0	0	0	1	0	0	1	5	0	0	0	0	0	0	5
218	1	1	0	7	0	0	227	0	0	0	0	4	0	0	4	14	0	0	0	0	0	0	14
99	2	0	0	0	0	0	101	1	0	0	0	1	0	0	2	7	0	0	0	0	0	0	7
94	4	0	0	1	0	0	99	1	0	0	0	1	0	0	2	3	1	0	0	0	0	0	4
135	1	1	0	3	0	0	140	0	0	0	0	1	0	0	1	7	0	0	0	0	0	0	7
103	6	1	0	1	1	1	113	1	0	0	0	1	0	0	2	5	0	0	0	0	0	0	5
431	13	2	0	5	1	1	453	3	0	0	0	4	0	0	7	22	1	0	0	0	0	0	23
90	7	1	0	1	5	0	104	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12
90	6	2	0	3	1	1	103	0	0	0	0	2	0	0	2	11	0	0	0	0	0	0	11
62	3	0	0	0	0	1	66	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	2
62	12	3	0	2	0	1	80	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
304	28	6	0	6	6	3	353	0	0	0	0	3	0	0	3	30	0	0	0	0	0	0	30
54	4	4	0	0	0	0	62	0	0	0	0	1	0	0	1	3	0	0	0	0	0	0	3
53	14	5	0	1	1	1	75	0	0	0	0	2	0	0	2	5	1	0	0	0	0	0	6
70	10	3	1	0	1	1	86	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	5
62	6	0	1	2	0	1	72	0	0	0	0	1	0	0	1	7	1	0	0	0	0	0	8
239	34	12	2	3	2	3	295	0	0	0	0	4	0	0	4	18	4	0	0	0	0	0	22
61	5	4	2	0	1	0	73	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7
47	5	0	0	1	0	1	54	0	0	0	0	1	0	0	1	6	0	0	0	0	0	0	6
79	10	3	0	2	0	1	95	2	1	0	0	1	0	0	4	9	1	0	0	0	0	1	11
84	15	3	0	1	0	1	104	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9
271	35	10	2	4	1	3	326	2	1	0	0	2	0	0	5	29	3	0	0	0	0	1	33
74	9	1	0	1	0	1	86	0	0	0	0	1	0	0	1	6	1	0	0	0	0	0	7
44	7	2	0	0	0	1	54	0	0	0	0	1	0	0	1	5	0	0	0	0	0	0	5
74	10	0	0	0	1	1	86	1	0	0	0	1	0	0	2	7	0	1	0	0	0	1	9
63	10	3	0	2	1	1	80	0	0	0	0	0	0	0	0	4	1	1	0	0	0	1	7
255	36	6	0	3	2	4	306	1	0	0	0	3	0	0	4	22	2	2	0	0	0	2	28
71	7	0	0	1	0	1	80	1	0	0	0	1	0	0	2	7	0	0	0	1	0	0	8
79	7	1	0	2	0	2	91	1	0	0	0	1	0	0	2	8	0	1	0	0	0	0	9
64	14	1	1	0	2	2	84	0	0	0	0	1	0	0	1	7	1	0	0	0	0	0	8
76	8	2	1	3	1	1	92	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	13
290	36	4	2	6	3	6	347	2	0	0	0	3	0	0	5	34	2	1	0	1	0	0	38
73	6	1	2	0	0	0	82	0	0	0	0	1	0	0	1	4	0	0	0	0	0	0	4
65	7	4	0	1	0	0	77	0	0	0	0	2	0	0	2	8	2	0	0	0	0	0	10
95	15	1	0	1	0	0	112	0	1	0	0	0	0	0	1	12	0	0	0	0	0	0	12
103	10	1	0	2	0	2	118	0	0	0	0	1	0	0	1	11	0	0	0	0	0	0	11
336	38	7	2	4	0	2	389	0	1	0	0	4	0	0	5	35	2	0	0	0	0	0	37
82	9	4	1	0	0	0	96	0	0	0	0	1	0	0	1	15	0	0	0	0	0	0	15
73	10	4	1	2	1	1	92	1	0	0	0	2	0	0	3	9	1	0	0	0	0	0	10
122	10	3	0	1	1	1	138	1	0	0	0	0	0	0	1	8	0	0	0	0	0	0	8
110	12	1	0	3	1	1	128	1	0	0	0	1	0	0	2	14	1	0	0	0	0	1	16
387	41	12	2	6	3	3	454	3	0	0	0	4	0	0	7	46	2	0	0	0	0	1	49
131	14	1	0	4	0	0	150	0	0	0	0	1	0	0	1	17	0	0	0	0	0	0	17
108	29	0	0	2	1	1	141	4	0	0	0	0	0	0	4	16	0	0	0	0	0	0	16
116	16	1	1	2	0	0	136	1	0	0	0	0	0	0	1	9	1	0	0	0	0	0	10
111	10	0	0	1	0	0	122	0	0	1	0	3	0	0	4	20	0	0	0	0	0	0	20
466	69	2	1	9	1	1	549	5	0	1	0	4	0	0	10	62	1	0	0	0	0	0	63
109	8	0	0	3	1	0	121	1	0	0	0	0	0	0	1	8	0	0	0	0	0	0	8
132	11	0	0	1	2	0	146	1	0	0	0	1	0	0	2	15	0	0	0	0	0	0	15
118	8	1	0	1	1	3	132	3	0	0	0	1	0	0	4	21	0	0	0	0	0	1	22
91	5	0	0	2	1	2	101	1	0	0	0	1	0	0	2	24	0	0	0	0	1	0	25
450	32	1	0	7	5	5	500	6	0	0	0	3	0	0	9	68	0	0	0	0	1	1	70
90	3	0	0	1	1	1	96	1	0	0	0	1	0	0	2	14	0	0	0	0	0	0	14
83	2	0	0	1	1	4	91	1	0	0	0	1	0	0	2	19	1	0	0	0	2	4	26
119	5	0	0	1	1	3	129	3	0	0	0	0	0	0	3	16	1	0	0	0	0	2	19
91	2	0	0	2	0	4	99	0	0	0	0	1	0	0	1	23	0	0	0	0	0	1	24
383	12	0	0	5	3	12	415	5	0	0	0	3	0	0	8	72	2	0	0	0	2	7	83
4030	375	63	11	65	27	43	4614	27	2	1	0	41	0	0	71	452	19	3	0	1	3	12	490

C => A								C => B								C => C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
8	0	0	0	0	0	0	8	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	11	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	11	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
15	1	0	0	0	0	0	16	14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0
45	1	0	0	0	0	0	46	27	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	19	22	0	0	0	0	0	2	24	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	19	25	1	0	0	0	0	0	26	0	0	0	0	0	0	0	0
19	1	0	0	0	0	0	20	21	2	0	0	0	1	0	24	0	0	0	0	0	0	0	0
10	1	0	0	0	0	0	11	15	0	0	0	0	0	0	15	1	0	0	0	0	0	0	1
67	2	0	0	0	0	0	69	83	3	0	0	0	1	2	89	1	0	0	0	0	0	0	1
9	0	0	0	0	0	0	9	11	1	0	0	0	0	1	13	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	6	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	5	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	6	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	26	32	2	0	0	0	0	1	35	0	0	0	0	0	0	0	0
6	2	0	0	0	0	0	8	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	2	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
2	1	0	0	0	0	0	3	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
13	4	0	0	0	0	0	17	24	2	0	0	0	0	0	26	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	5	4	0	0	0	0	0	1	5	1	0	0	0	0	0	0	1
2	1	0	0	0	0	0	3	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	8	2	0	0	0	0	0	10	0	0	0	0	0	0	0	0
14	1	0	0	0	0	0	15	26	4	0	0	0	0	1	31	1	0	0	0	0	0	0	1
4	1	0	0	0	0	0	5	7	2	0	0	0	0	0	9	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	6	6	1	1	0	0	0	0	8	0	0	0	0	0	0	0	0
4	1	1	0	0	0	0	6	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	8	0	1	0	0	0	0	9	0	0	0	0	0	0	0	0
18	2	1	0	0	0	0	21	26	3	2	0	0	0	0	31	0	0	0	0	0	0	0	0
3	1	0	0	0	0	0	4	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
3	1	0	0	0	0	0	4	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0
5	0	1	0	0	0	0	6	13	1	0	0	1	0	1	16	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0
14	2	1	0	0	0	0	17	38	3	0	0	1	0	1	43	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
10	1	0	0	0	0	0	11	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
3	1	0	0	0	0	0	4	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
17	2	0	0	0	0	0	19	30	1	0	0	0	0	0	31	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
5	1	0	0	0	0	0	6	17	1	0	0	0	0	0	18	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	5	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
16	2	0	0	0	0	0	18	37	1	0	0	0	0	0	38	0	0	0	0	0	0	0	0
3	1	0	0	0	0	0	4	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	10	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
19	1	0	0	0	0	0	20	29	0	0	0	0	0	0	29	0	0	0	0	0	0	0	0
6	1	0	0	0	0	0	7	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	5	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0
16	2	0	0	0	0	0	18	43	0	0	0	0	0	0	43	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	5	9	1	0	0	0	0	3	13	0	0	0	0	0	0	0	0
5	1	0	0	0	0	0	6	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	7	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0
13	1	0	0	0	0	0	14	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0
29	3	0	0	0	0	0	32	42	1	0	0	0	0	3	46	0	0	0	0	0	0	0	0
294	22	2	0	0	0	0	318	437	20	2	0	1	1	8	469	2	0	0	0	0	0	0	2

Survey Name :	J-389 Baldoyle
Site:	3
Date:	23.01.20
Time:	07:00-19:00
Location:	53.3990436,-6.1287129
Classification:	CAR, LGV, OGV1, OGV2, PSV, M/C, P/C.

Irish Traffic Surveys

	A => A								A => B								A => C							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
07:00	0	0	0	0	0	0	0	0	40	8	0	0	2	0	0	50	4	0	0	0	0	0	0	4
07:15	0	0	0	0	0	0	0	0	68	12	2	0	0	0	1	83	4	0	0	0	0	0	0	4
07:30	0	0	0	0	0	0	0	0	69	10	2	0	3	1	3	88	10	0	0	0	1	0	0	11
07:45	0	0	0	0	0	0	0	0	115	13	1	0	2	0	6	137	18	1	0	0	1	0	0	20
H/TOT	0	0	0	0	0	0	0	0	292	43	5	0	7	1	10	358	36	1	0	0	2	0	0	39
08:00	0	0	0	0	0	0	0	0	150	10	2	0	5	0	4	171	15	2	0	0	2	0	0	19
08:15	0	0	0	0	0	0	0	0	159	6	1	1	3	1	2	173	19	2	0	0	0	0	0	21
08:30	0	0	0	0	0	0	0	0	128	7	1	1	3	2	2	144	20	1	2	0	1	0	0	24
08:45	0	0	0	0	0	0	0	0	107	12	2	2	0	0	2	125	36	0	0	0	2	0	0	38
H/TOT	0	0	0	0	0	0	0	0	544	35	6	4	11	3	10	613	90	5	2	0	5	0	0	102
09:00	0	0	0	0	0	0	0	0	93	15	2	0	1	0	2	113	17	0	0	0	1	0	0	18
09:15	0	0	0	0	0	0	0	0	65	12	2	0	1	1	2	83	16	0	1	0	1	0	0	18
09:30	0	0	0	0	0	0	0	0	70	9	4	0	1	0	1	85	10	2	2	0	1	0	0	15
09:45	0	0	0	0	0	0	0	0	64	12	2	2	2	1	1	84	15	4	0	0	0	0	0	19
H/TOT	0	0	0	0	0	0	0	0	292	48	10	2	5	2	6	365	58	6	3	0	3	0	0	70
10:00	0	0	0	0	0	0	0	0	45	10	0	1	0	0	0	56	8	1	0	0	1	0	0	10
10:15	0	0	0	0	0	0	0	0	52	10	0	0	2	0	0	64	7	1	0	0	1	0	0	9
10:30	0	0	0	0	0	0	0	0	46	8	3	1	0	0	2	60	7	1	0	0	1	0	0	9
10:45	0	0	0	0	0	0	0	0	59	6	0	0	0	0	0	65	8	1	0	0	0	0	0	9
H/TOT	0	0	0	0	0	0	0	0	202	34	3	2	2	0	2	245	30	4	0	0	3	0	0	37
11:00	0	0	0	0	0	0	0	0	43	6	2	0	2	0	0	53	8	3	0	0	1	0	0	12
11:15	0	0	0	0	0	0	0	0	48	8	1	0	3	0	1	61	10	1	0	0	1	0	0	12
11:30	0	0	0	0	0	0	0	0	57	10	0	0	1	0	0	68	6	4	0	0	1	0	0	11
11:45	0	0	0	0	0	0	0	0	54	4	0	0	0	2	0	60	10	3	1	0	0	0	0	14
H/TOT	0	0	0	0	0	0	0	0	202	28	3	0	6	2	1	242	34	11	1	0	3	0	0	49
12:00	0	0	0	0	0	0	0	0	53	9	1	0	2	0	4	69	10	1	0	0	1	1	0	13
12:15	0	0	0	0	0	0	0	0	65	9	2	0	1	0	1	78	16	1	1	0	1	0	0	19
12:30	0	0	0	0	0	0	0	0	66	8	1	1	1	0	4	81	7	0	0	0	1	0	0	8
12:45	0	0	0	0	0	0	0	0	71	13	2	1	0	0	0	87	9	2	0	0	1	0	0	12
H/TOT	0	0	0	0	0	0	0	0	255	39	6	2	4	0	9	315	42	4	1	0	4	1	0	52
13:00	0	0	0	0	0	0	0	0	49	5	0	1	1	0	1	57	9	2	0	0	0	0	0	11
13:15	0	0	0	0	0	0	0	0	52	6	3	0	2	0	0	63	10	1	0	0	1	0	0	12
13:30	0	0	0	0	0	0	0	0	63	5	0	0	0	0	0	68	16	1	0	0	2	0	1	20
13:45	0	0	0	0	0	0	0	0	73	7	1	0	0	1	2	84	11	0	0	0	0	0	0	11
H/TOT	0	0	0	0	0	0	0	0	237	23	4	1	3	1	3	272	46	4	0	0	3	0	1	54
14:00	0	0	0	0	0	0	0	0	81	13	1	0	2	0	0	97	14	1	0	0	1	0	0	16
14:15	0	0	0	0	0	0	0	0	64	4	2	1	2	0	2	75	16	3	0	0	1	0	0	20
14:30	0	0	0	0	0	0	0	0	78	8	3	1	1	0	2	93	11	1	1	0	1	0	0	14
14:45	0	0	0	0	0	0	0	0	70	5	1	2	0	0	0	78	14	1	0	0	0	0	0	15
H/TOT	0	0	0	0	0	0	0	0	293	30	7	4	5	0	4	343	55	6	1	0	3	0	0	65
15:00	0	0	0	0	0	0	0	0	95	8	3	0	1	0	1	108	10	1	0	0	1	0	0	12
15:15	0	0	0	0	0	0	0	0	75	3	0	1	1	0	0	80	13	1	0	0	1	0	0	15
15:30	0	0	0	0	0	0	0	0	87	3	1	0	2	0	1	94	12	2	0	0	1	0	0	15
15:45	0	0	0	0	0	0	0	0	61	4	1	1	0	0	3	70	16	2	0	0	1	0	0	19
H/TOT	0	0	0	0	0	0	0	0	318	18	5	2	4	0	5	352	51	6	0	0	4	0	0	61
16:00	0	0	0	0	0	0	0	0	82	5	0	0	2	0	1	90	9	0	0	0	0	0	0	9
16:15	0	0	0	0	0	0	0	0	83	5	1	0	0	1	2	92	21	3	0	0	1	0	0	25
16:30	0	0	0	0	0	0	0	0	70	5	1	0	1	0	0	77	11	1	0	0	0	0	0	12
16:45	0	0	0	0	0	0	0	0	62	2	1	0	1	1	0	67	16	1	0	0	1	0	2	20
H/TOT	0	0	0	0	0	0	0	0	297	17	3	0	4	2	3	326	57	5	0	0	2	0	2	66
17:00	0	0	0	0	0	0	0	0	75	7	0	0	1	0	0	83	16	2	0	0	2	0	0	20
17:15	0	0	0	0	0	0	0	0	93	1	0	0	1	0	1	96	17	0	0	0	1	0	0	18
17:30	0	0	0	0	0	0	0	0	65	6	0	0	1	0	1	73	15	0	0	0	1	0	0	16
17:45	0	0	0	0	0	0	0	0	75	3	2	0	0	1	3	84	13	0	0	0	0	0	0	13
H/TOT	0	0	0	0	0	0	0	0	308	17	2	0	3	1	5	336	61	2	0	0	4	0	0	67
18:00	0	0	0	0	0	0	0	0	85	3	0	0	2	0	1	91	14	0	0	0	2	0	0	16
18:15	0	0	0	0	0	0	0	0	70	0	0	0	1	0	0	71	14	0	0	0	1	0	0	15
18:30	0	0	0	0	0	0	0	0	85	1	0	0	1	0	3	90	16	1	0	0	0	0	0	17
18:45	0	0	0	0	0	0	0	0	76	3	0	0	2	0	1	82	12	0	0	0	2	0	0	14
H/TOT	0	0	0	0	0	0	0	0	316	7	0	0	6	0	5	334	56	1	0	0	5	0	0	62
12 TOT	0	0	0	0	0	0	0	0	3556	339	54	17	60	12	63	4101	616	55	8	0	41	1	3	724

B => A								B => B								B => C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
27	4	0	0	2	0	0	33	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	4
36	3	0	1	3	0	0	43	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	4
39	9	0	0	1	1	0	50	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
75	8	1	0	3	0	1	88	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
177	24	1	1	9	1	1	214	0	0	0	0	0	0	0	0	13	1	1	0	0	0	1	16
77	3	0	0	1	0	0	81	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5
73	2	1	0	1	0	0	77	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
119	1	2	0	3	0	1	126	0	0	0	0	0	0	0	0	20	0	2	0	0	0	0	22
87	3	1	0	1	1	1	94	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	12
356	9	4	0	6	1	2	378	0	0	0	0	0	0	0	0	38	3	2	0	0	0	0	43
88	4	1	0	2	0	5	100	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	15
76	6	2	0	2	1	1	88	0	0	0	0	0	0	0	0	7	2	0	0	0	0	1	10
57	3	0	0	0	0	1	61	0	0	0	0	0	0	0	0	6	0	1	0	0	0	0	7
55	11	2	0	2	0	1	71	0	0	0	0	0	0	0	0	8	0	1	0	1	0	0	10
276	24	5	0	6	1	8	320	0	0	0	0	0	0	0	0	36	2	2	0	1	0	1	42
45	3	6	0	1	0	0	55	0	0	0	0	0	0	0	0	8	4	2	0	0	0	0	14
43	11	4	0	0	1	1	60	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
60	11	2	1	0	1	2	77	0	0	0	0	0	0	0	0	9	1	2	0	0	0	0	12
55	7	1	1	2	0	1	67	0	0	0	0	0	0	0	0	12	2	0	0	0	0	0	14
203	32	13	2	3	2	4	259	0	0	0	0	0	0	0	0	34	7	4	0	0	0	0	45
48	3	2	2	0	1	0	56	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	12
45	3	0	0	0	1	2	51	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
69	11	2	0	2	0	2	86	0	0	0	0	0	0	0	0	10	0	1	0	0	0	0	11
80	15	3	0	1	0	1	100	0	0	0	0	0	0	0	0	13	2	2	0	0	0	0	17
242	32	7	2	3	2	5	293	0	0	0	0	0	0	0	0	38	3	3	0	0	0	0	44
64	9	1	0	1	0	1	76	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7
38	7	1	0	0	0	1	47	0	0	0	0	0	0	0	0	8	3	0	1	0	0	0	12
64	10	0	0	0	1	1	76	0	0	0	0	0	0	0	0	12	1	1	0	0	0	0	14
59	9	3	0	2	1	2	76	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
225	35	5	0	3	2	5	275	0	0	0	0	0	0	0	0	35	4	1	1	0	0	0	41
61	8	0	0	2	0	2	73	0	0	0	0	0	0	0	0	10	4	1	0	0	0	0	15
66	7	0	0	1	0	3	77	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10
63	14	1	1	0	2	2	83	0	0	0	0	0	0	0	0	10	1	1	0	1	0	0	13
73	6	2	2	3	1	1	88	0	0	0	0	0	0	0	0	9	0	0	0	0	0	1	10
263	35	3	3	6	3	8	321	0	0	0	0	0	0	0	0	38	6	2	0	1	0	1	48
62	8	1	1	1	0	0	73	0	0	0	0	0	0	0	0	9	1	1	0	0	1	1	13
58	6	3	0	1	0	0	68	0	0	0	0	0	0	0	0	9	0	0	0	0	1	0	10
82	15	1	0	1	0	0	99	0	0	0	0	0	0	0	0	15	2	1	0	0	0	0	18
73	9	1	0	1	0	2	86	0	0	0	0	0	0	0	0	14	1	2	0	0	0	0	17
275	38	6	1	4	0	2	326	0	0	0	0	0	0	0	0	47	4	4	0	0	2	1	58
90	13	4	2	1	0	0	110	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12
55	9	4	1	3	1	1	74	0	0	0	0	0	0	0	0	14	2	0	1	0	0	0	17
105	10	3	0	1	1	1	121	0	0	0	0	0	0	0	0	12	1	1	1	0	0	0	15
87	9	1	0	3	1	2	103	0	0	0	0	0	0	0	0	13	0	1	0	0	0	1	15
337	41	12	3	8	3	4	408	0	0	0	0	0	0	0	0	51	3	2	2	0	0	1	59
125	14	1	0	4	0	0	144	0	0	0	0	0	0	0	0	23	2	0	0	0	0	0	25
90	27	0	0	1	1	0	119	0	0	0	0	0	0	0	0	15	0	1	0	0	0	0	16
102	18	1	1	2	0	1	125	0	0	0	0	0	0	0	0	6	2	0	0	0	0	0	8
101	10	1	0	2	0	0	114	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	12
418	69	3	1	9	1	1	502	0	0	0	0	0	0	0	0	55	5	1	0	0	0	0	61
93	7	0	0	3	1	1	105	0	0	0	0	0	0	0	0	8	3	0	0	0	0	1	12
106	12	0	0	1	1	0	120	0	0	0	0	0	0	0	0	13	3	0	0	0	0	0	16
119	5	1	0	1	0	6	132	0	0	0	0	0	0	0	0	11	2	0	0	0	0	0	13
74	5	0	0	2	2	3	86	0	0	0	0	0	0	0	0	15	1	0	0	0	0	0	16
392	29	1	0	7	4	10	443	0	0	0	0	0	0	0	0	47	9	0	0	0	0	1	57
81	1	0	0	1	1	1	85	0	0	0	0	0	0	0	0	13	1	0	0	0	0	0	14
78	2	0	0	2	1	7	90	0	0	0	0	0	0	0	0	8	1	0	0	0	0	1	10
108	3	1	0	1	0	5	118	0	0	0	0	0	0	0	0	15	2	0	0	1	0	1	19
87	3	0	0	2	0	5	97	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	11
354	9	1	0	6	2	18	390	0	0	0	0	0	0	0	0	46	5	0	0	1	0	2	54
3518	377	61	13	70	22	68	4129	0	0	0	0	0	0	0	0	478	52	22	3	3	2	8	568

C => A								C => B								C => C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
4	0	0	0	0	0	0	4	12	2	1	0	0	0	0	15	0	0	0	0	0	0	0	0
5	0	0	0	2	0	0	7	14	6	0	0	0	0	0	20	0	0	0	0	0	0	0	0
10	0	0	0	2	0	0	12	13	4	1	0	0	0	1	19	0	0	0	0	0	0	0	0
9	2	0	0	1	0	0	12	20	3	0	0	1	0	0	24	0	0	0	0	0	0	0	0
28	2	0	0	5	0	0	35	59	15	2	0	1	0	1	78	0	0	0	0	0	0	0	0
12	1	0	0	0	0	0	13	38	6	2	0	0	0	0	46	0	0	0	0	0	0	0	0
8	2	0	0	1	0	0	11	50	7	2	0	0	0	2	61	0	0	0	0	0	0	0	0
11	2	0	0	1	0	0	14	39	2	2	0	0	0	0	43	0	0	0	0	0	0	0	0
7	4	0	0	1	0	0	12	25	3	2	0	0	0	0	30	0	0	0	0	0	0	0	0
38	9	0	0	3	0	0	50	152	18	8	0	0	0	2	180	0	0	0	0	0	0	0	0
12	2	0	0	0	0	0	14	29	5	1	0	1	1	0	37	0	0	0	0	0	0	0	0
13	1	0	0	2	0	0	16	26	3	1	0	0	0	0	30	0	0	0	0	0	0	0	0
5	0	0	0	1	0	0	6	22	6	0	0	0	0	0	28	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	18	5	0	0	0	0	0	23	0	0	0	0	0	0	0	0
31	3	0	0	3	0	0	37	95	19	2	0	1	1	0	118	0	0	0	0	0	0	0	0
9	1	0	0	0	0	0	10	25	4	2	0	0	0	0	31	0	0	0	0	0	0	0	0
11	4	0	0	2	0	0	17	29	8	0	0	0	0	0	37	0	0	0	0	0	0	0	0
13	2	1	0	0	0	0	16	18	1	0	0	0	0	0	19	0	0	0	0	0	0	0	0
13	1	0	0	1	0	0	15	26	2	2	1	0	0	0	31	0	0	0	0	0	0	0	0
46	8	1	0	3	0	0	58	98	15	4	1	0	0	0	118	0	0	0	0	0	0	0	0
6	3	1	0	0	0	0	10	25	2	1	0	0	0	0	28	0	0	0	0	0	0	0	0
8	1	0	0	1	0	0	10	20	3	1	0	0	0	0	24	0	0	0	0	0	0	0	0
9	1	1	0	1	0	0	12	31	6	0	0	0	0	0	37	0	0	0	0	0	0	0	0
12	1	0	0	0	0	0	13	29	3	0	0	0	0	0	32	0	0	0	0	0	0	0	0
35	6	2	0	2	0	0	45	105	14	2	0	0	0	0	121	0	0	0	0	0	0	0	0
11	2	0	0	1	0	0	14	27	2	0	0	0	1	0	30	0	0	0	0	0	0	0	0
10	2	0	0	1	0	0	13	30	0	1	0	0	0	0	31	0	0	0	0	0	0	0	0
6	0	1	0	1	0	0	8	27	1	2	0	0	1	0	31	0	0	0	0	0	0	0	0
6	3	1	0	0	0	0	10	21	8	0	0	2	0	0	31	0	0	0	0	0	0	0	0
33	7	2	0	3	0	0	45	105	11	3	0	2	2	0	123	0	0	0	0	0	0	0	0
10	1	0	0	2	0	0	13	32	3	0	1	2	1	0	39	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	11	32	2	0	0	0	0	0	34	0	0	0	0	0	0	0	0
8	4	0	0	1	0	0	13	33	5	1	0	0	0	0	39	0	0	0	0	0	0	0	0
16	3	0	0	0	0	0	19	36	2	3	1	0	0	1	43	0	0	0	0	0	0	0	0
45	8	0	0	3	0	0	56	133	12	4	2	2	1	1	155	0	0	0	0	0	0	0	0
10	1	0	0	1	0	0	12	34	1	0	0	0	0	0	35	0	0	0	0	0	0	0	0
11	2	1	0	1	0	0	15	37	0	1	0	1	0	0	39	0	0	0	0	0	0	0	0
19	1	0	0	0	0	0	20	36	5	0	0	0	0	0	41	0	0	0	0	0	0	0	0
20	4	0	0	2	0	0	26	42	4	0	0	1	0	0	47	0	0	0	0	0	0	0	0
60	8	1	0	4	0	0	73	149	10	1	0	2	0	0	162	0	0	0	0	0	0	0	0
12	2	0	0	0	0	0	14	36	3	0	0	0	0	0	39	0	0	0	0	0	0	0	0
17	1	0	0	1	0	0	19	33	3	0	0	0	0	0	36	0	0	0	0	0	0	0	0
14	2	0	0	0	0	0	16	30	3	0	0	1	0	1	35	0	0	0	0	0	0	0	0
19	4	0	0	1	0	0	24	37	5	0	0	0	0	0	42	0	0	0	0	0	0	0	0
62	9	0	0	2	0	0	73	136	14	0	0	1	0	1	152	0	0	0	0	0	0	0	0
23	3	0	0	1	0	0	27	30	1	0	0	0	0	0	31	0	0	0	0	0	0	0	0
20	2	0	0	1	0	0	23	39	2	1	0	1	0	1	44	0	0	0	0	0	0	0	0
10	1	0	0	0	0	0	11	39	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0
22	1	0	1	1	0	0	25	30	3	0	0	0	0	0	33	0	0	0	0	0	0	0	0
75	7	0	1	3	0	0	86	138	6	1	0	1	0	1	147	0	0	0	0	0	0	0	0
23	2	0	0	0	0	0	25	41	3	0	0	0	0	0	44	0	0	0	0	0	0	0	0
18	1	0	0	1	0	0	20	25	1	0	0	0	0	0	26	0	0	0	0	0	0	0	0
23	1	0	0	1	0	0	25	51	2	0	0	0	0	1	54	0	0	0	0	0	0	0	0
26	1	0	0	1	0	0	28	28	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0
90	5	0	0	3	0	0	98	145	6	0	0	0	0	1	152	0	0	0	0	0	0	0	0
18	1	0	0	1	0	0	20	41	1	0	0	0	0	0	42	0	0	0	0	0	0	0	0
22	0	0	0	1	0	0	23	31	1	0	0	0	0	0	32	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	17	25	2	0	0	1	1	0	29	0	0	0	0	0	0	0	0
18	0	0	0	2	0	0	20	25	1	0	0	0	0	0	26	0	0	0	0	0	0	0	0
75	1	0	0	4	0	0	80	122	5	0	0	1	1	0	129	0	0	0	0	0	0	0	0
618	73	6	1	38	0	0	736	1437	145	27	3	11	5	7	1635	0	0	0	0	0	0	0	0

Survey Name :	J-389 Baldoyle
Site:	4
Date:	23.01.20
Time:	07:00-19:00
Location:	53.3984661,-6.1278973
Classification:	CAR, LGV, OGV1, OGV2, PSV, M/C, P/C.

Irish Traffic Surveys

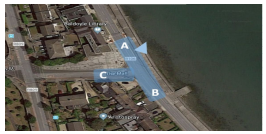
	A => A								A => B								A => C							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
07:00	0	0	0	0	0	0	0	0	15	5	0	0	0	0	1	21	33	3	0	0	1	1	0	38
07:15	0	0	0	0	0	0	0	0	37	13	2	0	0	0	0	52	52	2	1	0	1	1	0	57
07:30	0	0	0	0	0	0	0	0	31	7	2	0	0	0	1	41	44	3	1	0	3	0	4	55
07:45	0	0	0	0	0	0	0	0	63	8	1	0	1	0	0	73	69	8	0	0	2	0	6	85
H/TOT	0	0	0	0	0	0	0	0	146	33	5	0	1	0	2	187	198	16	2	0	7	2	10	235
08:00	0	0	0	0	0	0	0	0	91	15	4	0	2	0	0	112	77	6	0	0	2	0	3	88
08:15	0	0	0	0	0	0	0	0	113	12	1	1	3	1	0	131	98	1	1	0	1	0	5	106
08:30	0	0	0	0	0	0	0	0	108	7	3	1	0	0	0	119	66	3	0	0	3	2	2	76
08:45	0	0	0	0	0	0	0	0	59	11	4	0	0	0	2	76	78	5	2	0	0	0	0	85
H/TOT	0	0	0	0	0	0	0	0	371	45	12	2	5	1	2	438	319	15	3	0	6	2	10	355
09:00	0	0	0	0	0	0	0	0	59	14	4	0	0	0	2	79	53	7	0	0	2	1	0	63
09:15	0	0	0	0	0	0	0	0	47	10	3	0	0	0	0	60	50	5	2	0	1	1	3	62
09:30	0	0	0	0	0	0	0	0	56	13	4	0	0	0	1	74	34	2	0	0	1	0	1	38
09:45	0	0	0	0	0	0	0	0	54	15	0	2	0	0	3	74	30	2	2	0	2	1	0	37
H/TOT	0	0	0	0	0	0	0	0	216	52	11	2	0	0	6	287	167	16	4	0	6	3	4	200
10:00	0	0	0	0	0	0	0	0	36	14	2	1	0	0	0	53	33	2	0	0	0	0	0	35
10:15	0	0	0	0	0	0	0	0	49	14	0	0	0	0	0	63	33	3	0	0	2	0	0	38
10:30	0	0	0	0	0	0	0	0	38	6	2	1	0	0	1	48	24	4	1	0	0	0	1	30
10:45	0	0	0	0	0	0	0	0	53	7	2	1	0	0	0	63	35	4	0	0	0	0	0	39
H/TOT	0	0	0	0	0	0	0	0	176	41	6	3	0	0	1	227	125	13	1	0	2	0	1	142
11:00	0	0	0	0	0	0	0	0	37	4	3	0	1	0	0	45	28	3	0	0	1	0	1	33
11:15	0	0	0	0	0	0	0	0	42	11	0	0	0	0	2	55	31	0	1	0	2	0	1	35
11:30	0	0	0	0	0	0	0	0	59	11	1	0	1	0	0	72	28	6	2	0	1	0	0	37
11:45	0	0	0	0	0	0	0	0	50	6	0	0	0	1	0	57	32	1	0	0	0	0	0	33
H/TOT	0	0	0	0	0	0	0	0	188	32	4	0	2	1	2	229	119	10	3	0	4	0	2	138
12:00	0	0	0	0	0	0	0	0	46	7	1	0	1	0	2	57	35	5	0	0	1	1	3	45
12:15	0	0	0	0	0	0	0	0	52	7	3	0	0	0	0	62	38	1	0	0	1	0	1	41
12:30	1	0	0	0	0	0	0	1	63	10	2	1	0	1	1	78	28	3	0	0	1	0	3	35
12:45	0	0	0	0	0	0	0	0	63	13	2	1	1	0	0	80	35	5	0	0	0	0	0	40
H/TOT	1	0	0	0	0	0	0	1	224	37	8	2	2	1	3	277	136	14	0	0	3	1	7	161
13:00	0	0	0	0	0	0	0	0	57	9	1	1	1	1	0	70	29	1	0	1	2	0	1	34
13:15	0	0	0	0	0	0	0	0	49	2	3	0	0	0	0	54	28	7	0	0	1	0	0	36
13:30	0	0	0	0	0	0	0	0	80	8	1	0	0	0	0	89	30	1	0	0	1	0	0	32
13:45	0	0	0	0	0	0	0	0	67	8	1	1	0	0	1	78	42	1	3	0	0	0	1	47
H/TOT	0	0	0	0	0	0	0	0	253	27	6	2	1	1	1	291	129	10	3	1	4	0	2	149
14:00	0	0	0	0	0	0	0	0	68	11	0	0	1	1	0	81	40	2	1	0	1	0	0	44
14:15	0	0	0	0	0	0	0	0	71	6	1	1	1	0	0	80	31	2	0	0	0	0	2	35
14:30	0	0	0	0	0	0	0	0	70	6	3	0	0	0	1	80	41	5	1	0	3	0	1	51
14:45	0	0	0	0	0	0	0	0	55	5	0	2	0	0	0	62	53	4	0	1	1	0	0	59
H/TOT	0	0	0	0	0	0	0	0	264	28	4	3	2	1	1	303	165	13	2	1	5	0	3	189
15:00	0	0	0	0	0	0	0	0	70	11	4	0	0	0	1	86	54	2	0	0	1	0	0	57
15:15	0	0	0	0	0	0	0	0	74	6	0	1	0	0	0	81	47	4	0	0	1	0	0	52
15:30	0	0	0	0	0	0	0	0	69	4	1	0	0	0	0	74	52	2	0	0	4	0	1	59
15:45	0	0	0	0	0	0	0	0	56	4	1	1	0	0	2	64	45	2	0	0	0	0	2	49
H/TOT	0	0	0	0	0	0	0	0	269	25	6	2	0	0	3	305	198	10	0	0	6	0	3	217
16:00	0	0	0	0	0	0	0	0	57	3	0	0	0	0	0	60	54	4	0	0	2	0	0	60
16:15	0	0	0	0	0	0	0	0	69	6	2	0	0	1	0	78	50	2	0	0	1	1	3	57
16:30	0	0	0	0	0	0	0	0	62	3	0	0	0	0	0	65	47	2	0	0	1	0	0	50
16:45	0	0	0	0	0	0	0	0	68	5	1	0	0	0	0	74	29	1	1	0	1	0	0	32
H/TOT	0	0	0	0	0	0	0	0	256	17	3	0	0	1	0	277	180	9	1	0	5	1	3	199
17:00	0	0	0	0	0	0	0	0	72	6	0	0	0	0	0	78	38	5	0	0	1	0	1	45
17:15	0	0	0	0	0	0	0	0	58	2	0	0	0	0	1	61	55	1	0	0	1	0	0	57
17:30	0	0	0	0	0	0	0	0	81	6	0	0	0	0	1	88	38	3	0	0	1	0	1	43
17:45	0	0	0	0	0	0	0	0	51	2	2	0	0	1	0	56	58	3	0	0	0	0	1	62
H/TOT	0	0	0	0	0	0	0	0	262	16	2	0	0	1	2	283	189	12	0	0	3	0	3	207
18:00	0	0	0	0	0	0	0	0	76	3	0	0	0	0	3	82	46	3	1	0	2	0	3	55
18:15	0	0	0	0	0	0	0	0	57	1	0	0	1	0	0	59	30	1	0	0	0	0	0	31
18:30	0	0	0	0	0	0	0	0	70	1	0	0	0	1	1	73	48	4	0	0	2	0	2	56
18:45	0	0	0	0	0	0	0	0	63	4	0	0	0	0	0	67	42	1	0	0	2	0	0	45
H/TOT	0	0	0	0	0	0	0	0	266	9	0	0	1	1	4	281	166	9	1	0	6	0	5	187
12 TOT	1	0	0	0	0	0	0	1	2891	362	67	16	14	8	27	3385	2091	147	20	2	57	9	53	2379

B => A								B => B								B => C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
26	1	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
22	1	0	1	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	6	0	0	0	1	0	31	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
29	5	0	0	0	0	0	34	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
101	13	0	1	0	1	0	116	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
35	1	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	1	0	0	0	0	0	22	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
46	0	3	0	0	0	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	1	0	33	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
134	2	3	0	0	1	0	140	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
43	2	1	0	0	0	5	51	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
24	6	2	0	0	0	0	32	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
30	2	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	9	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
126	19	3	0	0	0	5	153	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
25	5	4	0	0	0	0	34	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
22	7	1	0	0	1	0	31	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
24	4	4	1	0	0	1	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	3	0	1	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	19	9	2	0	1	1	130	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
27	3	2	2	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	2	0	0	0	0	0	24	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3
39	6	2	0	0	0	0	47	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	4
43	12	2	0	0	0	0	57	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
131	23	6	2	0	0	0	162	0	0	0	0	0	0	0	0	4	3	1	0	0	0	0	8
37	5	1	0	0	0	1	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	5	1	1	0	0	0	28	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
29	7	0	0	0	1	1	38	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
24	5	2	0	0	1	0	32	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5
111	22	4	1	0	2	2	142	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10
36	4	0	0	0	0	0	40	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
29	4	0	0	0	0	2	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	9	1	1	1	1	1	40	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
27	5	0	0	0	1	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	22	1	1	1	2	3	148	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
30	4	2	2	0	0	1	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	5	2	0	0	0	0	28	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1
45	15	0	0	0	0	0	60	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
26	3	2	0	0	0	1	32	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
122	27	6	2	0	0	2	159	0	1	0	0	0	0	0	1	3	3	0	0	0	0	0	6
46	5	1	1	0	0	0	53	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
29	6	1	0	0	0	0	36	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
39	6	1	1	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	6	1	0	0	2	1	50	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
154	23	4	2	0	2	1	186	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
39	4	0	0	0	0	0	43	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
33	14	1	0	0	0	0	48	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
28	8	0	1	0	0	1	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	4	1	0	0	0	0	46	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
141	30	2	1	0	0	1	175	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4
26	4	0	0	1	1	1	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	5	1	0	0	1	0	47	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4
41	2	1	0	0	0	1	45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
26	2	0	0	0	0	1	29	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
133	13	2	0	1	2	3	154	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7
26	1	0	0	0	1	0	28	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
28	1	0	0	0	0	1	30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
40	3	0	0	1	0	1	45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
26	3	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
120	8	0	0	1	1	2	132	0	0	0	0	0	0	0	0	6	0	1	0	0	1	0	8
1489	221	40	12	3	12	20	1797	0	1	0	0	0	0	0	1	44	13	3	0	0	1	0	61

C => A								C => B								C => C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
7	1	0	0	2	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	2	0	0	3	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	2	0	0	1	0	1	26	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
42	3	1	0	3	0	1	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	8	1	0	9	0	2	112	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
48	2	0	0	1	0	1	52	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
60	2	0	0	1	0	0	63	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
87	0	1	0	1	0	1	90	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
69	5	1	0	2	0	1	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	9	2	0	5	0	3	283	1	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0
59	4	0	0	2	0	0	65	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
59	2	0	0	2	1	2	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	2	0	0	0	0	1	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	5	2	0	2	0	1	37	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
179	13	2	0	6	1	4	205	1	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0
30	3	2	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	5	3	0	1	0	1	37	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
43	7	1	0	0	1	1	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	5	0	0	2	0	1	53	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
145	20	6	0	3	1	3	178	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
34	2	1	0	0	1	0	38	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
25	1	0	0	1	0	2	29	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
41	6	1	0	2	0	2	52	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
47	3	3	0	1	0	1	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147	12	5	0	4	1	5	174	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
39	3	0	0	0	0	0	42	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
25	5	0	0	1	0	0	31	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
51	5	1	0	0	0	1	58	4	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0
37	6	1	0	2	0	2	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152	19	2	0	3	0	3	179	5	0	0	1	0	0	0	6	1	0	0	0	0	0	0	1
36	6	0	0	1	0	1	44	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
30	4	2	0	2	0	1	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	7	1	0	0	0	1	64	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
52	2	2	1	3	1	2	63	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
173	19	5	1	6	1	5	210	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
41	3	0	0	0	1	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	4	2	0	2	1	0	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56	2	2	0	0	0	0	60	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
62	5	1	0	2	0	2	72	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
204	14	5	0	4	2	2	231	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
57	4	2	0	1	0	0	64	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
38	5	1	3	3	1	2	53	2	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0
84	8	4	0	1	0	1	98	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
66	4	1	0	3	0	1	75	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
245	21	8	3	8	1	4	290	7	0	0	0	1	0	0	8	0	0	0	0	0	0	0	0
93	8	1	0	4	0	0	106	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
83	13	0	0	1	1	0	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	11	1	0	2	0	0	96	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
68	5	0	0	2	0	0	75	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
326	37	2	0	9	1	0	375	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
79	7	0	0	2	0	1	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	7	0	0	1	1	1	108	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
90	5	0	0	1	0	6	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
69	4	0	0	2	2	2	79	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
336	23	0	0	6	3	10	378	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
69	2	0	0	1	0	3	75	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
52	4	0	0	1	3	6	66	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
92	3	0	0	2	2	4	103	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
64	2	0	0	2	0	5	73	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1
277	11	0	0	6	5	18	317	7	0	0	0	0	0	0	7	1	0	0	0	0	0	0	1
2540	206	38	4	69	16	59	2932	43	5	0	1	1	0	0	50	3	0	0	0	0	0	0	3

Survey Name :	J-389 Baldoyle
Site:	5
Date:	23.01.20
Time:	07:00-19:00
Location:	53.3965691,-6.1261496
Classification:	CAR, LGV, OGV1, OGV2, PSV, M/C, P/C.

Irish Traffic Surveys



	A => A								A => B								A => C							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
07:00	0	0	0	0	0	0	0	0	19	5	1	0	0	0	0	25	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	36	11	1	0	0	1	0	49	1	0	0	0	0	0	0	1
07:30	0	0	0	0	0	0	0	0	38	5	2	0	0	1	0	46	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	68	4	1	0	1	0	0	74	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	161	25	5	0	1	2	0	194	1	0	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0	100	13	4	0	2	0	0	119	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	113	14	3	0	3	1	0	134	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	105	6	3	1	0	0	0	115	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	60	11	4	0	0	0	2	77	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	378	44	14	1	5	1	2	445	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	64	14	4	0	0	0	0	82	0	1	0	0	0	0	0	1
09:15	0	0	0	0	0	0	0	0	50	10	2	0	0	0	0	62	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	57	11	4	0	0	0	2	74	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	51	17	0	2	0	0	2	72	1	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	222	52	10	2	0	0	4	290	1	1	0	0	0	0	0	2
10:00	0	0	0	0	0	0	0	0	37	11	2	1	0	0	0	51	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	50	15	0	0	0	0	0	65	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	40	6	2	1	0	0	1	50	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	57	5	2	1	0	0	0	65	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	184	37	6	3	0	0	1	231	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	35	5	3	0	1	0	0	44	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	40	11	0	0	0	0	0	51	1	0	0	0	0	0	0	1
11:30	0	0	0	0	0	0	0	0	64	13	0	0	1	0	0	78	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	47	8	0	0	0	1	0	56	1	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	186	37	3	0	2	1	0	229	2	0	0	0	0	0	0	2
12:00	0	0	0	0	0	0	0	0	44	6	1	0	1	0	2	54	1	0	0	0	0	0	0	1
12:15	0	0	0	0	0	0	0	0	57	8	3	0	0	0	0	68	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	64	8	2	2	0	0	1	77	2	0	0	0	0	0	0	2
12:45	0	0	0	0	0	0	0	0	63	12	3	1	1	0	0	80	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	228	34	9	3	2	0	3	279	3	0	0	0	0	0	0	3
13:00	0	0	0	0	0	0	0	0	57	6	0	1	2	1	0	67	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	57	3	3	0	0	0	0	63	1	0	0	0	0	0	0	1
13:30	0	0	0	0	0	0	0	0	73	8	1	0	0	0	0	82	1	0	0	0	0	0	0	1
13:45	0	0	0	0	0	0	0	0	67	8	1	1	0	1	1	79	2	0	0	0	0	0	0	2
H/TOT	0	0	0	0	0	0	0	0	254	25	5	2	2	2	1	291	4	0	0	0	0	0	0	4
14:00	0	0	0	0	0	0	0	0	68	10	0	0	1	0	0	79	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	67	7	1	1	1	0	0	77	1	0	0	0	0	0	0	1
14:30	0	0	0	0	0	0	0	0	71	7	3	1	0	0	1	83	1	0	0	0	0	0	0	1
14:45	0	0	0	0	0	0	0	0	60	5	1	1	0	0	0	67	1	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	266	29	5	3	2	0	1	306	3	0	0	0	0	0	0	3
15:00	0	0	0	0	0	0	0	0	73	6	3	0	0	0	1	83	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	75	4	0	1	1	0	0	81	1	0	0	0	0	0	0	1
15:30	0	0	0	0	0	0	0	0	67	4	1	0	0	0	0	72	1	0	0	0	0	0	0	1
15:45	0	0	0	0	0	0	0	0	62	5	1	1	0	0	2	71	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	277	19	5	2	1	0	3	307	2	0	0	0	0	0	0	2
16:00	0	0	0	0	0	0	0	0	55	3	0	0	0	0	0	58	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	74	5	2	0	0	1	0	82	1	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	64	2	1	0	0	0	0	67	1	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	67	4	0	0	0	0	0	71	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	260	14	3	0	0	1	0	278	2	0	0	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0	75	6	0	0	0	0	0	81	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	63	1	0	0	0	1	0	65	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	79	5	0	0	0	0	0	84	0	1	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0	54	1	2	0	0	1	1	59	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	271	13	2	0	0	2	1	289	0	1	0	0	0	0	0	1
18:00	0	0	0	0	0	0	0	0	78	1	0	0	0	0	2	81	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	66	1	0	0	0	1	0	68	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	71	1	0	0	0	0	1	73	1	0	0	0	0	0	0	1
18:45	0	0	0	0	0	0	0	0	60	3	0	0	0	0	1	64	3	0	0	0	0	0	0	3
H/TOT	0	0	0	0	0	0	0	0	275	6	0	0	0	1	4	286	4	0	0	0	0	0	0	4
12 TOT	0	0	0	0	0	0	0	0	2962	335	67	16	15	10	20	3425	22	2	0	0	0	0	0	24

B => A								B => B								B => C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
24	0	0	0	0	1	0	25	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	18
21	0	1	0	0	0	0	22	0	0	0	0	0	0	0	0	7	0	0	0	1	0	0	8
26	0	0	0	0	1	0	27	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	19
43	0	0	0	0	0	0	43	0	0	0	0	0	0	0	0	23	1	0	0	1	0	0	25
114	0	1	0	0	2	0	117	0	0	0	0	0	0	0	0	67	1	0	0	2	0	0	70
31	1	0	0	0	0	0	32	0	0	0	0	0	0	0	0	36	3	1	0	0	0	1	41
32	2	1	0	0	0	0	35	0	0	0	0	0	0	0	0	46	4	0	0	2	1	0	53
37	0	2	0	0	0	0	39	0	0	0	0	0	0	0	0	48	2	1	0	1	0	0	52
47	1	1	0	0	1	0	50	0	0	0	0	0	0	0	0	68	4	2	0	1	1	0	76
147	4	4	0	0	1	0	156	0	0	0	0	0	0	0	0	198	13	4	0	4	2	1	222
40	2	1	0	0	0	5	48	0	0	0	0	0	0	0	0	58	0	0	0	1	0	0	59
19	5	1	0	0	0	0	25	0	0	0	0	0	0	0	0	43	3	1	0	1	0	0	48
33	3	0	0	0	0	0	36	0	0	0	0	0	0	0	0	31	3	0	0	0	0	0	34
26	8	1	0	0	0	0	35	0	0	0	0	0	0	0	0	27	0	2	0	1	0	0	30
118	18	3	0	0	0	5	144	0	0	0	0	0	0	0	0	159	6	3	0	3	0	0	171
23	3	3	0	0	1	0	30	0	0	0	0	0	0	0	0	26	5	3	1	1	0	1	37
21	6	2	0	0	0	0	29	0	0	0	0	0	0	0	0	31	3	0	0	0	0	1	35
19	3	3	1	0	0	1	27	0	0	0	0	0	0	0	0	24	2	3	1	0	0	1	31
30	4	0	1	0	0	0	35	0	0	0	0	0	0	0	0	46	6	1	0	1	0	0	54
93	16	8	2	0	1	1	121	0	0	0	0	0	0	0	0	127	16	7	2	2	0	3	157
25	3	2	2	0	0	0	32	0	0	0	0	0	0	0	0	31	5	0	0	1	0	0	37
30	3	0	0	0	0	0	33	0	0	0	0	0	0	0	0	21	3	2	0	0	0	1	27
31	4	3	0	0	0	0	38	0	0	0	0	0	0	0	0	27	8	2	0	1	0	1	39
48	13	3	0	0	0	0	64	0	0	0	0	0	0	0	0	43	3	2	0	0	0	1	49
134	23	8	2	0	0	0	167	0	0	0	0	0	0	0	0	122	19	6	0	2	0	3	152
34	7	0	1	0	0	1	43	0	0	0	0	0	0	0	0	39	7	1	0	1	0	0	48
18	3	1	0	0	0	0	22	0	0	0	0	0	0	0	0	27	2	0	0	0	0	1	30
30	7	0	0	0	1	1	39	0	0	0	0	0	0	0	0	45	4	3	0	2	0	0	54
36	6	2	0	0	1	0	45	0	0	0	0	0	0	0	0	50	8	1	0	1	0	0	60
118	23	3	1	0	2	2	149	0	0	0	0	0	0	0	0	161	21	5	0	4	0	1	192
34	5	0	0	0	0	0	39	0	0	0	0	0	0	0	0	33	5	2	0	1	1	0	42
36	5	0	0	0	0	2	43	0	0	0	0	0	0	0	0	35	4	0	0	0	0	1	40
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34	4	0	1	0	0	0	39	0	0	0	0	0	0	0	0	44	5	1	1	0	0	0	51
122	22	1	2	1	2	2	152	0	0	0	0	0	0	0	0	138	23	4	1	2	1	1	170
30	4	3	1	0	0	0	38	0	0	0	0	0	0	0	0	37	6	1	0	1	0	0	45
28	4	1	0	0	0	0	33	0	0	0	0	0	0	0	0	30	4	1	0	0	0	0	35
36	15	0	0	0	0	0	51	0	0	0	0	0	0	0	0	53	4	0	0	1	0	0	58
38	3	3	0	0	0	1	45	0	0	0	0	0	0	0	0	42	4	1	0	0	0	0	47
132	26	7	1	0	0	1	167	0	0	0	0	0	0	0	0	162	18	3	0	2	0	0	185
42	6	1	1	0	0	0	50	0	0	0	0	0	0	0	0	51	6	2	1	0	1	0	61
43	5	0	0	0	0	0	48	0	0	0	0	0	0	0	0	35	2	0	0	2	0	0	39
32	4	1	1	0	1	0	39	0	0	0	0	0	0	0	0	49	3	2	0	1	0	0	55
51	5	1	0	0	1	1	59	0	0	0	0	0	0	0	0	63	5	0	0	2	0	0	70
168	20	3	2	0	2	1	196	0	0	0	0	0	0	0	0	198	16	4	1	5	1	0	225
43	7	0	0	0	0	0	50	0	0	0	0	0	0	0	0	69	8	2	0	2	0	0	81
25	8	1	0	0	0	1	35	0	0	0	0	0	0	0	0	59	13	0	0	0	1	0	73
22	6	0	1	0	0	1	30	0	0	0	0	0	0	0	0	22	5	1	0	1	1	0	30
49	3	1	0	0	0	0	53	0	0	0	0	0	0	0	0	44	12	0	0	0	0	0	56
139	24	2	1	0	0	2	168	0	0	0	0	0	0	0	0	194	38	3	0	3	2	0	240
36	2	0	0	1	1	1	41	0	0	0	0	0	0	0	0	41	8	1	0	2	0	0	52
38	5	0	0	0	1	0	44	0	0	0	0	0	0	0	0	43	8	0	0	1	1	0	53
40	0	1	0	0	0	1	42	0	0	0	0	0	0	0	0	36	1	0	0	1	1	0	39
29	0	0	0	0	1	3	33	0	0	0	0	0	0	0	0	36	3	0	0	0	0	1	40
143	7	1	0	1	3	5	160	0	0	0	0	0	0	0	0	156	20	1	0	4	2	1	184
35	1	0	0	0	0	0	36	0	0	0	0	0	0	0	0	27	2	0	0	0	0	1	30
27	1	0	0	0	0	1	29	0	0	0	0	0	0	0	0	27	1	0	1	0	0	1	30
31	3	0	0	0	1	0	35	0	0	0	0	0	0	0	0	27	2	0	0	0	1	0	30
30	3	1	0	0	1	1	36	0	0	0	0	0	0	0	0	33	2	0	0	0	1	0	36
123	8	1	0	0	2	2	136	0	0	0	0	0	0	0	0	114	7	0	1	0	2	2	126
1551	191	42	11	2	15	21	1833	0	0	0	0	0	0	0	0	1796	198	40	5	33	10	12	2094

C => A								C => B								C => C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
0	0	0	0	0	0	0	0	3	1	0	0	1	0	0	5	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	6	4	0	0	0	1	0	11	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	20	4	0	0	1	0	0	25	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	14	7	1	0	0	0	0	22	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	43	16	1	0	2	1	0	63	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	9	5	0	0	1	0	1	16	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	14	2	0	0	0	0	0	16	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	12	2	0	0	1	0	0	15	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	12	2	1	0	0	0	0	15	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	47	11	1	0	2	0	1	62	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	6	5	1	0	1	0	0	13	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	11	6	0	0	0	0	1	18	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	13	0	3	0	1	0	0	17	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	13	7	0	1	1	1	0	23	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	43	18	4	1	3	1	1	71	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	12	1	1	0	0	2	0	16	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	10	3	0	0	1	0	1	15	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	17	5	0	0	0	0	0	22	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	22	4	1	0	0	0	0	27	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	66	14	4	0	2	0	1	87	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	22	3	0	0	1	0	0	26	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	14	1	1	0	1	0	1	18	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	21	1	0	0	0	0	0	22	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	17	3	0	1	1	0	0	22	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	18	3	0	0	1	0	0	22	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	15	2	0	0	0	0	0	17	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	66	8	0	1	2	0	0	77	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	14	5	0	0	0	0	1	20	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	14	2	0	0	0	0	0	16	0	0	0	0	0	0	0	0
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1	1	0	0	0	0	0	2	19	1	1	0	0	0	0	21	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	5	69	8	1	0	2	0	1	81	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	15	2	0	0	1	0	0	18	0	0	0	0	0	0	0	0
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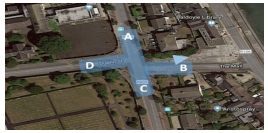
1	0	0	0	0	0	0	1	15	2	0	0	1	0	0	18	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	5	53	7	0	0	2	0	0	62	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	1	12	2	1	0	1	0	1	17	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	15	0	0	0	1	0	0	16	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	19	1	0	0	0	0	0	20	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	2	58	4	1	0	2	0	1	66	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	11	0	0	0	1	0	0	12	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	19	2	0	0	1	0	0	22	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	5	52	4	0	0	2	0	0	58	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	17	0	0	0	1	0	1	19	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	15	0	0	0	0	1	0	16	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	16	1	0	0	1	0	0	18	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	16	1	0	0	0	0	0	17	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	64	2	0	0	2	1	1	70	0	0	0	0	0	0	0	0
20	2	1	0	0	0	0	23	683	106	16	2	24	5	8	844	0	0	0	0	0	0	0	0

Survey Name :	J-389 Baldoyle
Site:	6
Date:	23.01.20
Time:	07:00-19:00
Location:	53.3965701,-6.1272106
Classification:	CAR, LGV, OGV1, OGV2, PSV, M/C, P/C.

Irish Traffic Surveys



	A => A								A => B								A => C								A => D							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
07:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	30	4	0	0	1	0	1	36	0	1	0	0	0	0	0	1
07:15	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	47	4	0	0	0	0	0	51	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	46	5	1	0	3	0	4	59	2	0	1	0	0	0	0	3
07:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	59	5	0	0	1	0	4	69	2	1	0	0	0	0	0	3
H/TOT	0	0	0	0	0	0	0	0	1	2	1	0	2	0	0	6	182	18	1	0	5	0	9	215	4	2	1	0	0	0	0	7
08:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	83	5	0	0	2	0	4	94	2	0	0	0	0	0	0	2
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	0	1	0	0	0	4	99	2	1	0	0	0	0	0	3
08:30	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	62	3	0	0	2	2	2	71	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	3	57	4	0	0	0	0	0	61	2	1	0	2	0	0	0	5
H/TOT	0	0	0	0	0	0	0	0	4	0	1	0	2	0	0	7	296	12	1	0	4	2	10	325	6	2	0	2	0	0	0	10
09:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	48	9	0	0	1	1	2	61	1	0	0	0	0	0	0	1
09:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	44	4	2	0	1	1	2	54	3	0	0	0	0	0	0	3
09:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	32	3	0	0	0	0	1	36	1	0	0	0	0	0	0	1
09:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	27	1	2	0	1	1	0	32	0	1	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4	151	17	4	0	3	3	5	183	5	1	0	0	0	0	0	6
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	2	0	0	0	0	0	34	1	0	0	0	0	0	0	1
10:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	29	4	0	0	1	0	0	34	2	0	0	0	0	0	0	2
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	3	0	0	0	0	1	28	1	0	0	0	0	0	0	1
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	4	1	0	0	0	0	36	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	116	13	1	0	1	0	1	132	4	0	0	0	0	0	0	4
11:00	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3	28	2	0	0	0	0	1	31	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	27	3	2	0	2	0	1	35	2	0	0	0	0	0	0	2
11:30	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	25	4	1	0	0	0	0	30	3	0	0	0	0	0	0	3
11:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	30	1	0	0	0	1	0	32	3	0	0	0	0	0	0	3
H/TOT	0	0	0	0	0	0	0	0	2	1	1	0	2	0	0	6	110	10	3	0	2	1	2	128	8	0	0	0	0	0	0	8
12:00	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	37	4	0	0	0	0	3	44	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	33	1	0	0	1	0	2	37	3	0	0	0	0	0	0	3
12:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	30	2	0	0	0	0	2	34	2	0	0	0	0	0	0	2
12:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	36	5	0	0	0	0	0	41	4	0	0	0	0	0	0	4
H/TOT	0	0	0	0	0	0	0	0	3	0	1	0	2	0	0	6	136	12	0	0	1	0	7	156	9	0	0	0	0	0	0	9
13:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	26	2	0	1	1	0	1	31	1	1	0	0	0	0	0	2
13:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	29	4	0	0	0	1	0	34	1	0	0	0	0	0	0	1
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	1	0	0	0	0	0	27	2	0	1	0	0	0	0	3
13:45	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	33	1	1	0	0	0	1	36	1	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5	114	8	1	1	1	1	2	128	5	1	1	0	0	0	0	7
14:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	44	3	1	0	1	0	0	49	1	0	0	0	0	0	0	1
14:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	32	2	1	0	1	0	1	37	1	0	0	0	0	0	0	1
14:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	40	6	1	0	1	0	0	48	3	2	0	0	0	0	0	5
14:45	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	50	2	0	1	1	0	0	54	1	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	5	1	0	0	1	0	0	7	166	13	3	1	4	0	1	188	6	2	0	0	0	0	0	8
15:00	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0	4	50	3	0	0	0	0	0	53	5	0	0	0	0	0	0	5
15:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	32	2	0	0	1	0	0	35	6	1	0	0	0	0	0	7
15:30	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	44	3	0	0	2	0	2	51	3	0	0	0	0	0	0	3
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	2	0	0	0	0	1	48	2	0	0	0	0	0	0	2
H/TOT	0	0	0	0	0	0	0	0	5	1	0	0	2	0	0	8	171	10	0	0	3	0	3	187	16	1	0	0	0	0	0	17
16:00	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	57	2	0	0	1	0	0	60	4	0	0	0	0	0	0	4
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	2	0	0	1	0	5	55	1	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	46	1	0	0	0	0	0	47	2	0	0	0	0	0	0	2
16:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	22	3	1	0	1	0	1	28	2	0	0	0	0	0	0	2
H/TOT	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4	172	8	1	0	3	0	6	190	9	0	0	0	0	0	0	9
17:00	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	33	3	0	0	0	0	1	37	3	0	0	0	0	0	0	3
17:15	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	48	0	0	0	1	0	0	49	4	0	0	0	0	0	0	4
17:30	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	42	0	0	0	0	0	1	43	6	0	0	0	0	0	0	6
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	2	0	0	0	1	1	54	3	0	0	0	0	0	0	3
H/TOT	0	0	0	0	0	0	0	0	7	0	0	0	2	0	0	9	173	5	0	0	1	1	3	183	16	0	0	0	0	0	0	16
18:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	40	0	0	0	1	0	0	41	5	0	0	0	0	0	0	5
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	38	2	0	0	0	0	0	0	2
18:30	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	42	1	0	0	1	0	1	45	3	1	0	0	0	0	0	4
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	0	0	0	2	0	0	40	3	1	0	0	0	1	0	5
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	2	0	1	4	158	1	0	0	4	0	1	164	13	2	0	0	0	1	0	16
12 TOT	0	0	0	0	0	0	0	0	35	5	4	0	22	0	1	67	1945	127	15	2	32	8	50	2179	101	11	2	2	0	1	0	117

B => A								B => B								B => C								B => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	12	2	0	0	0	0	0	14
1	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	13	2	0	0	0	0	0	15
3	0	0	0	1	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	17	2	0	0	0	0	1	20
9	1	0	0	2	0	0	12	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	51	6	0	0	0	0	1	58
16	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	23	3	1	0	0	0	0	27
26	1	0	0	2	0	0	29	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	19	3	0	0	0	1	0	23
23	0	1	0	1	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	2	0	0	0	0	0	29
32	1	1	0	1	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	4	1	0	0	1	0	43
97	2	2	0	4	0	0	105	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	106	12	2	0	0	2	0	122
16	1	0	0	1	0	0	18	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	38	0	0	0	0	0	0	38
11	0	0	0	1	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	4	1	0	0	0	0	46
8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	23	3	0	0	0	0	0	26
5	0	0	0	0	1	0	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	22	0	2	0	0	0	0	24
40	1	0	0	2	1	0	44	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	3	124	7	3	0	0	0	0	134
5	0	2	0	1	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	5	1	1	0	0	0	24
7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	4	0	0	0	0	0	32
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	2	3	1	0	0	1	28
8	0	1	0	1	0	0	10	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	36	7	0	0	0	0	0	43
23	0	3	0	2	0	0	28	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	102	18	4	2	0	0	1	127
7	1	0	0	1	1	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	4	0	0	0	0	1	29
7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	3	2	0	0	0	0	19
7	2	0	0	0	1	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	6	2	0	0	0	1	32
7	2	0	0	0	0	0	9	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	29	2	2	0	0	1	0	34
28	5	0	0	1	2	0	36	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	90	15	6	0	0	1	2	114
15	1	0	0	1	0	0	17	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	25	6	1	0	0	0	1	33
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	24	2	0	0	0	0	0	26
11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	33	3	3	0	2	0	1	42
10	0	0	0	1	0	0	11	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	36	8	1	0	0	0	0	45
39	1	0	0	2	0	0	42	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7	118	19	5	0	2	0	2	146
7	1	1	0	1	0	0	10	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	24	4	0	1	0	1	0	30
11	2	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	2	0	0	0	0	1	28
4	0	1	0	1	0	0	6	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3	22	7	0	0	0	0	0	29
9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	5	0	1	0	0	0	41
31	3	2	0	2	0	0	38	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4	106	18	0	2	0	1	1	128
6	0	0	0	1	0	0	7	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	31	6	2	0	0	0	0	39
6	0	1	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	3	0	0	0	1	1	30
12	1	0	0	1	0	0	14	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	39	5	0	0	0	0	1	45
11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	30	4	0	1	0	0	0	35
35	1	1	0	2	0	0	39	1	0	0	0	0	0	0	1	4	0	0	0	0	0	0	4	125	18	2	1	0	1	2	149
15	1	1	1	0	0	0	18	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3	31	4	1	0	0	1	0	37
7	5	0	0	1	0	0	13	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	28	1	0	0	1	0	0	30
14	1	1	0	1	0	0	17	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	33	3	1	0	0	0	0	37
22	1	0	0	2	0	0	25	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	39	5	0	0	0	0	0	44
58	8	2	1	4	0	0	73	1	0	0	0	0	0	0	1	6	0	0	0	0	0	0	6	131	13	2	0	1	1	0	148
33	4	1	0	1	0	0	39	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	30	2	1	0	0	0	0	33
26	7	0	0	1	0	0	34	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	30	9	0	0	0	1	0	40
8	4	0	0	1	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	2	1	0	0	1	0	19
14	5	0	0	0	0	0	19	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	31	7	0	0	0	0	0	38
81	20	1	0	3	0	0	105	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	106	20	2	0	0	2	0	130
22	2	0	0	3	0	0	27	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	22	6	1	0	0	0	0	29
10	4	0	0	0	1	0	15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	26	6	0	0	0	0	1	33
11	0	0	0	1	0	0	12	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	22	2	0	0	0	1	0	25
9	0	0	0	0	1	0	10	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	26	3	0	0	0	0	1	30
52	6	0	0	4	2	0	64	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	96	17	1	0	0	1	2	117
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	17	2	0	0	0	0	0	19
5	1	0	0	1	0	0	7	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	21	1	0	0	0	0	0	22
10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	21	2	0	0	0	1	0	24
8	0	0	0	1	0	0	9	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	24	2	0	0	0	0	0	26
28	1	0	0	2	0	0	31	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10	83	7	0	0	0	1	0	91
521	49	11	1	30	5	0	617	2	0	0	0	0	0	0	2	51	4	0	0	0	0	1	56	1238	170	27	5	3	10	11	1464

C => A								C => B								C => C								C => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	12
17	1	0	0	2	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	2	0	0	0	0	1	16
17	1	0	0	1	0	0	19	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15
43	2	2	0	2	0	0	49	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	32
86	5	2	0	5	0	0	98	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	70	4	0	0	0	0	1	75
44	1	0	0	1	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	4	1	0	1	0	0	41
36	0	1	0	0	0	1	38	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	24	4	0	0	0	0	0	28
47	0	0	0	1	0	0	48	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	26	2	0	0	1	0	1	30
47	2	0	0	0	0	0	49	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	57	3	1	1	0	0	1	63
174	3	1	0	2	0	1	181	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	142	13	2	1	2	0	2	162
56	1	0	0	1	0	0	58	1	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	52	4	0	0	1	0	0	57
31	3	0	0	1	0	1	36	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	20	3	0	1	0	0	1	25
25	2	0	0	0	0	0	27	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	26	9	0	0	1	0	0	36
28	4	3	0	1	0	0	36	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	32	3	0	0	0	0	0	35
140	10	3	0	3	0	1	157	3	0	2	1	0	0	0	6	0	0	0	0	0	0	0	0	130	19	0	1	2	0	1	153
17	3	1	0	0	0	0	21	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	20	4	0	0	0	0	1	25
27	5	1	0	0	0	1	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	3	0	0	0	1	1	37
35	6	0	0	0	1	1	43	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	30	3	0	0	0	0	0	33
31	2	0	0	1	0	1	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	3	0	0	0	0	0	38
110	16	2	0	1	1	3	133	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	117	13	0	0	0	1	2	133
19	2	0	0	0	0	0	21	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	25	4	1	0	0	0	2	32
25	1	0	0	0	0	3	29	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	35	3	1	0	0	1	0	40
29	4	1	0	1	0	1	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	3	1	0	0	0	0	34
32	3	3	0	1	0	1	40	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	44	5	0	0	0	0	0	49
105	10	4	0	2	0	5	126	4	1	1	0	0	0	0	6	0	0	0	0	0	0	0	0	134	15	3	0	0	1	2	155
29	4	0	0	0	0	0	33	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	31	0	1	0	0	0	0	32
24	2	0	0	0	0	1	27	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	19	2	0	0	0	0	0	21
39	4	1	1	0	1	0	46	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	31	9	2	0	0	0	0	42
30	7	1	0	1	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	5	0	0	0	0	1	37
122	17	2	1	1	1	1	145	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	112	16	3	0	0	0	1	132
33	3	0	0	1	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	3	1	0	0	0	0	38
32	5	0	0	1	0	1	39	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	34	4	1	0	0	0	0	39
30	3	0	0	0	1	1	35	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	29	3	2	0	0	0	1	35
51	2	1	1	2	0	2	59	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	40	8	1	0	0	0	0	49
146	13	1	1	4	1	4	170	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	137	18	5	0	0	0	1	161
39	3	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	5	0	0	0	0	0	32
40	3	1	0	1	1	0	46	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	39	2	1	0	0	0	1	43
35	1	2	0	0	0	0	38	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	36	3	1	0	0	1	0	41
58	5	1	0	1	0	2	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	2	0	1	1	0	2	60
172	12	4	0	2	1	2	193	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	156	12	2	1	1	1	3	176
43	6	1	0	1	0	1	52	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	49	3	3	0	0	0	1	56
34	5	2	1	3	1	2	48	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	35	3	0	0	1	0	1	40
50	1	2	0	0	1	1	55	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	30	2	1	0	0	0	0	33
53	6	1	0	1	0	0	61	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	42	4	0	0	1	0	1	48
180	18	6	1	5	2	4	216	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	156	12	4	0	2	0	3	177
63	3	0	0	3	1	0	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	7	1	0	1	0	0	59
60	4	1	0	0	0	0	65	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	36	2	0	0	0	1	0	39
53	5	0	0	1	0	0	59	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	28	2	0	0	0	0	0	30
56	4	0	0	2	0	0	62	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	43	4	0	0	0	0	2	49
232	16	1	0	6	1	0	256	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	157	15	1	0	1	1	2	177
69	2	0	0	0	0	2	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	3	0	0	0	0	0	31
72	4	0	0	0	0	1	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	3	0	0	0	0	1	50
74	3	0	0	1	1	0	79	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	41	6	0	0	1	0	0	48
57	2	0	0	1	0	0	60	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	50	2	0	0	0	0	0	52
272	11	0	0	2	1	3	289	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	165	14	0	0	1	0	1	181
64	2	0	0	1	1	2	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	6	0	0	1	0	0	45
60	1	0	0	2	0	6	69	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	39	2	0	0	0	1	0	42
60	2	0	0	0	0	0	62	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	26	2	0	0	0	0	0	28
69	1	0	0	0	1	0	71	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	47	1	0	0	0	0	1	49
253	6	0	0	3	2	8	272	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	150	11	0	0	1	1	1	164
1992	137	26	3	36	10	32	2236	58	4	3	1	0	0	0	66	0	0	0	0	0	0	0	0	1626	162	20	3	10	5	20	1846

D => A								D => B								D => C								D => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
0	0	1	0	0	0	0	1	4	1	0	0	0	0	0	5	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0
0	1	1	0	0	0	0	2	5	5	0	0	0	1	1	12	14	3	0	0	0	0	0	17	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	12	5	0	0	0	0	1	18	14	0	0	0	0	0	1	15	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	9	6	1	0	0	0	0	16	27	1	1	0	0	0	0	29	0	0	0	0	0	0	0	0
5	1	2	0	0	0	0	8	30	17	1	0	0	1	2	51	67	5	1	0	0	0	1	74	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	13	5	0	0	0	0	1	19	29	5	0	0	1	0	2	37	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	5	11	2	0	0	0	0	0	13	22	2	0	0	0	0	4	28	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	12	5	3	0	0	0	0	0	8	36	0	0	0	0	1	4	41	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	9	2	0	0	0	0	0	11	18	4	0	0	0	0	1	23	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	20	38	12	0	0	0	0	1	51	105	11	0	0	1	1	11	129	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	5	6	5	0	0	0	0	0	11	23	4	0	0	0	0	1	28	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	9	4	0	0	0	0	1	14	41	5	0	0	0	0	0	46	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	12	0	1	2	0	0	0	15	11	4	0	0	0	0	0	15	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	13	7	0	0	0	0	1	21	26	2	0	0	0	0	0	28	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	10	40	16	1	2	0	0	2	61	101	15	0	0	0	0	1	117	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	5	14	1	1	0	0	2	0	18	20	2	1	0	0	0	0	23	0	0	0	0	0	0	0	0
0	2	1	0	0	0	0	3	9	3	1	0	0	0	1	14	14	4	0	0	0	0	0	18	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	6	14	1	0	0	0	0	0	15	14	2	0	0	0	1	0	17	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	16	6	0	0	0	0	0	22	26	2	1	0	1	0	0	30	0	0	0	0	0	0	0	0
14	2	1	0	0	0	0	17	53	11	2	0	0	2	1	69	74	10	2	0	1	1	0	88	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	16	3	0	0	0	0	1	20	26	6	1	0	0	0	0	33	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	17	4	0	0	0	0	0	21	20	4	0	0	0	0	0	24	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	14	2	1	0	0	0	0	17	22	5	0	0	0	0	0	27	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	5	16	5	1	0	0	0	0	22	28	3	0	0	0	0	0	31	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	9	63	14	2	0	0	0	1	80	96	18	1	0	0	0	0	115	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	22	3	0	0	0	0	0	25	26	3	0	0	0	0	0	29	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	7	0	0	0	0	0	0	7	25	1	0	0	0	0	1	27	0	0	0	0	0	0	0	0
2	0	0	0	0	0	1	3	15	1	0	1	0	0	0	17	25	3	0	0	0	0	0	28	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	20	1	0	0	0	0	0	21	22	3	0	0	0	1	0	26	0	0	0	0	0	0	0	0
8	0	0	0	0	0	1	9	64	5	0	1	0	0	0	70	98	10	0	0	0	1	1	110	0	0	0	0	0	0	0	0
5	2	0	0	0	0	0	7	20	3	0	1	0	0	0	24	27	5	1	0	0	0	0	33	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	16	3	0	0	0	0	0	19	28	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	19	2	0	0	0	0	0	21	23	3	1	0	0	0	0	27	0	0	0	0	0	0	0	0
1	0	1	0	0	0	0	2	15	0	0	0	0	0	0	15	25	2	2	0	0	0	0	29	0	0	0	0	0	0	0	0
11	2	1	0	0	0	0	14	70	8	0	1	0	0	0	79	103	10	4	0	0	0	0	117	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	10	6	0	0	0	1	1	18	25	3	0	0	0	0	0	28	0	0	0	0	0	0	0	0
3	1	0	0	0	0	0	4	14	1	0	0	0	0	0	15	28	4	0	0	0	0	0	32	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	23	0	0	0	1	0	0	24	38	4	1	0	0	0	0	43	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	17	1	1	0	0	0	0	19	38	2	1	0	0	0	0	41	0	0	0	0	0	0	0	0
11	1	0	0	0	0	0	12	64	8	1	0	1	1	1	76	129	13	2	0	0	0	0	144	0	0	0	0	0	0	0	0
7	1	0	0	0	0	0	8	7	1	0	0	0	0	0	8	34	2	0	0	1	0	0	37	0	0	0	0	0	0	0	0
5	0	1	0	0	0	0	6	13	1	0	0	0	0	0	14	35	4	0	0	1	0	0	40	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	7	15	2	0	0	0	0	0	17	38	3	0	0	1	0	0	42	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	5	2	0	0	0	0	0	7	36	2	1	0	0	0	0	39	0	0	0	0	0	0	0	0
21	1	1	0	0	0	0	23	40	6	0	0	0	0	0	46	143	11	1	0	3	0	0	158	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	12	2	1	0	0	0	1	16	28	1	0	0	1	1	0	31	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	11	39	1	0	0	0	0	0	40	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	13	0	0	0	0	0	0	13	20	2	0	0	0	0	0	22	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	17	1	0	0	0	0	0	18	34	3	0	0	0	0	0	37	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	6	52	4	1	0	0	0	1	58	121	7	0	0	1	1	0	130	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	36	5	0	0	0	0	0	41	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	14	1	0	0	0	0	0	15	41	2	0	0	0	0	0	43	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	6	15	1	0	0	0	0	0	16	36	2	0	0	0	0	0	38	0	0	0	0	0	0	0	0
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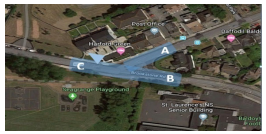
14	0	0	0	0	0	0	14	49	3	0	0	0	0	0	52	140	11	0	0	0	0	0	151	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	19	0	0	0	0	0	0	19	32	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	14	0	0	0	0	1	0	15	33	2	0	0	0	0	0	35	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	8	16	1	0	0	0	0	0	17	35	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	13	1	0	0	0	0	0	14	25	2	0	0	0	0	0	27	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	14	62	2	0	0	0	1	0	65	125	4	0	0	0	0	0	129	0	0	0	0	0	0	0	0
143	7	5	0	0	0	1	156	625	106	8	4	1	5	9	758	1302	125	11	0	6	4	14	1462	0	0	0	0	0	0	0	0

Survey Name :	J-389 Baldoyle
Site:	7
Date:	23.01.20
Time:	07:00-19:00
Location:	53.3969546,-6.1352417
Classification:	CAR, LGV, OGV1, OGV2, PSV, M/C, P/C.

Irish Traffic Surveys



	A => A								A => B								A => C							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	1	0	0	17
07:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	13	0	0	0	1	0	0	14
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	1	0	0	1	0	0	21
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	2	0	0	1	0	0	33
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	78	3	0	0	4	0	0	85
08:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	33	2	0	0	1	0	1	37
08:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	43	2	0	0	1	0	0	46
08:30	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	41	0	3	0	1	0	0	45
08:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	42	3	0	0	1	0	0	46
H/TOT	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	159	7	3	0	4	0	1	174
09:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	36	2	1	0	2	0	0	41
09:15	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6	23	2	2	0	1	0	0	28
09:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	25	2	5	0	1	0	0	33
09:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	26	6	0	0	0	0	0	32
H/TOT	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	13	110	12	8	0	4	0	0	134
10:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	21	3	2	0	1	0	0	27
10:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	16	2	0	0	1	0	0	19
10:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	22	1	2	0	1	0	0	26
10:45	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	28	5	0	0	0	0	0	33
H/TOT	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9	87	11	4	0	3	0	0	105
11:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	18	5	0	0	1	0	0	24
11:15	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	13	3	0	0	1	0	1	18
11:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	16	5	1	0	1	0	0	23
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	4	3	0	0	0	0	40
H/TOT	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4	80	17	4	0	3	0	1	105
12:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	21	3	0	0	1	1	0	26
12:15	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4	25	5	1	1	1	0	0	33
12:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	36	2	1	0	1	0	0	40
12:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	26	2	0	0	0	0	0	28
H/TOT	0	0	0	0	0	0	0	0	5	3	0	0	0	0	0	8	108	12	2	1	3	1	0	127
13:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	26	8	0	0	1	0	1	36
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	3	0	0	1	0	0	21
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	3	1	0	3	0	1	39
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	2	0	0	0	0	1	38
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	109	16	1	0	5	0	3	134
14:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	25	2	1	0	1	1	2	32
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	4	0	0	1	1	0	30
14:30	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	27	4	2	0	1	0	0	34
14:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	35	2	2	0	0	0	0	39
H/TOT	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	111	12	5	0	3	2	2	135
15:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	30	3	0	0	1	0	0	34
15:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	18	3	2	1	1	0	0	25
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	3	1	1	1	0	0	49
15:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	30	2	1	0	0	1	0	34
H/TOT	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	121	11	4	2	3	1	0	142
16:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	24	5	0	0	1	0	0	30
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	4	1	0	1	0	0	49
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	4	0	0	0	0	0	32
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	2	0	0	1	0	2	43
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	133	15	1	0	3	0	2	154
17:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	22	3	0	0	1	0	1	27
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	4	0	0	1	0	1	51
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	1	0	0	1	0	0	43
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	1	0	0	0	1	0	35
H/TOT	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	141	9	0	0	3	1	2	156
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	2	0	0	2	0	1	32
18:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	19	1	0	0	1	0	0	21
18:30	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	37	4	0	0	1	0	1	43
18:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	19	2	0	0	2	0	1	24
H/TOT	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10	102	9	0	0	6	0	3	120
12 TOT	0	0	0	0	0	0	0	0	58	9	0	0	0	0	0	67	1339	134	32	3	44	5	14	1571

B => A								B => B								B => C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	26
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	35	2	0	0	0	0	0	37
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	1	38
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	3	1	0	0	0	0	60
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	154	5	1	0	0	0	1	161
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	6	2	0	1	0	1	77
2	2	1	0	0	0	0	5	0	0	0	0	0	0	0	0	63	5	0	0	0	1	0	69
6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	96	7	2	0	2	0	0	107
5	2	0	0	0	0	0	7	0	0	0	0	0	0	0	0	94	11	3	0	0	0	0	108
13	4	1	0	0	0	0	18	0	0	0	0	0	0	0	0	320	29	7	0	3	1	1	361
7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	100	3	0	0	1	0	1	105
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	62	8	0	1	0	0	0	71
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	61	12	1	0	1	0	0	75
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	6	1	0	0	1	0	62
11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	277	29	2	1	2	1	1	313
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	9	1	1	0	0	1	56
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	60	7	1	0	0	1	1	70
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	54	4	2	1	0	0	1	62
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	72	12	0	0	0	0	0	84
8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	230	32	4	2	0	1	3	272
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	57	8	1	0	0	0	1	67
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	48	9	2	0	0	1	0	60
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5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	234	35	10	0	0	2	2	283
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14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	286	31	5	0	1	2	5	330
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	82	9	3	0	0	1	2	97
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	63	6	1	0	2	1	0	73
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9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	309	28	6	0	3	2	3	351
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1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	63	11	0	0	0	1	1	76
4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	53	8	1	0	0	2	0	64
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	70	12	0	0	0	0	0	82
8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	264	40	3	0	1	3	6	317
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11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	241	30	1	0	1	1	1	275
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2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	85	5	0	0	0	1	0	91
4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	65	7	0	0	0	0	1	73
13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0	260	21	1	0	1	1	1	285
98	8	1	0	0	0	0	107	0	0	0	0	0	0	0	0	3061	356	54	4	14	16	28	3533

C => A								C => B								C => C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
16	2	0	0	0	0	0	18	15	1	0	0	0	1	0	17	0	0	0	0	0	0	0	0
18	1	1	0	3	0	0	23	17	3	0	0	0	0	0	20	0	0	0	0	0	0	0	0
35	1	0	0	1	0	0	37	31	4	1	0	0	1	0	37	0	0	0	0	0	0	0	0
26	4	1	0	1	0	0	32	30	5	0	0	0	0	1	36	0	0	0	0	0	0	0	0
95	8	2	0	5	0	0	110	93	13	1	0	0	2	1	110	0	0	0	0	0	0	0	0
47	6	1	0	0	0	0	54	35	9	0	0	1	0	0	45	0	0	0	0	0	0	0	0
57	9	1	0	2	0	0	69	54	2	2	0	1	0	1	60	0	0	0	0	0	0	0	0
58	4	2	0	0	0	0	64	61	5	0	0	0	1	0	67	0	0	0	0	0	0	0	0
38	5	2	0	2	0	0	47	50	7	0	0	0	0	4	61	0	0	0	0	0	0	0	0
200	24	6	0	4	0	0	234	200	23	2	0	2	1	5	233	0	0	0	0	0	0	0	0
37	9	4	0	0	1	2	53	55	9	3	0	0	0	1	68	0	0	0	0	0	0	0	0
47	4	1	0	0	2	0	54	35	6	0	0	0	0	0	41	0	0	0	0	0	0	0	0
29	4	0	0	0	1	0	34	20	3	1	0	0	0	0	24	0	0	0	0	0	0	0	0
35	5	2	0	1	0	0	43	35	6	0	0	0	2	1	44	0	0	0	0	0	0	0	0
148	22	7	0	1	4	2	184	145	24	4	0	0	2	2	177	0	0	0	0	0	0	0	0
44	8	1	0	0	0	0	53	32	2	2	0	0	1	0	37	0	0	0	0	0	0	0	0
36	11	0	0	1	0	0	48	21	8	4	0	0	0	1	34	0	0	0	0	0	0	0	0
35	4	1	0	0	0	0	40	30	4	1	0	0	1	0	36	0	0	0	0	0	0	0	0
47	3	2	1	1	0	0	54	39	10	1	0	1	1	0	52	0	0	0	0	0	0	0	0
162	26	4	1	2	0	0	195	122	24	8	0	1	3	1	159	0	0	0	0	0	0	0	0
33	5	2	0	0	0	0	40	46	9	1	0	0	0	0	56	0	0	0	0	0	0	0	0
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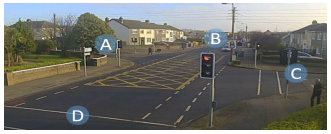
37	8	2	0	1	0	0	48	36	6	3	0	0	0	0	45	0	0	0	0	0	0	0	0
34	4	0	0	0	0	0	38	47	6	3	0	0	0	1	57	0	0	0	0	0	0	0	0
140	24	5	0	2	0	0	171	164	29	7	0	0	0	1	201	0	0	0	0	0	0	0	0
44	4	0	0	1	0	0	49	46	6	1	0	0	0	0	53	0	0	0	0	0	0	0	0
49	2	1	0	1	0	0	53	32	5	0	0	0	0	0	37	0	0	0	0	0	0	0	0
34	3	3	0	1	1	0	42	43	4	0	0	0	0	0	47	0	0	0	0	0	0	0	0
50	9	1	1	3	0	0	64	42	8	1	0	0	1	1	53	0	0	0	0	0	0	0	0
177	18	5	1	6	1	0	208	163	23	2	0	0	1	1	190	0	0	0	0	0	0	0	0
51	5	0	0	3	1	0	60	47	7	2	0	0	0	0	56	0	0	0	0	0	0	0	0
46	1	1	0	0	0	0	48	42	4	1	0	0	0	0	47	0	0	0	0	0	0	0	0
50	7	1	0	1	0	0	59	46	5	0	0	0	0	0	51	0	0	0	0	0	0	0	0
53	5	2	1	1	0	0	62	45	2	1	0	0	0	0	48	0	0	0	0	0	0	0	0
200	18	4	1	5	1	0	229	180	18	4	0	0	0	0	202	0	0	0	0	0	0	0	0
46	1	1	0	1	0	0	49	38	8	0	0	0	0	0	46	0	0	0	0	0	0	0	0
57	6	0	0	2	0	0	65	55	5	0	0	0	0	0	60	0	0	0	0	0	0	0	0
56	7	0	0	1	0	0	64	53	2	1	0	1	0	0	57	0	0	0	0	0	0	0	0
53	9	0	0	1	0	0	63	46	3	2	0	0	0	0	51	0	0	0	0	0	0	0	0
212	23	1	0	5	0	0	241	192	18	3	0	1	0	0	214	0	0	0	0	0	0	0	0
55	7	0	0	0	0	0	62	52	4	0	0	1	0	0	57	0	0	0	0	0	0	0	0
63	2	0	0	2	0	0	67	75	4	1	0	1	0	0	81	0	0	0	0	0	0	0	0
50	7	0	0	0	0	0	57	54	4	1	0	1	0	0	60	0	0	0	0	0	0	0	0
50	8	0	0	1	0	0	59	57	3	2	0	1	0	0	63	0	0	0	0	0	0	0	0
218	24	0	0	3	0	0	245	238	15	4	0	4	0	0	261	0	0	0	0	0	0	0	0
50	5	0	0	1	0	1	57	57	6	0	0	0	1	0	64	0	0	0	0	0	0	0	0
64	4	1	0	2	1	1	73	36	3	0	0	0	0	0	39	0	0	0	0	0	0	0	0
57	4	0	0	1	0	0	62	40	3	0	0	0	0	1	44	0	0	0	0	0	0	0	0
70	5	0	0	1	0	0	76	61	5	0	0	0	0	0	66	0	0	0	0	0	0	0	0
241	18	1	0	5	1	2	268	194	17	0	0	0	1	1	213	0	0	0	0	0	0	0	0
73	5	0	0	0	0	0	78	60	4	0	0	0	1	0	65	0	0	0	0	0	0	0	0
71	2	0	0	1	1	0	75	53	5	0	0	0	0	0	58	0	0	0	0	0	0	0	0
78	2	0	0	2	0	0	82	56	3	1	0	0	0	0	60	0	0	0	0	0	0	0	0
62	1	0	0	0	0	0	63	46	6	0	0	0	0	0	52	0	0	0	0	0	0	0	0
284	10	0	0	3	1	0	298	215	18	1	0	0	1	0	235	0	0	0	0	0	0	0	0
83	3	0	0	1	0	0	87	58	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0
54	1	0	0	1	0	0	56	61	1	0	0	0	0	0	62	0	0	0	0	0	0	0	0
43	3	0	0	0	1	1	48	42	2	0	0	0	0	0	44	0	0	0	0	0	0	0	0
52	1	0	0	0	2	0	55	60	1	0	0	0	1	0	62	0	0	0	0	0	0	0	0
232	8	0	0	2	3	1	246	221	4	0	0	0	1	0	226	0	0	0	0	0	0	0	0
2309	223	35	3	43	11	5	2629	2127	226	36	0	8	12	12	2421	0	0	0	0	0	0	0	0

Survey Name :	J-389 Baldoyle
Site:	8
Date:	23.01.20
Time:	07:00-19:00
Location:	53.3970443,-6.1431692
Classification:	CAR, LGV, OGV1, OGV2, PSV, M/C, P/C.

Irish Traffic Surveys



	A => A								A => B								A => C								A => D							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
07:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9
07:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	10	0	0	0	0	0	0	10
07:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	5	1	0	0	0	0	0	6	15	1	0	0	0	0	0	16
07:45	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	2	0	0	0	0	0	0	2	18	3	0	0	0	0	0	21
H/TOT	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	8	1	0	0	0	0	0	9	51	5	0	0	0	0	0	56
08:00	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	11	4	0	0	0	0	0	0	4	17	1	0	0	0	0	0	18
08:15	0	0	0	0	0	0	0	0	17	1	0	0	0	0	0	18	2	0	0	0	0	0	0	2	17	0	0	0	0	0	0	17
08:30	0	0	0	0	0	0	0	0	12	1	0	0	0	0	1	14	1	0	0	0	0	0	0	1	13	2	0	0	0	0	0	15
08:45	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10	3	0	0	0	0	0	0	3	9	1	0	0	0	0	0	10
H/TOT	0	0	0	0	0	0	0	0	49	3	0	0	0	0	1	53	10	0	0	0	0	0	0	10	56	4	0	0	0	0	0	60
09:00	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	1	0	0	0	0	0	0	1	15	2	0	0	0	0	0	17
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H/TOT	0	0	0	0	0	0	0	0	26	1	0	0	0	0	0	27	3	0	0	0	0	0	0	3	58	3	0	0	0	0	0	61
10:00	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10
10:15	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7
10:30	0	0	0	0	0	0	0	0	7	0	1	0	0	0	0	8	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12
10:45	0	0	0	0	0	0	0	0	8	1	1	0	0	0	0	10	1	0	0	0	0	0	0	1	13	2	0	0	0	0	0	15
H/TOT	0	0	0	0	0	0	0	0	22	2	2	0	0	0	0	26	1	0	0	0	0	0	0	1	41	3	0	0	0	0	0	44
11:00	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	0	2	0	0	0	0	0	2	3	0	0	0	0	0	0	3
11:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10
11:30	0	0	0	0	0	0	0	0	7	2	0	0	0	0	0	9	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9
11:45	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	1	0	0	0	0	0	0	1	10	1	0	0	0	0	0	11
H/TOT	0	0	0	0	0	0	0	0	14	3	0	0	0	0	0	17	1	2	0	0	0	0	0	3	30	3	0	0	0	0	0	33
12:00	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	7	2	0	0	0	0	0	9
12:15	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8
12:30	0	0	0	0	0	0	0	0	4	1	1	0	0	0	0	6	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8
12:45	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7	1	0	0	0	0	0	0	1	8	0	0	0	0	0	0	8
H/TOT	0	0	0	0	0	0	0	0	22	2	1	0	0	0	0	25	1	0	0	0	0	0	0	1	29	4	0	0	0	0	0	33
13:00	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	6
13:15	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9
13:30	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	3	1	0	1	0	0	0	5
13:45	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	18	0	0	0	0	0	1	19
H/TOT	0	0	0	0	0	0	0	0	36	1	0	0	0	0	0	37	0	0	0	0	0	0	0	0	32	5	0	1	0	0	1	39
14:00	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8
14:15	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
14:30	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	7	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
14:45	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6	1	0	0	0	0	0	0	1	7	1	0	0	0	0	0	8
H/TOT	0	0	0	0	0	0	0	0	33	4	0	0	0	0	0	37	1	0	0	0	0	0	0	1	21	2	0	0	0	0	0	23
15:00	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5
15:15	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	2	0	0	0	0	0	0	2	5	0	0	0	0	0	0	5
15:30	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4
15:45	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
H/TOT	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	31	2	0	0	0	0	0	0	2	17	2	0	0	0	0	0	19
16:00	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6
16:15	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9
16:30	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	1	0	0	0	0	0	0	1	5	0	0	0	0	0	0	5
16:45	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
H/TOT	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	25	1	0	0	0	0	0	0	1	21	1	0	0	0	0	0	22
17:00	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	6
17:15	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	3	0	0	0	0	0	0	3	7	1	0	0	0	0	0	8
17:30	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
17:45	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	1	0	0	0	0	0	0	1	8	1	0	0	0	0	0	9
H/TOT	0	0	0	0	0	0	0	0	27	1	0	0	0	0	0	28	4	0	0	0	0	0	0	4	27	4	0	0	0	0	0	31
18:00	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8
18:15	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10
18:30	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	13
18:45	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	2	0	0	0	0	0	0	2	22	1	0	0	0	0	0	23
H/TOT	0	0	0	0	0	0	0	0	30	1	0	0	0	0	0	31	2	0	0	0	0	0	0	2	50	4	0	0	0	0	0	54
12 TOT	0	0	0	0	0	0	0	0	327	18	3	0	0	0	1	349	34	3	0	0	0	0	0	37	433	40	0	1	0	0	1	475

B => A								B => B								B => C								B => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	2	0	0	1	0	0	52
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	56	1	0	0	1	0	1	59
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	1	0	0	1	0	0	58
2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	4	1	0	1	0	0	92
7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	247	8	1	0	4	0	1	261
3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	91	8	3	0	2	1	1	106
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107	7	0	1	1	1	0	117
4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	7	1	0	3	0	0	127
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	8	4	0	1	1	3	115
15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	412	30	8	1	7	3	4	465
8	0	1	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	10	0	0	3	0	1	116
7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	85	7	0	0	1	0	0	93
3	2	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	15	3	2	2	0	0	112
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	84	9	3	0	0	0	0	96
19	3	1	0	0	0	0	23	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	5	361	41	6	2	6	0	1	417
7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	14	3	1	1	0	1	87
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	9	2	0	1	0	0	74
6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	75	5	4	1	0	0	0	85
3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4	91	15	0	0	1	0	1	108
17	2	0	0	0	0	0	19	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	5	295	43	9	2	3	0	2	354
6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	9	1	1	1	0	0	84
2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	56	15	2	0	1	0	1	75
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4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	87	10	8	0	1	1	1	108
17	1	0	0	0	0	0	18	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	290	50	14	1	3	2	3	363
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	76	11	1	0	1	2	1	92
6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	63	8	2	1	1	0	0	75
8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	82	13	5	0	2	0	0	102
4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	84	17	0	0	1	0	1	103
23	1	0	0	0	0	0	24	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	7	305	49	8	1	5	2	2	372
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7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	10	1	0	1	1	0	89
8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	12	4	0	3	0	1	91
4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	85	12	1	1	0	0	0	99
23	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	319	46	9	1	5	2	5	387
8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	15	2	0	1	1	2	107
6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	65	9	2	0	0	2	2	80
6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	94	17	3	0	2	1	0	117
8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	99	4	3	1	1	0	0	108
28	3	0	0	0	0	0	31	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	344	45	10	1	4	4	4	412
7	0	0	0	0	1	0	8	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	100	11	2	0	1	0	2	116
10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	5	3	0	2	2	2	83
13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	91	9	3	2	1	0	0	106
9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	85	7	0	0	2	1	0	95
39	0	0	0	0	1	0	40	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	345	32	8	2	6	3	4	400
14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99	11	2	0	1	0	0	113
14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96	15	1	0	1	0	3	116
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	72	14	2	0	0	2	1	91
9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	87	16	0	0	1	0	0	104
42	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	354	56	5	0	3	2	4	424
11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	63	7	0	0	1	0	1	72
8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	76	15	0	0	1	0	2	94
11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	99	8	0	0	1	0	0	108
10	0	0	0	0	0	1	11	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	81	6	0	0	2	0	1	90
40	1	0	0	0	0	1	42	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	319	36	0	0	5	0	4	364
12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	93	6	0	0	2	0	2	103
7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	63	3	0	0	1	0	0	67
14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96	8	1	0	2	1	2	110
7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	75	10	0	0	2	0	1	88
40	2	0	0	0	0	0	42	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	327	27	1	0	7	1	5	368
310	15	1	0	0	1	1	328	0	0	0	0	0	0	0	0	45	7	1	0	0	0	0	53	3918	463	79	11	58	19	39	4587

C => A								C => B								C => C								C => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
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	0	0	0	0	0	0	6
0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	9	0	0	0	0	0	1	10
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7
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	2	0	0	0	0	0	8
0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	27	3	0	0	0	0	1	31
1	0	0	0	0	0	0	1	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	8	2	0	0	0	0	0	10
0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	16
1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	12	1	0	0	0	1	0	14
3	0	0	0	0	0	0	3	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	7	2	0	0	0	0	1	10
5	0	0	0	0	0	0	5	18	1	0	0	0	0	0	19	0	0	0	0	0	0	0	0	43	5	0	0	0	1	1	50
1	0	0	0	0	0	0	1	2	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0	8	0	0	1	0	0	0	9
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2	0	0	0	0	0	0	2	9	2	0	0	0	0	0	11	0	0	0	0	0	0	0	0	30	2	0	2	0	0	1	35
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1	0	0	0	0	0	0	1	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	7	1	1	0	0	0	0	9
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1	0	1	0	0	0	0	2	10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0	27	4	2	0	0	0	0	33
0	1	0	0	0	0	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	8	2	0	0	0	0	0	10
1	0	0	0	0	0	0	1	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9
2	1	0	0	0	0	0	3	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	23	3	0	0	0	0	0	26
0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4	3	0	0	0	0	1	8
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15
1	0	0	0	0	0	1	2	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	27	5	0	0	0	0	1	33
0	1	0	0	0	0	0	1	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	6	2	1	0	0	0	0	9
1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10
0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6
1	1	0	0	0	0	0	2	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	26	5	1	0	0	0	0	32
0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8
0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	5
1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	1	1	0	0	0	0	7
2	0	0	0	0	0	0	2	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	24	4	1	0	0	0	0	29
1	0	0	0	0	0	0	1	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	4	1	0	0	0	1	0	6
0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
1	0	0	0	0	0	0	1	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
3	0	0	0	0	0	0	3	17	2	0	0	0	0	0	19	0	0	0	0	0	0	0	0	19	2	0	0	0	1	0	22
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0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	5	1	0	0	0	1	0	7
1	0	0	0	0	0	0	1	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	12
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	0	0	0	0	0	0	7
1	0	0	0	0	0	0	1	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	27	3	0	0	0	1	0	31
1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7
0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5
6	0	0	0	0	0	0	6	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7
4	0	0	0	0	0	0	4	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	6	0	0	0	0	0	1	7
11	0	0	0	0	0	0	11	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	23	2	0	0	0	0	1	26
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7
2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8
0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	8	3	0	0	0	0	0	11
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8
2	1	0	0	0	0	0	3	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	29	5	0	0	0	0	0	34
31	3	1	0	0	0	1	36	115	7	0	0	0	0	0	122	0	0	0	0	0	0	0	0	325	43	4	2	0	3	5	382

D => A								D => B								D => C								D => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
1	0	0	0	0	0	0	1	35	3	0	0	0	0	0	38	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	33	3	0	0	3	0	0	39	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	6	58	6	1	0	1	0	0	66	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	54	11	1	0	1	0	0	67	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	13	180	23	2	0	5	0	0	210	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	66	16	3	0	1	0	0	86	3	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	87	11	0	0	3	0	0	101	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	101	15	3	0	0	1	3	123	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
5	1	0	0	0	0	0	6	65	13	2	1	1	0	5	87	1	2	0	0	0	0	1	4	0	0	0	0	0	0	0	0
14	1	0	0	0	0	0	15	319	55	8	1	5	1	8	397	7	3	0	0	0	0	4	14	0	0	0	0	0	0	0	0
8	1	0	0	0	0	0	9	70	18	4	0	0	0	0	92	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	10	61	11	0	0	2	0	0	74	3	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	45	12	2	1	1	0	0	61	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	53	14	1	0	1	2	2	73	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
23	1	0	0	0	0	0	24	229	55	7	1	4	2	2	300	21	1	0	1	0	0	0	23	0	0	0	0	0	0	0	0
2	1	0	0	0	0	0	3	59	13	3	0	1	0	0	76	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	53	19	2	0	0	1	1	76	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
3	2	0	0	0	0	0	5	60	8	3	0	0	0	0	71	3	1	1	0	0	0	0	5	0	0	0	0	0	0	0	0
6	2	0	0	0	0	0	8	74	16	2	1	2	1	1	97	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
13	5	0	0	0	0	0	18	246	56	10	1	3	2	2	320	16	4	1	0	0	0	0	21	0	0	0	0	0	0	0	0
6	1	0	0	0	0	0	7	69	11	1	0	0	0	0	81	3	1	0	0	0	0	1	5	0	0	0	0	0	0	0	0
8	2	0	0	0	0	0	10	68	11	2	0	1	0	0	82	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	5	71	17	2	1	1	0	1	93	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	10	65	12	1	0	0	1	0	79	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
28	4	0	0	0	0	0	32	273	51	6	1	2	1	1	335	14	3	0	0	0	0	1	18	0	0	0	0	0	0	0	0
5	3	0	0	0	0	0	8	81	11	1	0	1	0	2	96	2	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0
5	1	0	0	0	0	0	6	78	6	1	0	1	0	1	87	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
7	3	1	0	0	0	0	11	80	10	3	0	1	1	1	96	5	2	0	0	0	0	0	7	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	9	86	15	1	1	3	1	1	108	8	1	1	0	0	0	0	10	0	0	0	0	0	0	0	0
26	7	1	0	0	0	0	34	325	42	6	1	6	2	5	387	20	6	1	0	0	0	0	27	0	0	0	0	0	0	0	0
10	1	0	0	0	0	0	11	92	8	2	1	3	0	0	106	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
14	3	0	1	0	0	0	18	65	7	2	1	0	0	0	75	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0
15	1	0	0	0	0	0	16	118	14	1	0	1	0	0	134	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	8	71	10	4	1	1	0	0	87	4	2	0	0	0	0	0	6	0	0	0	0	0	0	0	0
47	5	0	1	0	0	0	53	346	39	9	3	5	0	0	402	26	5	0	0	0	0	0	31	0	0	0	0	0	0	0	0
11	1	0	0	0	0	0	12	71	11	2	0	1	0	1	86	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	7	89	14	0	0	2	0	0	105	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
14	3	0	0	0	0	0	17	86	11	2	0	2	0	1	102	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
5	2	0	0	0	0	0	7	69	10	1	0	1	0	0	81	5	2	0	0	0	0	0	7	0	0	0	0	0	0	0	0
37	6	0	0	0	0	0	43	315	46	5	0	6	0	2	374	17	3	0	0	0	0	0	20	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	14	95	12	1	0	1	1	0	110	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	7	119	8	1	0	3	0	1	132	7	0	0	0	0	1	0	8	0	0	0	0	0	0	0	0
10	1	0	0	0	0	0	11	87	13	0	0	1	0	1	102	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	9	105	9	2	0	2	0	0	118	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
40	1	0	0	0	0	0	41	406	42	4	0	7	1	2	462	22	1	0	0	0	1	0	24	0	0	0	0	0	0	0	0
8	1	0	0	0	0	0	9	114	10	0	0	1	1	1	127	4	1	0	0	0	1	0	6	0	0	0	0	0	0	0	0
20	1	0	0	0	0	0	21	99	8	2	0	2	1	3	115	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0
11	1	0	0	0	0	0	12	107	12	0	0	1	0	2	122	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0
11	1	0	0	0	0	0	12	118	12	0	0	1	0	0	131	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
50	4	0	0	0	0	0	54	438	42	2	0	5	2	6	495	27	4	0	0	0	1	0	32	0	0	0	0	0	0	0	0
11	3	0	0	0	0	2	16	120	7	0	0	1	0	2	130	10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0
9	2	0	0	0	0	1	12	137	13	0	0	0	0	2	152	10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	6	123	1	1	0	2	1	1	129	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0
11	1	0	0	0	0	0	12	109	6	0	0	0	0	1	116	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0
37	6	0	0	0	0	3	46	489	27	1	0	3	1	6	527	37	6	0	0	0	0	0	43	0	0	0	0	0	0	0	0
20	3	0	0	0	0	0	23	115	5	0	0	1	0	0	121	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
19	2	0	0	0	0	0	21	115	6	0	0	1	1	1	124	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	11	96	2	0	0	1	1	1	101	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0
9	1	0	0	0	0	0	10	91	2	0	0	2	0	1	96	11	0	0	0	0	1	0	12	0	0	0	0	0	0	0	0
59	6	0	0	0	0	0	65	417	15	0	0	5	2	3	442	36	3	0	0	0	1	0	40	0	0	0	0	0	0	0	0
387	46	1	1	0	0	3	438	3983	493	60	8	56	14	37	4651	249	40	2	1	0	3	5	300	0	0	0	0	0	0	0	0

Survey Name :	J-389 Baldoyle
Site:	9
Date:	23.01.20
Time:	07:00-19:00
Location:	53.3988656,-6.1634679
Classification:	CAR, LGV, OGV1, OGV2, PSV, M/C, P/C.

Irish Traffic Surveys

	A => A								A => B								A => C								A => D							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
07:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	58	0	0	0	1	0	0	59	31	0	0	0	1	0	0	32
07:15	1	0	0	0	0	0	0	1	15	0	0	0	0	0	0	15	57	2	0	0	1	0	1	61	37	2	0	0	1	0	0	40
07:30	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	19	62	13	0	0	0	1	2	78	25	3	0	1	3	0	1	33
07:45	0	0	0	0	0	0	0	0	17	2	0	0	0	0	0	19	57	11	0	0	0	0	1	69	22	7	3	0	0	0	1	33
H/TOT	1	0	0	0	0	0	0	1	52	2	0	0	0	0	0	54	234	26	0	0	2	1	4	267	115	12	3	1	5	0	2	138
08:00	0	0	0	0	0	0	0	0	23	2	0	0	1	0	0	26	65	6	0	0	1	1	0	73	24	2	0	0	3	0	0	29
08:15	0	0	0	0	0	0	0	0	23	2	0	0	0	0	0	25	108	3	0	0	0	0	2	113	15	4	0	0	2	1	1	23
08:30	0	0	0	0	0	0	0	0	37	1	0	0	0	1	0	39	48	3	1	0	0	0	0	52	8	1	0	0	1	1	0	11
08:45	0	0	0	0	0	0	0	0	36	4	0	0	1	1	0	42	48	1	0	0	0	1	0	50	11	0	0	0	0	1	0	12
H/TOT	0	0	0	0	0	0	0	0	119	9	0	0	2	2	0	132	269	13	1	0	1	2	2	288	58	7	0	0	6	3	1	75
09:00	2	0	1	0	0	0	0	3	33	3	1	0	0	0	0	37	44	3	0	0	0	0	1	48	21	2	0	0	2	0	0	25
09:15	1	0	0	0	0	0	0	1	15	3	0	0	0	0	0	18	59	6	0	0	0	2	1	68	20	2	0	0	2	0	2	26
09:30	1	0	0	0	0	0	0	1	8	2	0	0	0	0	0	10	46	2	1	0	0	0	0	49	29	2	0	0	4	0	0	35
09:45	1	0	0	0	0	0	0	1	11	1	0	0	0	0	0	12	43	2	2	0	0	0	2	49	30	4	1	1	2	0	0	38
H/TOT	5	0	1	0	0	0	0	6	67	9	1	0	0	0	0	77	192	13	3	0	0	2	4	214	100	10	1	1	10	0	2	124
10:00	4	1	0	0	0	0	0	5	10	3	0	0	0	0	0	13	27	2	0	0	0	0	0	29	24	2	0	1	3	0	0	30
10:15	3	0	0	0	0	0	0	3	10	5	1	0	0	0	0	16	40	4	0	0	0	0	0	44	21	3	0	0	0	0	0	24
10:30	3	0	0	0	0	0	0	3	13	3	0	0	0	0	0	16	41	6	0	0	0	0	0	47	21	5	1	0	3	0	0	30
10:45	3	0	0	0	0	0	0	3	18	1	1	0	0	0	0	20	38	6	0	0	0	0	0	44	25	4	2	0	2	0	0	33
H/TOT	13	1	0	0	0	0	0	14	51	12	2	0	0	0	0	65	146	18	0	0	0	0	0	164	91	14	3	1	8	0	0	117
11:00	1	0	0	0	0	0	0	1	14	2	0	0	0	0	0	16	48	5	2	0	0	0	0	55	22	2	0	0	2	0	0	26
11:15	0	0	0	0	0	0	0	0	19	3	0	0	0	0	0	22	46	4	0	0	0	0	2	52	22	6	0	0	1	0	0	29
11:30	0	1	0	0	0	0	0	1	12	3	0	0	0	0	0	15	43	3	0	0	0	0	0	46	17	1	0	0	3	0	0	21
11:45	0	0	0	0	0	0	0	0	28	3	0	0	0	1	0	32	49	2	2	0	0	0	0	53	23	9	0	1	1	0	0	34
H/TOT	1	1	0	0	0	0	0	2	73	11	0	0	0	1	0	85	186	14	4	0	0	0	2	206	84	18	0	1	7	0	0	110
12:00	2	0	0	0	0	0	0	2	23	4	1	0	0	0	0	28	63	3	0	0	0	0	0	66	22	1	0	0	1	0	0	24
12:15	1	0	0	0	0	0	0	1	22	6	4	0	0	0	0	32	51	3	0	0	0	0	0	54	24	6	0	0	2	0	0	32
12:30	2	0	0	0	0	0	0	2	13	4	0	0	0	0	0	17	59	5	0	0	0	0	1	65	29	1	0	0	2	0	0	32
12:45	0	0	0	0	0	0	0	0	25	5	1	0	1	0	0	32	50	4	0	0	0	0	0	54	24	5	0	0	1	0	0	30
H/TOT	5	0	0	0	0	0	0	5	83	19	6	0	1	0	0	109	223	15	0	0	0	0	1	239	99	13	0	0	6	0	0	118
13:00	3	0	0	0	0	0	0	3	25	1	0	0	0	0	0	26	45	8	0	0	0	0	0	53	22	5	1	0	2	0	0	30
13:15	2	0	0	0	0	0	0	2	30	3	0	0	0	0	0	33	49	4	0	0	0	0	1	54	33	7	1	0	1	0	0	42
13:30	1	0	0	0	0	0	0	1	15	0	0	0	0	0	0	15	43	4	0	0	1	0	0	48	24	4	0	0	1	0	0	29
13:45	3	0	0	0	0	0	0	3	21	2	0	0	0	0	0	23	66	5	0	0	0	1	1	73	29	4	0	0	1	0	0	34
H/TOT	9	0	0	0	0	0	0	9	91	6	0	0	0	0	0	97	203	21	0	0	1	1	2	228	108	20	2	0	5	0	0	135
14:00	0	0	0	0	0	0	0	0	23	6	0	0	0	0	0	29	63	3	0	0	0	0	0	66	24	4	0	0	2	0	0	30
14:15	3	0	0	0	0	0	0	3	29	2	0	0	0	0	0	31	51	1	0	0	0	0	0	52	20	0	1	0	1	0	0	22
14:30	3	2	0	0	0	0	0	5	16	5	0	0	0	0	0	21	40	5	0	0	0	0	0	45	17	2	1	0	3	0	0	23
14:45	2	1	0	0	0	0	0	3	19	6	0	0	0	0	0	25	49	5	0	0	0	1	0	55	30	6	0	0	2	0	0	38
H/TOT	8	3	0	0	0	0	0	11	87	19	0	0	0	0	0	106	203	14	0	0	0	1	0	218	91	12	2	0	8	0	0	113
15:00	3	1	0	0	0	0	0	4	28	1	1	0	0	0	0	30	57	4	0	0	0	0	0	61	37	3	0	0	2	0	0	42
15:15	4	1	0	0	0	0	0	5	25	2	1	0	0	0	0	28	64	2	0	0	0	0	0	66	35	5	1	1	2	0	0	44
15:30	9	0	0	0	1	0	0	10	28	3	0	0	0	0	0	31	66	5	0	0	0	0	0	71	43	1	0	0	4	1	0	49
15:45	3	1	0	0	0	0	0	4	25	2	0	0	0	0	0	27	55	4	1	0	0	0	1	61	24	1	0	3	1	0	0	29
H/TOT	19	3	0	0	1	0	0	23	106	8	2	0	0	0	0	116	242	15	1	0	0	0	1	259	139	10	1	4	9	1	0	164
16:00	1	0	0	0	0	0	0	1	22	3	0	0	0	0	0	25	47	5	0	0	0	1	0	53	33	7	0	0	2	1	0	43
16:15	2	1	0	0	0	0	0	3	22	6	1	0	0	0	0	29	65	6	0	0	0	0	0	71	28	7	0	0	2	0	0	37
16:30	6	0	0	0	0	0	0	6	22	2	1	0	0	0	0	25	54	5	1	0	0	0	0	60	21	4	0	0	3	1	0	29
16:45	3	0	0	0	0	0	0	3	28	0	0	0	0	0	0	28	73	7	0	0	0	0	0	80	25	3	0	0	2	0	0	30
H/TOT	12	1	0	0	0	0	0	13	94	11	2	0	0	0	0	107	239	23	1	0	0	1	0	264	107	21	0	0	9	2	0	139
17:00	0	0	0	0	0	0	0	0	32	1	0	0	0	0	0	33	70	6	0	0	0	0	0	76	26	5	0	0	2	0	0	33
17:15	0	1	0	0	0	0	0	1	27	3	0	0	0	0	0	30	77	2	0	0	0	0	0	79	23	2	0	0	1	0	0	26
17:30	3	1	0	0	0	0	0	4	19	3	0	0	0	0	0	22	79	5	0	0	0	0	0	84	42	3	0	0	2	0	0	47
17:45	1	0	0	0	0	0	0	1	27	1	0	0	0	0	0	28	61	6	0	0	0	1	0	68	36	2	0	0	2	0	0	40
H/TOT	4	2	0	0	0	0	0	6	105	8	0	0	0	0	0	113	287	19	0	0	0	1	0	307	127	12	0	0	7	0	0	146
18:00	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	26	80	2	0	0	0	1	0	83	38	2	0	0	3	0	0	43
18:15	1	0	0	0	0	0	0	1	22	0	0	0	0	0	0	22	72	2	0	0	0	0	0	74	46	3	0	0	1	0	0	50
18:30	1	0	0	0	0	0	0	1	25	0	0	0	0	0	0	25	75	3	0	0	1	0	0	79	33	6	0	0	2	0	0	41
18:45	2	0	0	0	0	0	0	2	17	1	0	0	0	0	0	18	74	6	0	0	0	0	0	80	32	4	0	0	1	0	0	37
H/TOT	4	0	0	0	0	0	0	4	90	1	0	0	0	0	0	91	301	13	0	0	1	1	0	316	149	15	0	0	7	0	0	171
12 TOT	81	11	1	0	1	0	0	94	1018	115	13	0	3	3	0	1152	2725	204	10	0	5	10	16	2970	1268	164	12	8	87	6	5	1550

B => A								B => B								B => C								B => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	25	4	0	0	1	0	0	30	78	7	0	1	0	0	0	86
4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	22	8	1	0	1	0	0	32	64	6	1	1	1	0	0	73
7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	26	4	0	0	1	0	0	31	50	5	4	0	0	0	0	59
12	3	0	0	0	0	0	15	0	0	0	0	0	0	0	0	27	8	0	0	2	0	0	37	55	9	5	1	0	0	0	70
26	3	0	0	0	0	0	29	0	0	0	0	0	0	0	0	100	24	1	0	5	0	0	130	247	27	10	3	1	0	0	288
9	1	1	0	0	0	0	11	0	0	0	0	0	0	0	0	46	5	2	0	2	0	0	0	74	10	1	0	1	0	2	88
15	2	0	0	0	0	0	17	0	0	0	0	0	0	0	0	34	3	1	0	1	0	0	0	59	6	5	0	1	2	2	75
6	1	1	0	0	0	0	8	0	0	0	0	0	0	0	0	58	1	2	1	0	0	0	62	55	7	1	0	1	2	0	66
11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	67	2	1	0	2	0	0	72	51	10	6	3	1	2	1	74
41	4	2	0	0	0	0	47	0	0	0	0	0	0	0	0	205	11	6	1	5	0	0	134	239	33	13	3	4	6	5	303
17	1	1	0	0	0	0	19	0	0	0	0	0	0	0	0	53	8	0	0	1	0	0	62	75	12	5	1	1	1	1	96
25	1	1	0	0	0	0	27	0	0	0	0	0	0	0	0	51	3	0	0	1	0	0	55	64	13	2	2	0	0	0	81
17	5	0	0	0	0	0	22	0	0	0	0	0	0	0	0	33	6	1	0	1	0	0	41	74	16	4	1	0	1	1	97
16	4	0	1	0	0	0	21	0	0	0	0	0	0	0	0	52	4	0	1	1	1	1	60	72	11	1	1	1	2	1	89
75	11	2	1	0	0	0	89	0	0	0	0	0	0	0	0	189	21	1	1	4	1	1	218	285	52	12	5	2	4	3	363
10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	38	2	1	1	2	1	0	45	53	16	7	1	3	0	0	80
10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	34	10	0	0	1	0	0	45	60	22	5	4	0	1	0	92
11	1	1	0	0	0	0	13	0	0	0	0	0	0	0	0	36	6	1	0	0	0	0	43	65	10	5	4	0	0	0	84
10	3	0	0	0	0	0	13	0	0	0	0	0	0	0	0	39	7	0	1	1	0	0	48	64	20	6	3	1	0	1	95
41	6	1	0	0	0	0	48	0	0	0	0	0	0	0	0	147	25	2	2	4	1	0	181	242	68	23	12	4	1	1	351
8	3	0	0	0	0	0	11	0	0	0	0	0	0	0	0	40	5	0	0	1	0	0	46	62	9	6	1	0	0	0	78
6	3	1	0	0	0	0	10	0	0	0	0	0	0	0	0	44	5	0	0	1	0	0	50	51	19	7	1	0	1	0	79
20	1	0	0	0	0	0	21	0	0	0	0	0	0	0	0	36	4	0	1	0	0	0	41	58	21	4	1	1	1	0	86
12	3	0	0	0	0	0	15	0	0	0	0	0	0	0	0	36	5	1	0	1	0	0	43	64	17	6	1	0	1	0	89
46	10	1	0	0	0	0	57	0	0	0	0	0	0	0	0	156	19	1	1	3	0	0	180	235	66	23	4	1	3	0	332
15	3	0	0	0	0	0	18	0	0	0	0	0	0	0	0	37	10	2	0	1	1	0	51	65	25	12	1	0	1	0	104
15	3	1	0	0	0	0	19	0	0	0	0	0	0	0	0	44	8	0	0	2	0	0	54	74	19	2	2	0	0	0	97
14	1	1	0	0	0	0	16	0	0	0	0	0	0	0	0	33	10	0	0	0	0	0	43	56	19	5	2	2	0	0	84
15	3	1	0	0	0	0	19	0	0	0	0	0	0	0	0	48	8	1	0	1	0	0	58	71	15	9	5	0	0	0	100
59	10	3	0	0	0	0	72	0	0	0	0	0	0	0	0	162	36	3	0	4	1	0	206	266	78	28	10	2	1	0	385
16	2	2	0	0	0	0	20	0	0	0	0	0	0	0	0	60	9	0	0	1	1	0	71	86	23	4	0	0	2	0	115
9	0	2	0	0	0	0	11	0	0	0	0	0	0	0	0	43	4	0	0	1	0	0	48	75	22	4	1	0	0	2	104
16	2	0	0	0	0	0	18	0	0	0	0	0	0	0	0	48	7	0	0	0	0	0	55	77	12	2	3	1	1	1	97
12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0	46	2	3	0	1	0	0	52	78	17	4	1	1	0	0	101
53	5	4	0	0	0	0	62	0	0	0	0	0	0	0	0	197	22	3	0	3	1	0	226	316	74	14	5	2	3	3	417
19	2	0	0	0	0	0	21	0	0	0	0	0	0	0	0	52	6	2	1	1	0	0	62	76	14	3	3	0	2	1	99
7	2	0	0	0	0	0	9	0	0	0	0	0	0	0	0	49	3	1	0	0	0	0	53	77	22	2	2	0	2	0	105
15	3	0	0	0	0	0	18	0	1	0	0	0	0	0	1	48	6	1	0	1	0	0	56	80	15	6	0	0	0	1	102
17	4	1	0	0	0	0	22	0	0	0	0	0	0	0	0	36	3	0	0	2	0	0	41	69	14	7	4	1	1	0	96
58	11	1	0	0	0	0	70	0	1	0	0	0	0	0	1	185	18	4	1	4	0	0	212	302	65	18	9	1	5	2	402
14	2	1	0	0	0	0	17	0	0	0	0	0	0	0	0	34	7	0	0	1	0	0	42	87	15	6	0	0	0	0	108
13	5	1	0	0	0	0	19	0	0	0	0	0	0	0	0	42	2	2	0	0	0	0	46	118	15	7	2	0	2	0	144
18	1	0	0	0	0	0	19	0	0	0	0	0	0	0	0	32	3	1	0	1	0	0	37	91	10	1	2	2	1	0	107
25	3	0	0	0	0	0	28	0	0	0	0	0	0	0	0	44	3	1	0	1	0	0	49	111	9	4	2	0	1	1	128
70	11	2	0	0	0	0	83	0	0	0	0	0	0	0	0	152	15	4	0	3	0	0	174	407	49	18	6	2	4	1	487
17	4	1	0	0	0	0	22	0	0	0	0	0	0	0	0	50	6	0	0	1	0	0	57	139	14	1	2	1	0	1	158
17	4	0	0	0	0	0	21	0	0	0	0	0	0	0	0	53	7	2	0	1	0	0	63	118	17	1	1	1	0	0	138
10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0	46	5	1	0	0	0	0	52	82	18	2	3	0	2	0	107
23	2	0	0	0	0	0	25	0	0	0	0	0	0	0	0	40	6	1	0	1	0	0	48	93	18	0	0	0	2	0	113
67	12	1	0	0	0	0	80	0	0	0	0	0	0	0	0	189	24	4	0	3	0	0	220	432	67	4	6	2	4	1	516
19	2	0	0	0	0	0	21	0	0	0	0	0	0	0	0	70	7	1	0	1	0	0	79	103	14	0	1	1	1	1	121
21	1	0	0	0	0	0	22	0	0	0	0	0	0	0	0	43	7	0	0	1	0	0	51	75	20	0	0	0	0	0	95
24	2	0	0	0	0	0	26	1	0	0	0	0	0	0	1	42	2	0	0	1	0	0	45	89	9	0	0	0	2	0	100
19	2	0	0	0	0	0	21	0	0	0	0	0	0	0	0	61	4	0	0	1	0	0	66	114	6	0	0	2	0	1	123
83	7	0	0	0	0	0	90	1	0	0	0	0	0	0	1	216	20	1	0	4	0	0	241	381	49	0	1	3	3	2	439
27	2	0	0	0	0	0	29	0	0	0	0	0	0	0	0	53	3	0	0	1	0	0	57	104	7	0	0	0	2	0	113
17	2	0	0	0	0	0	19	0	0	0	0	0	0	0	0	35	4	0	0	0	0	0	39	69	5	0	0	1	0	0	75
20	2	0	0	0	0	0	22	0	0	0	0	0	0	0	0	41	4	0	0	1	0	0	46	71	9	1	0	0	1	0	82
22	2	0	0	0	0	0	24	0	0	0	0	0	0	0	0	39	3	0	0	1	0	0	43	69	6	0	0	2	0	0	77
86	8	0	0	0	0	0	94	0	0	0	0	0	0	0	0	168	14	0	0	3	0	0	185	313	27	1	0	3	3	0	347
705	98	17	1	0	0	0	821	1	1	0	0	0	0	0	2	2066	249	30	6	45	4	1	2307	3665	655	164	64	27	37	18	4630

C => A								C => B								C => C								C => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
23	0	0	0	0	0	0	23	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	42	2	0	0	0	1	0	45
24	0	0	0	0	0	0	24	18	0	0	0	1	0	0	19	0	0	0	0	0	0	0	0	55	3	0	0	1	0	0	59
24	2	0	0	0	0	0	26	10	1	0	0	1	0	0	12	0	0	0	0	0	0	0	0	60	3	1	0	2	0	0	66
30	4	0	0	0	0	0	34	26	1	0	0	0	0	0	27	0	0	0	0	0	0	0	0	62	2	0	0	1	0	0	65
101	6	0	0	0	0	0	107	62	2	0	0	2	0	0	66	0	0	0	0	0	0	0	0	219	10	1	0	4	1	0	235
54	2	1	0	0	0	0	57	30	9	1	0	0	0	0	40	0	0	0	0	0	0	0	0	58	7	1	2	2	0	0	70
58	3	0	1	0	1	0	63	45	3	2	0	2	0	0	52	0	0	0	0	0	0	0	0	72	7	1	0	1	1	0	82
41	4	1	0	1	0	2	49	42	5	1	0	1	0	0	49	0	0	0	0	0	0	0	0	80	14	3	2	0	0	1	100
49	4	0	0	1	0	0	54	59	6	0	0	0	0	0	65	0	0	0	0	0	0	0	0	85	3	2	0	0	0	0	90
202	13	2	1	2	1	2	223	176	23	4	0	3	0	0	206	0	0	0	0	0	0	0	0	295	31	7	4	3	1	1	342
53	1	0	0	0	0	0	54	26	2	0	0	0	0	1	29	1	0	0	0	0	0	0	1	94	7	0	1	0	0	0	102
78	1	0	0	1	0	0	80	34	7	1	0	2	0	0	44	0	0	0	0	0	0	0	0	101	7	2	1	0	0	0	111
41	4	0	0	0	0	0	45	39	5	1	0	1	0	0	46	0	0	0	0	0	0	0	0	74	4	0	1	0	1	0	80
46	3	0	0	0	0	0	49	24	11	0	0	1	0	0	36	0	0	0	0	0	0	0	0	56	7	1	2	2	0	0	68
218	9	0	0	1	0	0	228	123	25	2	0	4	0	1	155	1	0	0	0	0	0	0	1	325	25	3	5	2	1	0	361
33	5	0	0	0	0	0	38	26	5	0	0	1	0	0	32	0	0	0	0	0	0	0	0	74	11	6	1	1	0	0	93
33	4	1	0	0	2	0	40	26	5	0	0	1	0	0	32	0	0	0	0	0	0	0	0	62	4	2	3	0	0	0	71
35	5	0	0	0	0	0	40	33	4	1	1	0	0	0	39	1	0	0	0	0	0	0	1	63	7	1	1	0	0	0	72
42	2	0	0	0	0	0	44	29	4	2	0	1	0	0	36	0	0	0	1	0	0	0	1	66	8	1	2	0	0	0	77
143	16	1	0	0	2	0	162	114	18	3	1	3	0	0	139	1	0	0	1	0	0	0	2	265	30	10	7	1	0	0	313
40	6	0	0	0	0	0	46	23	3	3	0	1	0	0	30	0	0	0	0	0	0	0	0	57	4	3	3	0	0	0	67
45	6	1	0	0	0	0	52	27	4	1	0	1	0	0	33	1	0	0	0	0	0	0	1	66	12	0	1	1	0	0	80
46	3	1	0	0	0	0	50	30	9	1	0	0	0	0	40	0	0	0	0	0	0	0	0	62	7	3	2	0	0	0	74
59	5	0	0	0	0	0	64	46	8	2	0	1	0	0	57	0	0	0	0	0	0	0	0	67	12	2	2	0	0	1	84
190	20	2	0	0	0	0	212	126	24	7	0	3	0	0	160	1	0	0	0	0	0	0	1	252	35	8	8	1	0	1	305
45	0	1	0	0	0	0	46	26	5	1	0	0	0	0	32	0	0	0	0	0	0	0	0	69	13	3	3	0	0	0	88
45	3	0	0	0	0	0	48	42	10	0	0	1	0	0	53	0	0	0	0	0	0	0	0	55	10	4	1	0	0	0	70
61	2	0	0	0	0	0	63	34	3	1	0	1	0	0	39	0	0	0	0	0	0	0	0	80	8	1	0	0	0	0	89
62	3	0	0	0	1	0	66	37	2	0	0	0	1	0	40	0	0	0	0	0	0	0	0	56	10	1	0	0	0	0	67
213	8	1	0	0	1	0	223	139	20	2	0	2	1	0	164	0	0	0	0	0	0	0	0	260	41	9	4	0	0	0	314
62	4	0	0	0	0	0	66	40	7	1	0	2	0	0	50	1	0	0	0	0	0	0	1	68	8	1	1	0	1	0	79
55	5	0	0	0	1	0	61	57	5	0	0	0	0	0	62	0	0	0	0	0	0	0	0	75	8	2	0	0	0	0	85
58	6	0	0	0	0	0	64	37	9	0	0	1	1	0	48	1	0	0	0	0	0	0	1	68	10	4	1	0	0	0	83
56	12	0	0	0	0	1	69	47	7	1	0	0	1	0	56	0	0	0	0	0	0	0	0	77	11	2	2	0	0	0	92
231	27	0	0	0	1	1	260	181	28	2	0	3	2	0	216	2	0	0	0	0	0	0	2	288	37	9	4	0	1	0	339
49	4	0	0	0	0	0	53	52	7	0	0	2	0	0	61	0	0	0	0	0	0	0	0	70	10	3	1	0	0	0	84
53	6	0	0	0	0	0	59	52	3	1	0	0	0	0	56	0	0	0	0	0	0	0	0	79	3	2	1	0	1	0	86
62	6	0	0	0	0	0	68	30	4	0	0	0	0	1	35	1	0	0	0	0	0	0	1	78	8	3	0	0	0	0	89
74	2	0	0	0	0	0	76	48	9	1	0	1	0	0	59	0	0	0	0	0	0	0	0	89	3	3	0	1	0	0	96
238	18	0	0	0	0	0	256	182	23	2	0	3	0	1	211	1	0	0	0	0	0	0	1	316	24	11	2	1	1	0	355
78	3	0	0	0	0	0	81	48	3	2	0	1	0	1	55	0	0	0	0	0	0	0	0	67	5	0	0	1	0	0	73
89	4	0	0	2	0	0	95	57	4	1	0	2	0	0	64	1	0	0	0	0	0	0	1	62	8	0	1	0	0	0	71
75	3	0	0	0	0	0	78	47	5	1	0	1	0	0	54	0	0	0	0	0	0	0	0	64	14	3	0	1	0	0	82
76	5	0	0	0	2	0	83	44	4	2	0	0	0	0	50	1	0	0	0	0	0	0	1	61	13	2	1	1	0	0	78
318	15	0	0	2	2	0	337	196	16	6	0	4	0	1	223	2	0	0	0	0	0	0	2	254	40	5	2	3	0	0	304
68	9	0	0	0	0	1	78	52	5	0	0	3	1	0	61	0	0	0	0	0	0	0	0	68	11	0	1	0	0	0	80
65	10	0	0	0	0	0	75	32	4	0	0	0	0	0	36	1	0	0	0	0	0	0	1	71	13	1	0	0	1	0	86
93	10	0	0	0	0	1	104	38	6	1	0	2	0	0	47	0	0	0	0	0	0	0	0	63	10	1	0	0	0	0	74
80	10	0	0	0	0	1	91	53	4	1	0	0	0	0	58	1	0	0	0	0	0	0	1	84	8	0	0	0	1	0	93
306	39	0	0	0	0	3	348	175	19	2	0	5	1	0	202	2	0	0	0	0	0	0	2	286	42	2	1	0	2	0	333
79	4	2	0	0	1	0	86	33	3	1	1	0	0	3	41	0	0	0	0	0	0	0	0	68	6	1	0	1	0	0	76
86	3	0	0	0	0	1	90	46	7	0	0	1	0	0	54	0	0	0	0	0	0	0	0	87	10	2	0	0	1	0	100
78	3	0	0	1	0	0	82	38	2	0	0	1	0	0	41	1	0	0	0	0	0	0	1	73	5	0	0	1	0	0	79
98	2	0	0	0	1	2	103	45	3	0	0	0	1	0	49	0	0	0	0	0	0	0	0	67	6	0	0	0	0	0	73
341	12	2	0	1	2	3	361	162	15	1	1	2	1	3	185	1	0	0	0	0	0	0	1	295	27	3	0	2	1	0	328
72	4	0	0	0	0	0	76	45	3	0	0	1	0	0	49	0	0	0	0	0	0	0	0	82	4	0	0	0	0	0	86
92	4	0	0	0	0	1	97	50	2	1	0	1	1	0	55	0	0	0	0	0	0	0	0	72	3	0	0	0	0	0	75
85	4	0	0	0	0	2	91	32	2	0	0	1	0	0	35	0	0	0	0	0	0	0	0	90	4	0	0	1	0	0	95
108	5	1	0	0	0	0	114	39	3	0	0	2	0	0	44	0	0	0	0	0	0	0	0	73	6	0	0	0	1	0	80
357	17	1	0	0	0	3	378	166	10	1	0	5	1	0	183	0	0	0	0	0	0	0	0	317	17	0	0	1	1	0	336
2858	200	9	1	6	9	12	3095	1802	223	32	2	39	6	6	2110	11	0	0	1	0	0	0	12	3372	359	68	37	18	9	2	3865

D => A								D => B								D => C								D => D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
6	0	1	0	2	0	0	9	70	4	0	1	2	0	0	77	58	2	0	1	1	0	0	62	4	0	0	0	0	0	0	4
21	0	1	1	2	0	0	25	87	3	1	0	1	0	0	92	82	5	1	0	0	0	0	88	4	1	0	0	0	0	0	5
25	1	0	1	1	0	0	28	111	3	0	0	1	0	0	115	59	5	2	2	0	0	0	68	1	1	0	0	0	0	0	2
30	2	0	0	3	0	0	35	116	13	3	0	1	0	0	133	80	16	3	1	1	0	0	101	0	0	0	0	0	0	0	0
82	3	2	2	8	0	0	97	384	23	4	1	5	0	0	417	279	28	6	4	2	0	0	319	9	2	0	0	0	0	0	11
34	1	0	0	0	0	0	35	91	17	1	4	0	0	0	113	108	11	3	2	1	0	0	125	0	0	0	0	0	0	0	0
32	1	0	0	1	0	0	34	102	16	1	0	1	0	0	120	93	11	2	0	0	0	0	106	0	0	0	0	0	0	0	0
22	4	1	0	2	0	0	29	97	12	2	1	0	1	0	113	116	9	1	1	1	0	0	128	0	0	0	0	0	0	0	0
19	2	0	0	4	0	0	25	99	23	2	0	0	0	0	124	109	10	0	2	0	0	0	121	0	0	0	0	0	0	0	0
107	8	1	0	7	0	0	123	389	68	6	5	1	1	0	470	426	41	6	5	2	0	0	480	0	0	0	0	0	0	0	0
23	4	0	0	1	0	0	28	64	20	5	3	0	0	0	92	63	10	5	1	1	1	0	81	0	0	0	0	0	0	0	0
21	3	0	0	1	0	0	25	77	20	3	2	0	0	0	102	74	12	4	0	0	0	0	90	2	0	0	0	0	0	0	2
17	2	1	0	5	0	0	25	61	11	3	3	0	1	0	79	45	13	5	2	1	0	0	66	0	0	0	0	0	0	0	0
24	6	0	1	1	0	1	33	71	12	7	1	0	3	0	94	64	10	0	1	0	0	0	75	2	0	0	0	0	0	0	2
85	15	1	1	8	0	1	111	273	63	18	9	0	4	0	367	246	45	14	4	2	1	0	312	4	0	0	0	0	0	0	4
18	7	1	0	3	0	0	29	59	27	3	2	2	0	0	93	53	5	3	4	2	0	0	67	1	1	0	0	0	0	0	2
21	2	1	0	1	1	0	26	50	16	3	2	1	0	0	72	54	12	1	4	1	2	0	74	1	0	0	0	0	0	0	1
16	3	0	0	3	0	0	22	53	11	8	3	1	0	1	77	61	13	1	0	0	0	0	75	0	0	0	0	0	0	0	0
16	4	0	0	2	0	0	22	68	19	6	3	1	0	0	97	60	6	0	1	0	0	0	67	0	0	0	0	0	0	0	0
71	16	2	0	9	1	0	99	230	73	20	10	5	0	1	339	228	36	5	9	3	2	0	283	2	1	0	0	0	0	0	3
19	1	2	0	0	0	0	22	54	18	4	0	0	1	0	77	60	10	0	3	1	0	0	74	1	0	0	0	0	0	0	1
16	1	1	0	3	0	0	21	66	23	5	0	0	0	0	94	42	4	2	1	0	0	0	49	0	0	0	0	0	0	0	0
15	6	2	0	3	0	0	26	58	17	7	1	0	0	0	83	43	10	2	0	0	0	0	55	1	0	0	0	0	0	0	1
21	2	0	0	1	0	0	24	62	19	6	0	0	1	0	88	47	11	2	3	0	0	0	63	0	0	0	0	0	0	0	0
71	10	5	0	7	0	0	93	240	77	22	1	0	2	0	342	192	35	6	7	1	0	0	241	2	0	0	0	0	0	0	2
14	3	0	0	1	0	0	18	52	19	6	0	0	0	0	77	50	7	0	1	0	0	0	58	0	0	0	0	0	0	0	0
22	2	0	0	2	0	0	26	76	21	4	5	0	0	0	106	55	11	2	1	0	0	0	69	0	0	0	0	0	0	0	0
17	4	0	0	1	0	0	22	55	20	3	2	1	0	0	81	71	7	1	0	0	1	0	80	0	0	0	0	0	0	0	0
36	3	0	0	2	0	0	41	61	17	6	4	1	2	0	91	68	6	2	0	0	1	0	77	0	0	0	0	0	0	0	0
89	12	0	0	6	0	0	107	244	77	19	11	2	2	0	355	244	31	5	2	0	2	0	284	0	0	0	0	0	0	0	0
27	1	1	1	1	0	0	31	65	12	6	4	1	1	0	89	55	13	1	0	0	0	0	69	0	0	0	0	0	0	0	0
12	1	0	0	1	0	0	14	99	11	3	2	0	0	0	115	83	3	1	4	0	1	0	92	0	0	0	0	0	0	0	0
16	2	0	0	2	0	0	20	70	14	5	2	0	0	0	91	60	12	4	0	0	0	0	76	1	0	0	0	0	0	0	1
25	1	1	0	3	0	0	30	97	16	4	3	0	0	1	121	68	5	0	0	0	1	0	74	0	0	0	0	0	0	0	0
80	5	2	1	7	0	0	95	331	53	18	11	1	1	1	416	266	33	6	4	0	2	0	311	1	0	0	0	0	0	0	1
14	3	1	0	1	0	0	19	85	10	2	0	0	0	0	97	79	5	0	0	0	0	0	84	0	0	0	0	0	0	0	0
13	0	1	0	1	0	0	15	104	19	2	1	2	0	0	128	110	4	2	0	1	0	0	117	0	0	0	0	0	0	0	0
24	4	0	0	2	0	0	30	89	15	5	2	1	1	0	113	73	8	2	0	0	0	0	83	0	1	0	0	0	0	0	1
34	3	0	0	3	0	0	40	93	14	3	1	0	0	0	111	60	10	1	1	0	0	0	72	0	0	0	0	0	0	0	0
85	10	2	0	7	0	0	104	371	58	12	4	3	1	0	449	322	27	5	1	1	0	0	356	0	1	0	0	0	0	0	1
37	4	0	0	2	0	0	43	68	15	2	3	2	0	0	90	60	12	1	0	0	0	0	73	0	0	0	0	0	0	0	0
39	3	0	0	2	1	0	45	72	11	2	1	2	1	0	89	66	5	2	0	0	0	0	73	0	0	0	0	0	0	0	0
29	3	0	3	0	0	0	35	67	17	3	0	1	0	0	88	94	7	1	0	1	1	0	104	0	0	0	0	0	0	0	0
31	0	0	0	2	0	0	33	75	13	2	2	2	0	0	94	83	11	0	0	0	0	0	94	0	0	0	0	0	0	0	0
136	10	0	3	6	1	0	156	282	56	9	6	7	1	0	361	303	35	4	0	1	1	0	344	0	0	0	0	0	0	0	0
33	6	0	0	3	0	0	42	63	6	3	0	0	2	0	74	62	8	2	0	1	1	0	74	0	0	0	0	0	0	0	0
39	3	3	0	1	0	0	46	70	11	2	0	0	0	0	83	61	6	0	0	1	0	0	68	1	0	0	0	0	0	0	1
43	6	0	0	1	0	0	50	91	10	1	0	0	1	0	103	86	12	1	0	1	0	0	100	1	0	0	0	0	0	0	1
34	3	0	0	4	0	0	41	81	13	0	1	0	1	0	96	79	11	0	0	0	0	0	90	0	0	0	0	0	0	0	0
149	18	3	0	9	0	0	179	305	40	6	1	0	4	0	356	288	37	3	0	3	1	0	332	2	0	0	0	0	0	0	2
37	8	0	0	0	1	0	46	85	10	2	0	0	0	0	97	105	8	0	0	0	0	0	113	0	0	0	0	0	0	0	0
59	4	0	0	3	0	0	66	89	6	0	1	0	0	0	96	90	5	0	0	1	0	0	96	0	0	0	0	0	0	0	0
63	5	0	0	0	0	0	68	84	2	2	0	0	0	0	88	100	7	0	0	0	1	0	108	1	0	0	0	0	0	0	1
83	3	0	0	3	0	0	89	67	9	0	0	0	0	0	76	68	4	1	0	0	1	0	74	0	0	0	0	0	0	0	0
242	20	0	0	6	1	0	269	325	27	4	1	0	0	0	357	363	24	1	0	1	2	0	391	1	0	0	0	0	0	0	1
72	5	0	0	2	0	0	79	96	7	0	1	0	0	0	104	86	5	0	0	0	1	0	92	0	0	0	0	0	0	0	0
39	6	0	0	1	1	4	51	96	8	1	0	0	2	0	107	72	6	1	0	1	0	0	80	0	0	0	0	0	0	0	0
50	1	0	0	2	0	0	53	78	5	0	0	0	0	0	83	76	6	2	0	0	1	0	85	0	0	0	0	0	0	0	0
59	6	0	0	2	0	0	67	99	3	0	0	0	0	0	102	69	9	0	0	1	1	0	80	0	0	0	0	0	0	0	0
220	18	0	0	7	1	4	250	369	23	1	1	0	2	0	396	303	26	3	0	2	3	0	337	0	0	0	0	0	0	0	0
1417	145	18	7	87	4	5	1683	3743	638	139	61	24	18	2	4625	3460	398	64	36	18	14	0	3990	21	4	0	0	0	0	0	25

Appendix B

TRICS Data

CS CONSULTING
GROUP

Calculation Reference: AUDIT-656801-200327-0353

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

VEHICLES

Selected regions and areas:

03	**SOUTH WEST**		
	DC	DORSET	1 days
	DV	DEVON	1 days
	WL	WILTSHIRE	1 days
04	**EAST ANGLIA**		
	SF	SUFFOLK	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	WY	WEST YORKSHIRE	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: 27 to 73 (units:)
Range Selected by User: 4 to 4334 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 19/11/19

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

Selected survey days:

Monday	1 days
Wednesday	2 days
Thursday	2 days

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

Selected survey types:

Manual count	5 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Residential Zone	5

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

Secondary Filtering selection:

Use Class:

C3	5 days

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

Population within 1 mile:

25,001 to 50,000	5 days

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

Population within 5 miles:

125,001 to 250,000	4 days
250,001 to 500,000	1 days

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

Car ownership within 5 miles:

1.1 to 1.5	5 days

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

Travel Plan:

Yes	1 days
No	4 days

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

PTAL Rating:

No PTAL Present	5 days

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

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

VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.095	5	42	0.227	5	42	0.322
08:00 - 09:00	5	42	0.185	**5**	**42**	**0.374**	**5**	**42**	**0.559**
09:00 - 10:00	5	42	0.161	5	42	0.209	5	42	0.370
10:00 - 11:00	5	42	0.190	5	42	0.137	5	42	0.327
11:00 - 12:00	5	42	0.204	5	42	0.237	5	42	0.441
12:00 - 13:00	5	42	0.175	5	42	0.209	5	42	0.384
13:00 - 14:00	5	42	0.204	5	42	0.194	5	42	0.398
14:00 - 15:00	5	42	0.190	5	42	0.213	5	42	0.403
15:00 - 16:00	5	42	0.270	5	42	0.204	5	42	0.474
16:00 - 17:00	**5**	**42**	**0.299**	5	42	0.185	5	42	0.484
17:00 - 18:00	5	42	0.294	5	42	0.213	5	42	0.507
18:00 - 19:00	5	42	0.209	5	42	0.147	5	42	0.356
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.476			2.549			5.025

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

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

Parameter summary

Trip rate parameter range selected:	27 - 73 (units:)
Survey date date range:	01/01/12 - 19/11/19
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	5	42	0.000	5	42	0.000
08:00 - 09:00	**5**	**42**	**0.009**	**5**	**42**	**0.009**	**5**	**42**	**0.018**
09:00 - 10:00	5	42	0.009	5	42	0.009	5	42	0.018
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.009	5	42	0.009	5	42	0.018
12:00 - 13:00	5	42	0.000	5	42	0.000	5	42	0.000
13:00 - 14:00	5	42	0.005	5	42	0.000	5	42	0.005
14:00 - 15:00	5	42	0.000	5	42	0.000	5	42	0.000
15:00 - 16:00	5	42	0.000	5	42	0.005	5	42	0.005
16:00 - 17:00	5	42	0.005	5	42	0.005	5	42	0.010
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.005	5	42	0.005	5	42	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.042			0.042			0.084

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.*

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

OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	5	42	0.000	5	42	0.000
08:00 - 09:00	**5**	**42**	**0.005**	**5**	**42**	**0.005**	**5**	**42**	**0.010**
09:00 - 10:00	5	42	0.005	5	42	0.005	5	42	0.010
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.005	5	42	0.000	5	42	0.005
12:00 - 13:00	5	42	0.000	5	42	0.005	5	42	0.005
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.000	5	42	0.000	5	42	0.000
15:00 - 16:00	5	42	0.005	5	42	0.005	5	42	0.010
16:00 - 17:00	5	42	0.000	5	42	0.000	5	42	0.000
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.000	5	42	0.000	5	42	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.020			0.020			0.040

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.*

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

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	5	42	0.000	5	42	0.000
08:00 - 09:00	**5**	**42**	**0.009**	**5**	**42**	**0.009**	**5**	**42**	**0.018**
09:00 - 10:00	5	42	0.000	5	42	0.000	5	42	0.000
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.000	5	42	0.000	5	42	0.000
12:00 - 13:00	5	42	0.000	5	42	0.000	5	42	0.000
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.005	5	42	0.005	5	42	0.010
15:00 - 16:00	5	42	0.009	5	42	0.009	5	42	0.018
16:00 - 17:00	5	42	0.000	5	42	0.000	5	42	0.000
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.000	5	42	0.000	5	42	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.023			0.023			0.046

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.*

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

CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.014	**5**	**42**	**0.028**	5	42	0.042
08:00 - 09:00	5	42	0.000	5	42	0.014	5	42	0.014
09:00 - 10:00	5	42	0.000	5	42	0.009	5	42	0.009
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.009	5	42	0.000	5	42	0.009
12:00 - 13:00	5	42	0.000	5	42	0.009	5	42	0.009
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.005	5	42	0.005	5	42	0.010
15:00 - 16:00	**5**	**42**	**0.038**	5	42	0.005	**5**	**42**	**0.043**
16:00 - 17:00	5	42	0.009	5	42	0.000	5	42	0.009
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.005	5	42	0.005	5	42	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.080			0.075			0.155

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.*

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

CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.071	5	42	0.194	5	42	0.265
08:00 - 09:00	5	42	0.114	**5**	**42**	**0.303**	5	42	0.417
09:00 - 10:00	5	42	0.085	5	42	0.118	5	42	0.203
10:00 - 11:00	5	42	0.123	5	42	0.090	5	42	0.213
11:00 - 12:00	5	42	0.128	5	42	0.133	5	42	0.261
12:00 - 13:00	5	42	0.085	5	42	0.133	5	42	0.218
13:00 - 14:00	5	42	0.100	5	42	0.109	5	42	0.209
14:00 - 15:00	5	42	0.114	5	42	0.142	5	42	0.256
15:00 - 16:00	5	42	0.213	5	42	0.142	5	42	0.355
16:00 - 17:00	5	42	0.223	5	42	0.118	5	42	0.341
17:00 - 18:00	**5**	**42**	**0.261**	5	42	0.171	**5**	**42**	**0.432**
18:00 - 19:00	5	42	0.175	5	42	0.128	5	42	0.303
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.692			1.781			3.473

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.*

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

LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.009	5	42	0.009	5	42	0.018
08:00 - 09:00	5	42	0.033	5	42	0.038	5	42	0.071
09:00 - 10:00	5	42	0.047	5	42	0.047	5	42	0.094
10:00 - 11:00	5	42	0.038	5	42	0.028	5	42	0.066
11:00 - 12:00	5	42	0.019	5	42	0.019	5	42	0.038
12:00 - 13:00	5	42	0.047	5	42	0.043	5	42	0.090
13:00 - 14:00	**5**	**42**	**0.066**	**5**	**42**	**0.057**	**5**	**42**	**0.123**
14:00 - 15:00	5	42	0.038	5	42	0.047	5	42	0.085
15:00 - 16:00	5	42	0.028	5	42	0.028	5	42	0.056
16:00 - 17:00	5	42	0.028	5	42	0.038	5	42	0.066
17:00 - 18:00	5	42	0.014	5	42	0.024	5	42	0.038
18:00 - 19:00	5	42	0.024	5	42	0.005	5	42	0.029
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.391			0.383			0.774

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.*

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

MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	**5**	**42**	**0.005**	5	42	0.005
08:00 - 09:00	5	42	0.000	5	42	0.000	5	42	0.000
09:00 - 10:00	5	42	0.000	5	42	0.000	5	42	0.000
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.000	5	42	0.000	5	42	0.000
12:00 - 13:00	5	42	0.000	5	42	0.000	5	42	0.000
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.000	5	42	0.005	5	42	0.005
15:00 - 16:00	5	42	0.000	5	42	0.000	5	42	0.000
16:00 - 17:00	**5**	**42**	**0.005**	5	42	0.005	**5**	**42**	**0.010**
17:00 - 18:00	5	42	0.005	5	42	0.000	5	42	0.005
18:00 - 19:00	5	42	0.000	5	42	0.000	5	42	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.015			0.025

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.*

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

Light Vehicles (LV)

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	5	42	0.000	5	42	0.000
08:00 - 09:00	5	42	0.000	5	42	0.000	5	42	0.000
09:00 - 10:00	5	42	0.000	5	42	0.000	5	42	0.000
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.000	5	42	0.000	5	42	0.000
12:00 - 13:00	5	42	0.000	5	42	0.000	5	42	0.000
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.000	5	42	0.000	5	42	0.000
15:00 - 16:00	5	42	0.000	5	42	0.000	5	42	0.000
16:00 - 17:00	5	42	0.000	5	42	0.000	5	42	0.000
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.000	5	42	0.000	5	42	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

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

Rigid Trucks - No Trailer (OGV1)

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	5	42	0.000	5	42	0.000
08:00 - 09:00	5	42	0.000	5	42	0.000	5	42	0.000
09:00 - 10:00	5	42	0.000	5	42	0.000	5	42	0.000
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.000	5	42	0.000	5	42	0.000
12:00 - 13:00	5	42	0.000	5	42	0.000	5	42	0.000
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.000	5	42	0.000	5	42	0.000
15:00 - 16:00	5	42	0.000	5	42	0.000	5	42	0.000
16:00 - 17:00	5	42	0.000	5	42	0.000	5	42	0.000
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.000	5	42	0.000	5	42	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

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

Trucks Towing Trailers (OGV2)

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	5	42	0.000	5	42	0.000
08:00 - 09:00	5	42	0.000	5	42	0.000	5	42	0.000
09:00 - 10:00	5	42	0.000	5	42	0.000	5	42	0.000
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.000	5	42	0.000	5	42	0.000
12:00 - 13:00	5	42	0.000	5	42	0.000	5	42	0.000
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.000	5	42	0.000	5	42	0.000
15:00 - 16:00	5	42	0.000	5	42	0.000	5	42	0.000
16:00 - 17:00	5	42	0.000	5	42	0.000	5	42	0.000
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.000	5	42	0.000	5	42	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

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

Buses

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	5	42	0.000	5	42	0.000
08:00 - 09:00	5	42	0.000	5	42	0.000	5	42	0.000
09:00 - 10:00	5	42	0.000	5	42	0.000	5	42	0.000
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.000	5	42	0.000	5	42	0.000
12:00 - 13:00	5	42	0.000	5	42	0.000	5	42	0.000
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.000	5	42	0.000	5	42	0.000
15:00 - 16:00	5	42	0.000	5	42	0.000	5	42	0.000
16:00 - 17:00	5	42	0.000	5	42	0.000	5	42	0.000
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.000	5	42	0.000	5	42	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

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

Non-Motorised Vehicles (NMV)

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	5	42	0.000	5	42	0.000
08:00 - 09:00	5	42	0.000	5	42	0.000	5	42	0.000
09:00 - 10:00	5	42	0.000	5	42	0.000	5	42	0.000
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.000	5	42	0.000	5	42	0.000
12:00 - 13:00	5	42	0.000	5	42	0.000	5	42	0.000
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.000	5	42	0.000	5	42	0.000
15:00 - 16:00	5	42	0.000	5	42	0.000	5	42	0.000
16:00 - 17:00	5	42	0.000	5	42	0.000	5	42	0.000
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.000	5	42	0.000	5	42	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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

Cycles

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	5	42	0.000	5	42	0.000
08:00 - 09:00	5	42	0.000	5	42	0.000	5	42	0.000
09:00 - 10:00	5	42	0.000	5	42	0.000	5	42	0.000
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.000	5	42	0.000	5	42	0.000
12:00 - 13:00	5	42	0.000	5	42	0.000	5	42	0.000
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.000	5	42	0.000	5	42	0.000
15:00 - 16:00	5	42	0.000	5	42	0.000	5	42	0.000
16:00 - 17:00	5	42	0.000	5	42	0.000	5	42	0.000
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.000	5	42	0.000	5	42	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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

Scooters

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	5	42	0.000	5	42	0.000
08:00 - 09:00	5	42	0.000	5	42	0.000	5	42	0.000
09:00 - 10:00	5	42	0.000	5	42	0.000	5	42	0.000
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.000	5	42	0.000	5	42	0.000
12:00 - 13:00	5	42	0.000	5	42	0.000	5	42	0.000
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.000	5	42	0.000	5	42	0.000
15:00 - 16:00	5	42	0.000	5	42	0.000	5	42	0.000
16:00 - 17:00	5	42	0.000	5	42	0.000	5	42	0.000
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.000	5	42	0.000	5	42	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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

Non-Vehicular People Movements (NVPM)

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	42	0.000	5	42	0.000	5	42	0.000
08:00 - 09:00	5	42	0.000	5	42	0.000	5	42	0.000
09:00 - 10:00	5	42	0.000	5	42	0.000	5	42	0.000
10:00 - 11:00	5	42	0.000	5	42	0.000	5	42	0.000
11:00 - 12:00	5	42	0.000	5	42	0.000	5	42	0.000
12:00 - 13:00	5	42	0.000	5	42	0.000	5	42	0.000
13:00 - 14:00	5	42	0.000	5	42	0.000	5	42	0.000
14:00 - 15:00	5	42	0.000	5	42	0.000	5	42	0.000
15:00 - 16:00	5	42	0.000	5	42	0.000	5	42	0.000
16:00 - 17:00	5	42	0.000	5	42	0.000	5	42	0.000
17:00 - 18:00	5	42	0.000	5	42	0.000	5	42	0.000
18:00 - 19:00	5	42	0.000	5	42	0.000	5	42	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

Calculation Reference: AUDIT-656801-200327-0354

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

VEHICLES

Selected regions and areas:

01	**GREATER LONDON**		
	HO	HOUNSLOW	1 days
04	**EAST ANGLIA**		
	CA	CAMBRIDGESHIRE	1 days
05	**EAST MIDLANDS**		
	DS	DERBYSHIRE	1 days
11	**SCOTLAND**		
	EB	CITY OF EDINBURGH	1 days
15	**GREATER DUBLIN**		
	DL	DUBLIN	1 days
17	**ULSTER (NORTHERN IRELAND)**		
	AN	ANTRIM	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 20 to 203 (units:)
Range Selected by User: 6 to 493 (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: 01/01/12 to 14/11/19

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

Selected survey days:

Monday	1 days
Tuesday	2 days
Wednesday	2 days
Friday	1 days

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

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Residential Zone	5
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

C3	6 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 1 mile:

20,001 to 25,000	2 days
25,001 to 50,000	4 days

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

Population within 5 miles:

125,001 to 250,000	2 days
250,001 to 500,000	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	3 days

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

Travel Plan:

Yes	1 days
No	5 days

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

PTAL Rating:

No PTAL Present	5 days
3 Moderate	1 days

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.031	6	65	0.111	6	65	0.142
08:00 - 09:00	6	65	0.046	**6**	**65**	**0.165**	6	65	0.211
09:00 - 10:00	6	65	0.075	6	65	0.085	6	65	0.160
10:00 - 11:00	6	65	0.067	6	65	0.090	6	65	0.157
11:00 - 12:00	6	65	0.062	6	65	0.059	6	65	0.121
12:00 - 13:00	6	65	0.057	6	65	0.085	6	65	0.142
13:00 - 14:00	6	65	0.041	6	65	0.075	6	65	0.116
14:00 - 15:00	6	65	0.075	6	65	0.064	6	65	0.139
15:00 - 16:00	6	65	0.103	6	65	0.075	6	65	0.178
16:00 - 17:00	6	65	0.118	6	65	0.077	6	65	0.195
17:00 - 18:00	**6**	**65**	**0.183**	6	65	0.080	**6**	**65**	**0.263**
18:00 - 19:00	6	65	0.126	6	65	0.100	6	65	0.226
19:00 - 20:00	1	203	0.113	1	203	0.064	1	203	0.177
20:00 - 21:00	1	203	0.069	1	203	0.049	1	203	0.118
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.166			1.179			2.345

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

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

Parameter summary

Trip rate parameter range selected:	20 - 203 (units:)
Survey date date range:	01/01/12 - 14/11/19
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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R089 Apartments Weekdays **Page 4**
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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.005	**6**	**65**	**0.005**	6	65	0.010
08:00 - 09:00	6	65	0.003	6	65	0.003	6	65	0.006
09:00 - 10:00	**6**	**65**	**0.008**	6	65	0.005	**6**	**65**	**0.013**
10:00 - 11:00	6	65	0.000	6	65	0.003	6	65	0.003
11:00 - 12:00	6	65	0.003	6	65	0.003	6	65	0.006
12:00 - 13:00	6	65	0.005	6	65	0.003	6	65	0.008
13:00 - 14:00	6	65	0.000	6	65	0.003	6	65	0.003
14:00 - 15:00	6	65	0.000	6	65	0.000	6	65	0.000
15:00 - 16:00	6	65	0.003	6	65	0.003	6	65	0.006
16:00 - 17:00	6	65	0.000	6	65	0.000	6	65	0.000
17:00 - 18:00	6	65	0.003	6	65	0.003	6	65	0.006
18:00 - 19:00	6	65	0.003	6	65	0.003	6	65	0.006
19:00 - 20:00	1	203	0.005	1	203	0.005	1	203	0.010
20:00 - 21:00	1	203	0.000	1	203	0.000	1	203	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.038			0.039			0.077

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.000	6	65	0.000	6	65	0.000
08:00 - 09:00	6	65	0.003	6	65	0.000	6	65	0.003
09:00 - 10:00	6	65	0.005	6	65	0.003	6	65	0.008
10:00 - 11:00	**6**	**65**	**0.015**	**6**	**65**	**0.010**	**6**	**65**	**0.025**
11:00 - 12:00	6	65	0.003	6	65	0.010	6	65	0.013
12:00 - 13:00	6	65	0.000	6	65	0.003	6	65	0.003
13:00 - 14:00	6	65	0.000	6	65	0.000	6	65	0.000
14:00 - 15:00	6	65	0.000	6	65	0.000	6	65	0.000
15:00 - 16:00	6	65	0.003	6	65	0.000	6	65	0.003
16:00 - 17:00	6	65	0.003	6	65	0.005	6	65	0.008
17:00 - 18:00	6	65	0.000	6	65	0.000	6	65	0.000
18:00 - 19:00	6	65	0.000	6	65	0.000	6	65	0.000
19:00 - 20:00	1	203	0.000	1	203	0.000	1	203	0.000
20:00 - 21:00	1	203	0.000	1	203	0.000	1	203	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.031			0.063

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.000	6	65	0.000	6	65	0.000
08:00 - 09:00	6	65	0.000	6	65	0.000	6	65	0.000
09:00 - 10:00	6	65	0.000	6	65	0.000	6	65	0.000
10:00 - 11:00	6	65	0.000	6	65	0.000	6	65	0.000
11:00 - 12:00	6	65	0.000	6	65	0.000	6	65	0.000
12:00 - 13:00	6	65	0.000	6	65	0.000	6	65	0.000
13:00 - 14:00	6	65	0.000	6	65	0.000	6	65	0.000
14:00 - 15:00	**6**	**65**	**0.003**	**6**	**65**	**0.003**	**6**	**65**	**0.006**
15:00 - 16:00	6	65	0.000	6	65	0.000	6	65	0.000
16:00 - 17:00	6	65	0.003	6	65	0.003	6	65	0.006
17:00 - 18:00	6	65	0.000	6	65	0.000	6	65	0.000
18:00 - 19:00	6	65	0.000	6	65	0.000	6	65	0.000
19:00 - 20:00	1	203	0.000	1	203	0.000	1	203	0.000
20:00 - 21:00	1	203	0.000	1	203	0.000	1	203	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.006			0.012

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.000	6	65	0.015	6	65	0.015
08:00 - 09:00	6	65	0.000	**6**	**65**	**0.023**	**6**	**65**	**0.023**
09:00 - 10:00	6	65	0.000	6	65	0.000	6	65	0.000
10:00 - 11:00	6	65	0.000	6	65	0.000	6	65	0.000
11:00 - 12:00	6	65	0.010	6	65	0.003	6	65	0.013
12:00 - 13:00	6	65	0.003	6	65	0.003	6	65	0.006
13:00 - 14:00	6	65	0.000	6	65	0.003	6	65	0.003
14:00 - 15:00	6	65	0.005	6	65	0.003	6	65	0.008
15:00 - 16:00	6	65	0.003	6	65	0.003	6	65	0.006
16:00 - 17:00	6	65	0.003	6	65	0.003	6	65	0.006
17:00 - 18:00	**6**	**65**	**0.015**	6	65	0.008	6	65	0.023
18:00 - 19:00	6	65	0.010	6	65	0.003	6	65	0.013
19:00 - 20:00	1	203	0.000	1	203	0.000	1	203	0.000
20:00 - 21:00	1	203	0.005	1	203	0.000	1	203	0.005
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.054			0.067			0.121

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.

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.018	6	65	0.095	6	65	0.113
08:00 - 09:00	6	65	0.033	**6**	**65**	**0.157**	6	65	0.190
09:00 - 10:00	6	65	0.051	6	65	0.064	6	65	0.115
10:00 - 11:00	6	65	0.046	6	65	0.062	6	65	0.108
11:00 - 12:00	6	65	0.049	6	65	0.031	6	65	0.080
12:00 - 13:00	6	65	0.031	6	65	0.059	6	65	0.090
13:00 - 14:00	6	65	0.033	6	65	0.051	6	65	0.084
14:00 - 15:00	6	65	0.062	6	65	0.051	6	65	0.113
15:00 - 16:00	6	65	0.085	6	65	0.067	6	65	0.152
16:00 - 17:00	6	65	0.095	6	65	0.059	6	65	0.154
17:00 - 18:00	**6**	**65**	**0.165**	6	65	0.062	**6**	**65**	**0.227**
18:00 - 19:00	6	65	0.105	6	65	0.085	6	65	0.190
19:00 - 20:00	1	203	0.084	1	203	0.044	1	203	0.128
20:00 - 21:00	1	203	0.059	1	203	0.044	1	203	0.103
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.916			0.931			1.847

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.008	6	65	0.010	6	65	0.018
08:00 - 09:00	6	65	0.008	6	65	0.005	6	65	0.013
09:00 - 10:00	6	65	0.010	6	65	0.013	6	65	0.023
10:00 - 11:00	6	65	0.005	6	65	0.013	6	65	0.018
11:00 - 12:00	6	65	0.005	**6**	**65**	**0.015**	6	65	0.020
12:00 - 13:00	**6**	**65**	**0.018**	6	65	0.015	**6**	**65**	**0.033**
13:00 - 14:00	6	65	0.003	6	65	0.015	6	65	0.018
14:00 - 15:00	6	65	0.008	6	65	0.010	6	65	0.018
15:00 - 16:00	6	65	0.013	6	65	0.005	6	65	0.018
16:00 - 17:00	6	65	0.013	6	65	0.008	6	65	0.021
17:00 - 18:00	6	65	0.013	6	65	0.013	6	65	0.026
18:00 - 19:00	6	65	0.015	6	65	0.008	6	65	0.023
19:00 - 20:00	1	203	0.015	1	203	0.010	1	203	0.025
20:00 - 21:00	1	203	0.010	1	203	0.000	1	203	0.010
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.144			0.140			0.284

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.

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.000	6	65	0.000	6	65	0.000
08:00 - 09:00	6	65	0.000	6	65	0.000	6	65	0.000
09:00 - 10:00	6	65	0.000	6	65	0.000	6	65	0.000
10:00 - 11:00	6	65	0.000	6	65	0.003	6	65	0.003
11:00 - 12:00	6	65	0.003	6	65	0.000	6	65	0.003
12:00 - 13:00	6	65	0.003	**6**	**65**	**0.005**	6	65	0.008
13:00 - 14:00	6	65	0.005	6	65	0.005	6	65	0.010
14:00 - 15:00	6	65	0.003	6	65	0.000	6	65	0.003
15:00 - 16:00	6	65	0.000	6	65	0.000	6	65	0.000
16:00 - 17:00	6	65	0.005	6	65	0.003	6	65	0.008
17:00 - 18:00	6	65	0.003	6	65	0.003	6	65	0.006
18:00 - 19:00	6	65	0.003	6	65	0.005	6	65	0.008
19:00 - 20:00	**1**	**203**	**0.010**	1	203	0.005	**1**	**203**	**0.015**
20:00 - 21:00	1	203	0.000	1	203	0.005	1	203	0.005
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.034			0.069

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

Light Vehicles (LV)

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	6	65	0.000	6	65	0.000	6	65	0.000
08:00 - 09:00	6	65	0.000	6	65	0.000	6	65	0.000
09:00 - 10:00	6	65	0.000	6	65	0.000	6	65	0.000
10:00 - 11:00	6	65	0.000	6	65	0.000	6	65	0.000
11:00 - 12:00	6	65	0.000	6	65	0.000	6	65	0.000
12:00 - 13:00	6	65	0.000	6	65	0.000	6	65	0.000
13:00 - 14:00	6	65	0.000	6	65	0.000	6	65	0.000
14:00 - 15:00	6	65	0.000	6	65	0.000	6	65	0.000
15:00 - 16:00	6	65	0.000	6	65	0.000	6	65	0.000
16:00 - 17:00	6	65	0.000	6	65	0.000	6	65	0.000
17:00 - 18:00	6	65	0.000	6	65	0.000	6	65	0.000
18:00 - 19:00	6	65	0.000	6	65	0.000	6	65	0.000
19:00 - 20:00	1	203	0.000	1	203	0.000	1	203	0.000
20:00 - 21:00	1	203	0.000	1	203	0.000	1	203	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

Rigid Trucks - No Trailer (OGV1)

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	6	65	0.000	6	65	0.000	6	65	0.000
08:00 - 09:00	6	65	0.000	6	65	0.000	6	65	0.000
09:00 - 10:00	6	65	0.000	6	65	0.000	6	65	0.000
10:00 - 11:00	6	65	0.000	6	65	0.000	6	65	0.000
11:00 - 12:00	6	65	0.000	6	65	0.000	6	65	0.000
12:00 - 13:00	6	65	0.000	6	65	0.000	6	65	0.000
13:00 - 14:00	6	65	0.000	6	65	0.000	6	65	0.000
14:00 - 15:00	6	65	0.000	6	65	0.000	6	65	0.000
15:00 - 16:00	6	65	0.000	6	65	0.000	6	65	0.000
16:00 - 17:00	6	65	0.000	6	65	0.000	6	65	0.000
17:00 - 18:00	6	65	0.000	6	65	0.000	6	65	0.000
18:00 - 19:00	6	65	0.000	6	65	0.000	6	65	0.000
19:00 - 20:00	1	203	0.000	1	203	0.000	1	203	0.000
20:00 - 21:00	1	203	0.000	1	203	0.000	1	203	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

Trucks Towing Trailers (OGV2)

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.000	6	65	0.000	6	65	0.000
08:00 - 09:00	6	65	0.000	6	65	0.000	6	65	0.000
09:00 - 10:00	6	65	0.000	6	65	0.000	6	65	0.000
10:00 - 11:00	6	65	0.000	6	65	0.000	6	65	0.000
11:00 - 12:00	6	65	0.000	6	65	0.000	6	65	0.000
12:00 - 13:00	6	65	0.000	6	65	0.000	6	65	0.000
13:00 - 14:00	6	65	0.000	6	65	0.000	6	65	0.000
14:00 - 15:00	6	65	0.000	6	65	0.000	6	65	0.000
15:00 - 16:00	6	65	0.000	6	65	0.000	6	65	0.000
16:00 - 17:00	6	65	0.000	6	65	0.000	6	65	0.000
17:00 - 18:00	6	65	0.000	6	65	0.000	6	65	0.000
18:00 - 19:00	6	65	0.000	6	65	0.000	6	65	0.000
19:00 - 20:00	1	203	0.000	1	203	0.000	1	203	0.000
20:00 - 21:00	1	203	0.000	1	203	0.000	1	203	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

Buses

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.000	6	65	0.000	6	65	0.000
08:00 - 09:00	6	65	0.000	6	65	0.000	6	65	0.000
09:00 - 10:00	6	65	0.000	6	65	0.000	6	65	0.000
10:00 - 11:00	6	65	0.000	6	65	0.000	6	65	0.000
11:00 - 12:00	6	65	0.000	6	65	0.000	6	65	0.000
12:00 - 13:00	6	65	0.000	6	65	0.000	6	65	0.000
13:00 - 14:00	6	65	0.000	6	65	0.000	6	65	0.000
14:00 - 15:00	6	65	0.000	6	65	0.000	6	65	0.000
15:00 - 16:00	6	65	0.000	6	65	0.000	6	65	0.000
16:00 - 17:00	6	65	0.000	6	65	0.000	6	65	0.000
17:00 - 18:00	6	65	0.000	6	65	0.000	6	65	0.000
18:00 - 19:00	6	65	0.000	6	65	0.000	6	65	0.000
19:00 - 20:00	1	203	0.000	1	203	0.000	1	203	0.000
20:00 - 21:00	1	203	0.000	1	203	0.000	1	203	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

Non-Motorised Vehicles (NMV)

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.000	6	65	0.000	6	65	0.000
08:00 - 09:00	6	65	0.000	6	65	0.000	6	65	0.000
09:00 - 10:00	6	65	0.000	6	65	0.000	6	65	0.000
10:00 - 11:00	6	65	0.000	6	65	0.000	6	65	0.000
11:00 - 12:00	6	65	0.000	6	65	0.000	6	65	0.000
12:00 - 13:00	6	65	0.000	6	65	0.000	6	65	0.000
13:00 - 14:00	6	65	0.000	6	65	0.000	6	65	0.000
14:00 - 15:00	6	65	0.000	6	65	0.000	6	65	0.000
15:00 - 16:00	6	65	0.000	6	65	0.000	6	65	0.000
16:00 - 17:00	6	65	0.000	6	65	0.000	6	65	0.000
17:00 - 18:00	6	65	0.000	6	65	0.000	6	65	0.000
18:00 - 19:00	6	65	0.000	6	65	0.000	6	65	0.000
19:00 - 20:00	1	203	0.000	1	203	0.000	1	203	0.000
20:00 - 21:00	1	203	0.000	1	203	0.000	1	203	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

Cycles

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.000	6	65	0.000	6	65	0.000
08:00 - 09:00	6	65	0.000	6	65	0.000	6	65	0.000
09:00 - 10:00	6	65	0.000	6	65	0.000	6	65	0.000
10:00 - 11:00	6	65	0.000	6	65	0.000	6	65	0.000
11:00 - 12:00	6	65	0.000	6	65	0.000	6	65	0.000
12:00 - 13:00	6	65	0.000	6	65	0.000	6	65	0.000
13:00 - 14:00	6	65	0.000	6	65	0.000	6	65	0.000
14:00 - 15:00	6	65	0.000	6	65	0.000	6	65	0.000
15:00 - 16:00	6	65	0.000	6	65	0.000	6	65	0.000
16:00 - 17:00	6	65	0.000	6	65	0.000	6	65	0.000
17:00 - 18:00	6	65	0.000	6	65	0.000	6	65	0.000
18:00 - 19:00	6	65	0.000	6	65	0.000	6	65	0.000
19:00 - 20:00	1	203	0.000	1	203	0.000	1	203	0.000
20:00 - 21:00	1	203	0.000	1	203	0.000	1	203	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

Scooters

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.000	6	65	0.000	6	65	0.000
08:00 - 09:00	6	65	0.000	6	65	0.000	6	65	0.000
09:00 - 10:00	6	65	0.000	6	65	0.000	6	65	0.000
10:00 - 11:00	6	65	0.000	6	65	0.000	6	65	0.000
11:00 - 12:00	6	65	0.000	6	65	0.000	6	65	0.000
12:00 - 13:00	6	65	0.000	6	65	0.000	6	65	0.000
13:00 - 14:00	6	65	0.000	6	65	0.000	6	65	0.000
14:00 - 15:00	6	65	0.000	6	65	0.000	6	65	0.000
15:00 - 16:00	6	65	0.000	6	65	0.000	6	65	0.000
16:00 - 17:00	6	65	0.000	6	65	0.000	6	65	0.000
17:00 - 18:00	6	65	0.000	6	65	0.000	6	65	0.000
18:00 - 19:00	6	65	0.000	6	65	0.000	6	65	0.000
19:00 - 20:00	1	203	0.000	1	203	0.000	1	203	0.000
20:00 - 21:00	1	203	0.000	1	203	0.000	1	203	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

Non-Vehicular People Movements (NVPM)

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	65	0.000	6	65	0.000	6	65	0.000
08:00 - 09:00	6	65	0.000	6	65	0.000	6	65	0.000
09:00 - 10:00	6	65	0.000	6	65	0.000	6	65	0.000
10:00 - 11:00	6	65	0.000	6	65	0.000	6	65	0.000
11:00 - 12:00	6	65	0.000	6	65	0.000	6	65	0.000
12:00 - 13:00	6	65	0.000	6	65	0.000	6	65	0.000
13:00 - 14:00	6	65	0.000	6	65	0.000	6	65	0.000
14:00 - 15:00	6	65	0.000	6	65	0.000	6	65	0.000
15:00 - 16:00	6	65	0.000	6	65	0.000	6	65	0.000
16:00 - 17:00	6	65	0.000	6	65	0.000	6	65	0.000
17:00 - 18:00	6	65	0.000	6	65	0.000	6	65	0.000
18:00 - 19:00	6	65	0.000	6	65	0.000	6	65	0.000
19:00 - 20:00	1	203	0.000	1	203	0.000	1	203	0.000
20:00 - 21:00	1	203	0.000	1	203	0.000	1	203	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : I - SHOPPING CENTRE - LOCAL SHOPS

VEHICLES

Selected regions and areas:

03	**SOUTH WEST**		
	DV	DEVON	1 days
05	**EAST MIDLANDS**		
	LE	LEICESTERSHIRE	1 days
06	**WEST MIDLANDS**		
	WO	WORCESTERSHIRE	1 days
09	**NORTH**		
	TV	TEES VALLEY	1 days
	TW	TYNE & WEAR	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: Gross floor area
Actual Range: 470 to 4052 (units: sqm)
Range Selected by User: 210 to 84009 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 28/06/19

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

Selected survey days:

Tuesday	1 days
Wednesday	2 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	3

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

Selected Location Sub Categories:

Residential Zone	5

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

Secondary Filtering selection:

Use Class:

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 1 mile:

25,001 to 50,000	5 days

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

Population within 5 miles:

125,001 to 250,000	1 days
250,001 to 500,000	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	3 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.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	5 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	5 days

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

PTAL Rating:

No PTAL Present	5 days

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

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	1.296	1	540	1.296	1	540	2.592
07:00 - 08:00	5	1502	2.131	5	1502	1.931	5	1502	4.062
08:00 - 09:00	5	1502	2.424	5	1502	2.051	5	1502	4.475
09:00 - 10:00	5	1502	3.436	5	1502	2.944	5	1502	6.380
10:00 - 11:00	5	1502	3.410	5	1502	3.263	5	1502	6.673
11:00 - 12:00	5	1502	3.849	5	1502	3.969	5	1502	7.818
12:00 - 13:00	**5**	**1502**	**4.622**	5	1502	4.435	**5**	**1502**	**9.057**
13:00 - 14:00	5	1502	3.396	5	1502	3.583	5	1502	6.979
14:00 - 15:00	5	1502	3.703	5	1502	3.570	5	1502	7.273
15:00 - 16:00	5	1502	2.957	5	1502	3.143	5	1502	6.100
16:00 - 17:00	5	1502	3.490	5	1502	3.316	5	1502	6.806
17:00 - 18:00	5	1502	3.729	5	1502	4.182	5	1502	7.911
18:00 - 19:00	5	1502	4.382	**5**	**1502**	**4.595**	5	1502	8.977
19:00 - 20:00	5	1502	3.769	5	1502	3.623	5	1502	7.392
20:00 - 21:00	5	1502	2.571	5	1502	2.890	5	1502	5.461
21:00 - 22:00	4	864	3.530	4	864	3.733	4	864	7.263
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			52.695			52.524			105.219

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

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

Parameter summary

Trip rate parameter range selected:	470 - 4052 (units: sqm)
Survey date date range:	01/01/12 - 28/06/19
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	5	1502	0.027	5	1502	0.027	5	1502	0.054
08:00 - 09:00	5	1502	0.027	5	1502	0.027	5	1502	0.054
09:00 - 10:00	**5**	**1502**	**0.080**	5	1502	0.067	5	1502	0.147
10:00 - 11:00	5	1502	0.040	5	1502	0.053	5	1502	0.093
11:00 - 12:00	5	1502	0.080	**5**	**1502**	**0.080**	**5**	**1502**	**0.160**
12:00 - 13:00	5	1502	0.040	5	1502	0.040	5	1502	0.080
13:00 - 14:00	5	1502	0.013	5	1502	0.000	5	1502	0.013
14:00 - 15:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
15:00 - 16:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
16:00 - 17:00	5	1502	0.013	5	1502	0.013	5	1502	0.026
17:00 - 18:00	5	1502	0.027	5	1502	0.040	5	1502	0.067
18:00 - 19:00	5	1502	0.013	5	1502	0.013	5	1502	0.026
19:00 - 20:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
20:00 - 21:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
21:00 - 22:00	4	864	0.000	4	864	0.000	4	864	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.360			0.360			0.720

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.*

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	5	1502	0.053	**5**	**1502**	**0.040**	5	1502	0.093
08:00 - 09:00	5	1502	0.027	5	1502	0.027	5	1502	0.054
09:00 - 10:00	**5**	**1502**	**0.093**	5	1502	0.040	**5**	**1502**	**0.133**
10:00 - 11:00	5	1502	0.000	5	1502	0.027	5	1502	0.027
11:00 - 12:00	5	1502	0.013	5	1502	0.013	5	1502	0.026
12:00 - 13:00	5	1502	0.013	5	1502	0.000	5	1502	0.013
13:00 - 14:00	5	1502	0.013	5	1502	0.013	5	1502	0.026
14:00 - 15:00	5	1502	0.013	5	1502	0.027	5	1502	0.040
15:00 - 16:00	5	1502	0.013	5	1502	0.013	5	1502	0.026
16:00 - 17:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
17:00 - 18:00	5	1502	0.027	5	1502	0.027	5	1502	0.054
18:00 - 19:00	5	1502	0.000	5	1502	0.027	5	1502	0.027
19:00 - 20:00	5	1502	0.000	5	1502	0.013	5	1502	0.013
20:00 - 21:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
21:00 - 22:00	4	864	0.029	4	864	0.029	4	864	0.058
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.294			0.296			0.590

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.*

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
08:00 - 09:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
09:00 - 10:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
10:00 - 11:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
11:00 - 12:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
12:00 - 13:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
13:00 - 14:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
14:00 - 15:00	5	1502	0.013	5	1502	0.000	5	1502	0.013
15:00 - 16:00	5	1502	0.000	5	1502	0.013	5	1502	0.013
16:00 - 17:00	5	1502	0.013	5	1502	0.013	5	1502	0.026
17:00 - 18:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
18:00 - 19:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
19:00 - 20:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
20:00 - 21:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
21:00 - 22:00	**4**	**864**	**0.058**	**4**	**864**	**0.058**	**4**	**864**	**0.116**
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.084			0.084			0.168

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.*

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	**1**	**540**	**0.185**	1	540	0.000	1	540	0.185
07:00 - 08:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
08:00 - 09:00	5	1502	0.067	5	1502	0.053	5	1502	0.120
09:00 - 10:00	5	1502	0.067	5	1502	0.067	5	1502	0.134
10:00 - 11:00	5	1502	0.040	5	1502	0.027	5	1502	0.067
11:00 - 12:00	5	1502	0.013	5	1502	0.027	5	1502	0.040
12:00 - 13:00	5	1502	0.027	5	1502	0.013	5	1502	0.040
13:00 - 14:00	5	1502	0.000	5	1502	0.013	5	1502	0.013
14:00 - 15:00	5	1502	0.027	5	1502	0.027	5	1502	0.054
15:00 - 16:00	5	1502	0.067	5	1502	0.067	5	1502	0.134
16:00 - 17:00	5	1502	0.067	5	1502	0.040	5	1502	0.107
17:00 - 18:00	5	1502	0.013	5	1502	0.027	5	1502	0.040
18:00 - 19:00	5	1502	0.040	5	1502	0.027	5	1502	0.067
19:00 - 20:00	5	1502	0.107	5	1502	0.133	5	1502	0.240
20:00 - 21:00	5	1502	0.027	5	1502	0.027	5	1502	0.054
21:00 - 22:00	4	864	0.174	**4**	**864**	**0.145**	**4**	**864**	**0.319**
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.921			0.693			1.614

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.*

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

Light Vehicles (LV)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
08:00 - 09:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
09:00 - 10:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
10:00 - 11:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
11:00 - 12:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
12:00 - 13:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
13:00 - 14:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
14:00 - 15:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
15:00 - 16:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
16:00 - 17:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
17:00 - 18:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
18:00 - 19:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
19:00 - 20:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
20:00 - 21:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
21:00 - 22:00	4	864	0.000	4	864	0.000	4	864	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

Rigid Trucks - No Trailer (OGV1)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
08:00 - 09:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
09:00 - 10:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
10:00 - 11:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
11:00 - 12:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
12:00 - 13:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
13:00 - 14:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
14:00 - 15:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
15:00 - 16:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
16:00 - 17:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
17:00 - 18:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
18:00 - 19:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
19:00 - 20:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
20:00 - 21:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
21:00 - 22:00	4	864	0.000	4	864	0.000	4	864	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

Trucks Towing Trailers (OGV2)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
08:00 - 09:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
09:00 - 10:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
10:00 - 11:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
11:00 - 12:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
12:00 - 13:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
13:00 - 14:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
14:00 - 15:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
15:00 - 16:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
16:00 - 17:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
17:00 - 18:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
18:00 - 19:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
19:00 - 20:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
20:00 - 21:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
21:00 - 22:00	4	864	0.000	4	864	0.000	4	864	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

Buses

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
08:00 - 09:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
09:00 - 10:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
10:00 - 11:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
11:00 - 12:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
12:00 - 13:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
13:00 - 14:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
14:00 - 15:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
15:00 - 16:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
16:00 - 17:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
17:00 - 18:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
18:00 - 19:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
19:00 - 20:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
20:00 - 21:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
21:00 - 22:00	4	864	0.000	4	864	0.000	4	864	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

Non-Motorised Vehicles (NMV)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
08:00 - 09:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
09:00 - 10:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
10:00 - 11:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
11:00 - 12:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
12:00 - 13:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
13:00 - 14:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
14:00 - 15:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
15:00 - 16:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
16:00 - 17:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
17:00 - 18:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
18:00 - 19:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
19:00 - 20:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
20:00 - 21:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
21:00 - 22:00	4	864	0.000	4	864	0.000	4	864	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

Cycles

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
08:00 - 09:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
09:00 - 10:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
10:00 - 11:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
11:00 - 12:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
12:00 - 13:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
13:00 - 14:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
14:00 - 15:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
15:00 - 16:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
16:00 - 17:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
17:00 - 18:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
18:00 - 19:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
19:00 - 20:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
20:00 - 21:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
21:00 - 22:00	4	864	0.000	4	864	0.000	4	864	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

Scooters

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
08:00 - 09:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
09:00 - 10:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
10:00 - 11:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
11:00 - 12:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
12:00 - 13:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
13:00 - 14:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
14:00 - 15:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
15:00 - 16:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
16:00 - 17:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
17:00 - 18:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
18:00 - 19:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
19:00 - 20:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
20:00 - 21:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
21:00 - 22:00	4	864	0.000	4	864	0.000	4	864	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

Non-Vehicular People Movements (NVPM)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	540	0.000	1	540	0.000	1	540	0.000
07:00 - 08:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
08:00 - 09:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
09:00 - 10:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
10:00 - 11:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
11:00 - 12:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
12:00 - 13:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
13:00 - 14:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
14:00 - 15:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
15:00 - 16:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
16:00 - 17:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
17:00 - 18:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
18:00 - 19:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
19:00 - 20:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
20:00 - 21:00	5	1502	0.000	5	1502	0.000	5	1502	0.000
21:00 - 22:00	4	864	0.000	4	864	0.000	4	864	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

Calculation Reference: AUDIT-656801-200327-0338

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : G - GP SURGERIES

VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	HF	HERTFORDSHIRE	1 days
03	**SOUTH WEST**		
	DV	DEVON	1 days
	WL	WILTSHIRE	1 days
05	**EAST MIDLANDS**		
	DS	DERBYSHIRE	1 days
	NT	NOTTINGHAMSHIRE	1 days
10	**WALES**		
	CF	CARDIFF	1 days
17	**ULSTER (NORTHERN IRELAND)**		
	AN	ANTRIM	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 300 to 1319 (units: sqm)
Range Selected by User: 40 to 2709 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 26/11/19

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

Selected survey days:

Wednesday	3 days
Friday	4 days

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

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	6
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Residential Zone	6
No Sub Category	1

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

Secondary Filtering selection:

Use Class:
D1 7 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 1 mile:
25,001 to 50,000 7 days

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

Population within 5 miles:
125,001 to 250,000 3 days
250,001 to 500,000 4 days

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

Car ownership within 5 miles:
0.6 to 1.0 2 days
1.1 to 1.5 5 days

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

Travel Plan:
No 7 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 7 days

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	1.325	1	830	0.000	1	830	1.325
07:00 - 08:00	6	919	1.198	6	919	0.417	6	919	1.615
08:00 - 09:00	7	853	2.964	7	853	1.491	7	853	4.455
09:00 - 10:00	**7**	**853**	**4.036**	7	853	3.299	**7**	**853**	**7.335**
10:00 - 11:00	7	853	3.450	**7**	**853**	**3.651**	7	853	7.101
11:00 - 12:00	7	853	2.495	7	853	3.015	7	853	5.510
12:00 - 13:00	7	853	1.909	7	853	2.495	7	853	4.404
13:00 - 14:00	7	853	2.060	7	853	2.244	7	853	4.304
14:00 - 15:00	7	853	2.462	7	853	2.495	7	853	4.957
15:00 - 16:00	7	853	2.529	7	853	2.680	7	853	5.209
16:00 - 17:00	7	853	1.993	7	853	2.328	7	853	4.321
17:00 - 18:00	7	853	1.256	7	853	1.825	7	853	3.081
18:00 - 19:00	7	853	0.502	7	853	0.854	7	853	1.356
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			28.179			26.794			54.973

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

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

Parameter summary

Trip rate parameter range selected:	300 - 1319 (units: sqm)
Survey date date range:	01/01/12 - 26/11/19
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	6	919	0.000	6	919	0.000	6	919	0.000
08:00 - 09:00	7	853	0.050	7	853	0.033	7	853	0.083
09:00 - 10:00	7	853	0.134	7	853	0.100	7	853	0.234
10:00 - 11:00	**7**	**853**	**0.151**	**7**	**853**	**0.184**	**7**	**853**	**0.335**
11:00 - 12:00	7	853	0.067	7	853	0.084	7	853	0.151
12:00 - 13:00	7	853	0.050	7	853	0.050	7	853	0.100
13:00 - 14:00	7	853	0.033	7	853	0.033	7	853	0.066
14:00 - 15:00	7	853	0.067	7	853	0.050	7	853	0.117
15:00 - 16:00	7	853	0.117	7	853	0.117	7	853	0.234
16:00 - 17:00	7	853	0.067	7	853	0.067	7	853	0.134
17:00 - 18:00	7	853	0.017	7	853	0.033	7	853	0.050
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.753			0.751			1.504

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	**6**	**919**	**0.018**	**6**	**919**	**0.018**	**6**	**919**	**0.036**
08:00 - 09:00	7	853	0.017	7	853	0.017	7	853	0.034
09:00 - 10:00	7	853	0.000	7	853	0.000	7	853	0.000
10:00 - 11:00	7	853	0.000	7	853	0.000	7	853	0.000
11:00 - 12:00	7	853	0.000	7	853	0.000	7	853	0.000
12:00 - 13:00	7	853	0.000	7	853	0.000	7	853	0.000
13:00 - 14:00	7	853	0.000	7	853	0.000	7	853	0.000
14:00 - 15:00	7	853	0.000	7	853	0.000	7	853	0.000
15:00 - 16:00	7	853	0.000	7	853	0.000	7	853	0.000
16:00 - 17:00	7	853	0.000	7	853	0.000	7	853	0.000
17:00 - 18:00	7	853	0.000	7	853	0.000	7	853	0.000
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.035			0.070

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	**1**	**830**	**0.120**	1	830	0.000	**1**	**830**	**0.120**
07:00 - 08:00	6	919	0.000	6	919	0.000	6	919	0.000
08:00 - 09:00	7	853	0.000	7	853	0.000	7	853	0.000
09:00 - 10:00	7	853	0.033	**7**	**853**	**0.033**	7	853	0.066
10:00 - 11:00	7	853	0.000	7	853	0.000	7	853	0.000
11:00 - 12:00	7	853	0.000	7	853	0.000	7	853	0.000
12:00 - 13:00	7	853	0.000	7	853	0.000	7	853	0.000
13:00 - 14:00	7	853	0.000	7	853	0.000	7	853	0.000
14:00 - 15:00	7	853	0.033	7	853	0.000	7	853	0.033
15:00 - 16:00	7	853	0.000	7	853	0.033	7	853	0.033
16:00 - 17:00	7	853	0.017	7	853	0.000	7	853	0.017
17:00 - 18:00	7	853	0.000	7	853	0.000	7	853	0.000
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.203			0.066			0.269

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	**6**	**919**	**0.109**	6	919	0.036	6	919	0.145
08:00 - 09:00	7	853	0.067	7	853	0.084	**7**	**853**	**0.151**
09:00 - 10:00	7	853	0.067	7	853	0.050	7	853	0.117
10:00 - 11:00	7	853	0.050	7	853	0.033	7	853	0.083
11:00 - 12:00	7	853	0.050	**7**	**853**	**0.100**	7	853	0.150
12:00 - 13:00	7	853	0.084	7	853	0.067	7	853	0.151
13:00 - 14:00	7	853	0.000	7	853	0.050	7	853	0.050
14:00 - 15:00	7	853	0.050	7	853	0.050	7	853	0.100
15:00 - 16:00	7	853	0.033	7	853	0.033	7	853	0.066
16:00 - 17:00	7	853	0.033	7	853	0.017	7	853	0.050
17:00 - 18:00	7	853	0.033	7	853	0.050	7	853	0.083
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.576			0.570			1.146

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	1.205	1	830	0.000	1	830	1.205
07:00 - 08:00	6	919	1.016	6	919	0.327	6	919	1.343
08:00 - 09:00	7	853	2.629	7	853	1.239	7	853	3.868
09:00 - 10:00	**7**	**853**	**3.450**	7	853	2.830	**7**	**853**	**6.280**
10:00 - 11:00	7	853	2.998	**7**	**853**	**3.149**	7	853	6.147
11:00 - 12:00	7	853	2.144	7	853	2.562	7	853	4.706
12:00 - 13:00	7	853	1.742	7	853	2.261	7	853	4.003
13:00 - 14:00	7	853	1.809	7	853	2.060	7	853	3.869
14:00 - 15:00	7	853	2.160	7	853	2.294	7	853	4.454
15:00 - 16:00	7	853	2.378	7	853	2.345	7	853	4.723
16:00 - 17:00	7	853	1.758	7	853	2.177	7	853	3.935
17:00 - 18:00	7	853	1.206	7	853	1.708	7	853	2.914
18:00 - 19:00	7	853	0.519	7	853	0.837	7	853	1.356
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			25.014			23.789			48.803

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	6	919	0.109	6	919	0.073	6	919	0.182
08:00 - 09:00	7	853	0.218	7	853	0.167	7	853	0.385
09:00 - 10:00	**7**	**853**	**0.368**	7	853	0.335	**7**	**853**	**0.703**
10:00 - 11:00	7	853	0.285	7	853	0.318	7	853	0.603
11:00 - 12:00	7	853	0.335	**7**	**853**	**0.352**	7	853	0.687
12:00 - 13:00	7	853	0.167	7	853	0.184	7	853	0.351
13:00 - 14:00	7	853	0.134	7	853	0.134	7	853	0.268
14:00 - 15:00	7	853	0.151	7	853	0.151	7	853	0.302
15:00 - 16:00	7	853	0.134	7	853	0.184	7	853	0.318
16:00 - 17:00	7	853	0.084	7	853	0.067	7	853	0.151
17:00 - 18:00	7	853	0.067	7	853	0.084	7	853	0.151
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.052			2.049			4.101

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

MOTOR CYCLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	6	919	0.000	6	919	0.000	6	919	0.000
08:00 - 09:00	**7**	**853**	**0.033**	**7**	**853**	**0.033**	**7**	**853**	**0.066**
09:00 - 10:00	7	853	0.000	7	853	0.000	7	853	0.000
10:00 - 11:00	7	853	0.000	7	853	0.000	7	853	0.000
11:00 - 12:00	7	853	0.017	7	853	0.017	7	853	0.034
12:00 - 13:00	7	853	0.000	7	853	0.000	7	853	0.000
13:00 - 14:00	7	853	0.017	7	853	0.017	7	853	0.034
14:00 - 15:00	7	853	0.000	7	853	0.000	7	853	0.000
15:00 - 16:00	7	853	0.000	7	853	0.000	7	853	0.000
16:00 - 17:00	7	853	0.017	7	853	0.017	7	853	0.034
17:00 - 18:00	7	853	0.017	7	853	0.000	7	853	0.017
18:00 - 19:00	7	853	0.017	7	853	0.017	7	853	0.034
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.118			0.101			0.219

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

Light Vehicles (LV)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	6	919	0.000	6	919	0.000	6	919	0.000
08:00 - 09:00	7	853	0.000	7	853	0.000	7	853	0.000
09:00 - 10:00	7	853	0.000	7	853	0.000	7	853	0.000
10:00 - 11:00	7	853	0.000	7	853	0.000	7	853	0.000
11:00 - 12:00	7	853	0.000	7	853	0.000	7	853	0.000
12:00 - 13:00	7	853	0.000	7	853	0.000	7	853	0.000
13:00 - 14:00	7	853	0.000	7	853	0.000	7	853	0.000
14:00 - 15:00	7	853	0.000	7	853	0.000	7	853	0.000
15:00 - 16:00	7	853	0.000	7	853	0.000	7	853	0.000
16:00 - 17:00	7	853	0.000	7	853	0.000	7	853	0.000
17:00 - 18:00	7	853	0.000	7	853	0.000	7	853	0.000
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

Rigid Trucks - No Trailer (OGV1)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	6	919	0.000	6	919	0.000	6	919	0.000
08:00 - 09:00	7	853	0.000	7	853	0.000	7	853	0.000
09:00 - 10:00	7	853	0.000	7	853	0.000	7	853	0.000
10:00 - 11:00	7	853	0.000	7	853	0.000	7	853	0.000
11:00 - 12:00	7	853	0.000	7	853	0.000	7	853	0.000
12:00 - 13:00	7	853	0.000	7	853	0.000	7	853	0.000
13:00 - 14:00	7	853	0.000	7	853	0.000	7	853	0.000
14:00 - 15:00	7	853	0.000	7	853	0.000	7	853	0.000
15:00 - 16:00	7	853	0.000	7	853	0.000	7	853	0.000
16:00 - 17:00	7	853	0.000	7	853	0.000	7	853	0.000
17:00 - 18:00	7	853	0.000	7	853	0.000	7	853	0.000
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

Trucks Towing Trailers (OGV2)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	6	919	0.000	6	919	0.000	6	919	0.000
08:00 - 09:00	7	853	0.000	7	853	0.000	7	853	0.000
09:00 - 10:00	7	853	0.000	7	853	0.000	7	853	0.000
10:00 - 11:00	7	853	0.000	7	853	0.000	7	853	0.000
11:00 - 12:00	7	853	0.000	7	853	0.000	7	853	0.000
12:00 - 13:00	7	853	0.000	7	853	0.000	7	853	0.000
13:00 - 14:00	7	853	0.000	7	853	0.000	7	853	0.000
14:00 - 15:00	7	853	0.000	7	853	0.000	7	853	0.000
15:00 - 16:00	7	853	0.000	7	853	0.000	7	853	0.000
16:00 - 17:00	7	853	0.000	7	853	0.000	7	853	0.000
17:00 - 18:00	7	853	0.000	7	853	0.000	7	853	0.000
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

Buses

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	6	919	0.000	6	919	0.000	6	919	0.000
08:00 - 09:00	7	853	0.000	7	853	0.000	7	853	0.000
09:00 - 10:00	7	853	0.000	7	853	0.000	7	853	0.000
10:00 - 11:00	7	853	0.000	7	853	0.000	7	853	0.000
11:00 - 12:00	7	853	0.000	7	853	0.000	7	853	0.000
12:00 - 13:00	7	853	0.000	7	853	0.000	7	853	0.000
13:00 - 14:00	7	853	0.000	7	853	0.000	7	853	0.000
14:00 - 15:00	7	853	0.000	7	853	0.000	7	853	0.000
15:00 - 16:00	7	853	0.000	7	853	0.000	7	853	0.000
16:00 - 17:00	7	853	0.000	7	853	0.000	7	853	0.000
17:00 - 18:00	7	853	0.000	7	853	0.000	7	853	0.000
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

Non-Motorised Vehicles (NMV)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	6	919	0.000	6	919	0.000	6	919	0.000
08:00 - 09:00	7	853	0.000	7	853	0.000	7	853	0.000
09:00 - 10:00	7	853	0.000	7	853	0.000	7	853	0.000
10:00 - 11:00	7	853	0.000	7	853	0.000	7	853	0.000
11:00 - 12:00	7	853	0.000	7	853	0.000	7	853	0.000
12:00 - 13:00	7	853	0.000	7	853	0.000	7	853	0.000
13:00 - 14:00	7	853	0.000	7	853	0.000	7	853	0.000
14:00 - 15:00	7	853	0.000	7	853	0.000	7	853	0.000
15:00 - 16:00	7	853	0.000	7	853	0.000	7	853	0.000
16:00 - 17:00	7	853	0.000	7	853	0.000	7	853	0.000
17:00 - 18:00	7	853	0.000	7	853	0.000	7	853	0.000
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

Cycles

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	6	919	0.000	6	919	0.000	6	919	0.000
08:00 - 09:00	7	853	0.000	7	853	0.000	7	853	0.000
09:00 - 10:00	7	853	0.000	7	853	0.000	7	853	0.000
10:00 - 11:00	7	853	0.000	7	853	0.000	7	853	0.000
11:00 - 12:00	7	853	0.000	7	853	0.000	7	853	0.000
12:00 - 13:00	7	853	0.000	7	853	0.000	7	853	0.000
13:00 - 14:00	7	853	0.000	7	853	0.000	7	853	0.000
14:00 - 15:00	7	853	0.000	7	853	0.000	7	853	0.000
15:00 - 16:00	7	853	0.000	7	853	0.000	7	853	0.000
16:00 - 17:00	7	853	0.000	7	853	0.000	7	853	0.000
17:00 - 18:00	7	853	0.000	7	853	0.000	7	853	0.000
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

Scooters

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	6	919	0.000	6	919	0.000	6	919	0.000
08:00 - 09:00	7	853	0.000	7	853	0.000	7	853	0.000
09:00 - 10:00	7	853	0.000	7	853	0.000	7	853	0.000
10:00 - 11:00	7	853	0.000	7	853	0.000	7	853	0.000
11:00 - 12:00	7	853	0.000	7	853	0.000	7	853	0.000
12:00 - 13:00	7	853	0.000	7	853	0.000	7	853	0.000
13:00 - 14:00	7	853	0.000	7	853	0.000	7	853	0.000
14:00 - 15:00	7	853	0.000	7	853	0.000	7	853	0.000
15:00 - 16:00	7	853	0.000	7	853	0.000	7	853	0.000
16:00 - 17:00	7	853	0.000	7	853	0.000	7	853	0.000
17:00 - 18:00	7	853	0.000	7	853	0.000	7	853	0.000
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES
Non-Vehicular People Movements (NVPM)
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS No. Days	ARRIVALS Ave. GFA	ARRIVALS Trip Rate	DEPARTURES No. Days	DEPARTURES Ave. GFA	DEPARTURES Trip Rate	TOTALS No. Days	TOTALS Ave. GFA	TOTALS Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	830	0.000	1	830	0.000	1	830	0.000
07:00 - 08:00	6	919	0.000	6	919	0.000	6	919	0.000
08:00 - 09:00	7	853	0.000	7	853	0.000	7	853	0.000
09:00 - 10:00	7	853	0.000	7	853	0.000	7	853	0.000
10:00 - 11:00	7	853	0.000	7	853	0.000	7	853	0.000
11:00 - 12:00	7	853	0.000	7	853	0.000	7	853	0.000
12:00 - 13:00	7	853	0.000	7	853	0.000	7	853	0.000
13:00 - 14:00	7	853	0.000	7	853	0.000	7	853	0.000
14:00 - 15:00	7	853	0.000	7	853	0.000	7	853	0.000
15:00 - 16:00	7	853	0.000	7	853	0.000	7	853	0.000
16:00 - 17:00	7	853	0.000	7	853	0.000	7	853	0.000
17:00 - 18:00	7	853	0.000	7	853	0.000	7	853	0.000
18:00 - 19:00	7	853	0.000	7	853	0.000	7	853	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

Calculation Reference: AUDIT-656801-200327-0301

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	**GREATER LONDON**		
	RB	REDBRIDGE	1 days
03	**SOUTH WEST**		
	WL	WILTSHIRE	1 days
04	**EAST ANGLIA**		
	CA	CAMBRIDGESHIRE	1 days
05	**EAST MIDLANDS**		
	DS	DERBYSHIRE	1 days
09	**NORTH**		
	TW	TYNE & WEAR	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: Gross floor area
Actual Range: 400 to 666 (units: sqm)
Range Selected by User: 109 to 2350 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 27/09/19

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

Selected survey days:

Tuesday	1 days
Wednesday	2 days
Thursday	2 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	2

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

Selected Location Sub Categories:

Residential Zone	5

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

Secondary Filtering selection:

Use Class:
D1 5 days

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

Population within 1 mile:
25,001 to 50,000 5 days

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

Population within 5 miles:
125,001 to 250,000 2 days
250,001 to 500,000 3 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 3 days
1.1 to 1.5 2 days

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

Travel Plan:
No 5 days

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

PTAL Rating:
No PTAL Present 4 days
1b Very poor 1 days

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

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	5	496	2.217	5	496	1.370	5	496	3.587
08:00 - 09:00	**5**	**496**	**3.466**	**5**	**496**	**2.741**	**5**	**496**	**6.207**
09:00 - 10:00	5	496	1.169	5	496	0.766	5	496	1.935
10:00 - 11:00	5	496	0.443	5	496	0.242	5	496	0.685
11:00 - 12:00	5	496	0.524	5	496	0.605	5	496	1.129
12:00 - 13:00	5	496	1.491	5	496	1.290	5	496	2.781
13:00 - 14:00	5	496	0.887	5	496	1.048	5	496	1.935
14:00 - 15:00	5	496	0.605	5	496	0.564	5	496	1.169
15:00 - 16:00	5	496	1.572	5	496	1.894	5	496	3.466
16:00 - 17:00	5	496	1.411	5	496	2.136	5	496	3.547
17:00 - 18:00	5	496	1.612	5	496	2.418	5	496	4.030
18:00 - 19:00	5	496	0.282	5	496	0.282	5	496	0.564
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			15.679			15.356			31.035

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

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

Parameter summary

Trip rate parameter range selected:	400 - 666 (units: sqm)
Survey date date range:	01/01/12 - 27/09/19
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	**5**	**496**	**0.081**	**5**	**496**	**0.081**	**5**	**496**	**0.162**
08:00 - 09:00	5	496	0.000	5	496	0.000	5	496	0.000
09:00 - 10:00	5	496	0.000	5	496	0.000	5	496	0.000
10:00 - 11:00	5	496	0.081	5	496	0.081	5	496	0.162
11:00 - 12:00	5	496	0.000	5	496	0.000	5	496	0.000
12:00 - 13:00	5	496	0.040	5	496	0.040	5	496	0.080
13:00 - 14:00	5	496	0.000	5	496	0.000	5	496	0.000
14:00 - 15:00	5	496	0.081	5	496	0.040	5	496	0.121
15:00 - 16:00	5	496	0.000	5	496	0.040	5	496	0.040
16:00 - 17:00	5	496	0.000	5	496	0.000	5	496	0.000
17:00 - 18:00	5	496	0.000	5	496	0.000	5	496	0.000
18:00 - 19:00	5	496	0.000	5	496	0.000	5	496	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.283			0.282			0.565

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.

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

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	**5**	**496**	**0.040**	**5**	**496**	**0.040**	**5**	**496**	**0.080**
08:00 - 09:00	5	496	0.000	5	496	0.000	5	496	0.000
09:00 - 10:00	5	496	0.040	5	496	0.040	5	496	0.080
10:00 - 11:00	5	496	0.000	5	496	0.000	5	496	0.000
11:00 - 12:00	5	496	0.040	5	496	0.040	5	496	0.080
12:00 - 13:00	5	496	0.000	5	496	0.000	5	496	0.000
13:00 - 14:00	5	496	0.000	5	496	0.000	5	496	0.000
14:00 - 15:00	5	496	0.000	5	496	0.000	5	496	0.000
15:00 - 16:00	5	496	0.000	5	496	0.000	5	496	0.000
16:00 - 17:00	5	496	0.000	5	496	0.000	5	496	0.000
17:00 - 18:00	5	496	0.000	5	496	0.000	5	496	0.000
18:00 - 19:00	5	496	0.000	5	496	0.000	5	496	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.120			0.120			0.240

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.*

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

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	5	496	0.000	5	496	0.000	5	496	0.000
08:00 - 09:00	**5**	**496**	**0.040**	**5**	**496**	**0.040**	**5**	**496**	**0.080**
09:00 - 10:00	5	496	0.000	5	496	0.000	5	496	0.000
10:00 - 11:00	5	496	0.000	5	496	0.000	5	496	0.000
11:00 - 12:00	5	496	0.000	5	496	0.000	5	496	0.000
12:00 - 13:00	5	496	0.000	5	496	0.000	5	496	0.000
13:00 - 14:00	5	496	0.000	5	496	0.000	5	496	0.000
14:00 - 15:00	5	496	0.000	5	496	0.000	5	496	0.000
15:00 - 16:00	5	496	0.000	5	496	0.000	5	496	0.000
16:00 - 17:00	5	496	0.000	5	496	0.000	5	496	0.000
17:00 - 18:00	5	496	0.000	5	496	0.000	5	496	0.000
18:00 - 19:00	5	496	0.000	5	496	0.000	5	496	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.040			0.040			0.080

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.

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

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	5	496	0.161	5	496	0.000	5	496	0.161
08:00 - 09:00	**5**	**496**	**0.322**	5	496	0.121	**5**	**496**	**0.443**
09:00 - 10:00	5	496	0.161	5	496	0.081	5	496	0.242
10:00 - 11:00	5	496	0.000	5	496	0.081	5	496	0.081
11:00 - 12:00	5	496	0.121	5	496	0.040	5	496	0.161
12:00 - 13:00	5	496	0.081	5	496	0.081	5	496	0.162
13:00 - 14:00	5	496	0.081	5	496	0.121	5	496	0.202
14:00 - 15:00	5	496	0.000	5	496	0.000	5	496	0.000
15:00 - 16:00	5	496	0.000	**5**	**496**	**0.161**	5	496	0.161
16:00 - 17:00	5	496	0.000	5	496	0.040	5	496	0.040
17:00 - 18:00	5	496	0.000	5	496	0.161	5	496	0.161
18:00 - 19:00	5	496	0.040	5	496	0.081	5	496	0.121
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00	1	400	0.000	1	400	0.000	1	400	0.000
21:00 - 22:00	1	400	0.000	1	400	0.000	1	400	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.967			0.968			1.935

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.

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

Light Vehicles (LV)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	5	496	0.000	5	496	0.000	5	496	0.000
08:00 - 09:00	5	496	0.000	5	496	0.000	5	496	0.000
09:00 - 10:00	5	496	0.000	5	496	0.000	5	496	0.000
10:00 - 11:00	5	496	0.000	5	496	0.000	5	496	0.000
11:00 - 12:00	5	496	0.000	5	496	0.000	5	496	0.000
12:00 - 13:00	5	496	0.000	5	496	0.000	5	496	0.000
13:00 - 14:00	5	496	0.000	5	496	0.000	5	496	0.000
14:00 - 15:00	5	496	0.000	5	496	0.000	5	496	0.000
15:00 - 16:00	5	496	0.000	5	496	0.000	5	496	0.000
16:00 - 17:00	5	496	0.000	5	496	0.000	5	496	0.000
17:00 - 18:00	5	496	0.000	5	496	0.000	5	496	0.000
18:00 - 19:00	5	496	0.000	5	496	0.000	5	496	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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

Rigid Trucks - No Trailer (OGV1)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	5	496	0.000	5	496	0.000	5	496	0.000
08:00 - 09:00	5	496	0.000	5	496	0.000	5	496	0.000
09:00 - 10:00	5	496	0.000	5	496	0.000	5	496	0.000
10:00 - 11:00	5	496	0.000	5	496	0.000	5	496	0.000
11:00 - 12:00	5	496	0.000	5	496	0.000	5	496	0.000
12:00 - 13:00	5	496	0.000	5	496	0.000	5	496	0.000
13:00 - 14:00	5	496	0.000	5	496	0.000	5	496	0.000
14:00 - 15:00	5	496	0.000	5	496	0.000	5	496	0.000
15:00 - 16:00	5	496	0.000	5	496	0.000	5	496	0.000
16:00 - 17:00	5	496	0.000	5	496	0.000	5	496	0.000
17:00 - 18:00	5	496	0.000	5	496	0.000	5	496	0.000
18:00 - 19:00	5	496	0.000	5	496	0.000	5	496	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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

Trucks Towing Trailers (OGV2)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	5	496	0.000	5	496	0.000	5	496	0.000
08:00 - 09:00	5	496	0.000	5	496	0.000	5	496	0.000
09:00 - 10:00	5	496	0.000	5	496	0.000	5	496	0.000
10:00 - 11:00	5	496	0.000	5	496	0.000	5	496	0.000
11:00 - 12:00	5	496	0.000	5	496	0.000	5	496	0.000
12:00 - 13:00	5	496	0.000	5	496	0.000	5	496	0.000
13:00 - 14:00	5	496	0.000	5	496	0.000	5	496	0.000
14:00 - 15:00	5	496	0.000	5	496	0.000	5	496	0.000
15:00 - 16:00	5	496	0.000	5	496	0.000	5	496	0.000
16:00 - 17:00	5	496	0.000	5	496	0.000	5	496	0.000
17:00 - 18:00	5	496	0.000	5	496	0.000	5	496	0.000
18:00 - 19:00	5	496	0.000	5	496	0.000	5	496	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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

Buses

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	5	496	0.000	5	496	0.000	5	496	0.000
08:00 - 09:00	5	496	0.000	5	496	0.000	5	496	0.000
09:00 - 10:00	5	496	0.000	5	496	0.000	5	496	0.000
10:00 - 11:00	5	496	0.000	5	496	0.000	5	496	0.000
11:00 - 12:00	5	496	0.000	5	496	0.000	5	496	0.000
12:00 - 13:00	5	496	0.000	5	496	0.000	5	496	0.000
13:00 - 14:00	5	496	0.000	5	496	0.000	5	496	0.000
14:00 - 15:00	5	496	0.000	5	496	0.000	5	496	0.000
15:00 - 16:00	5	496	0.000	5	496	0.000	5	496	0.000
16:00 - 17:00	5	496	0.000	5	496	0.000	5	496	0.000
17:00 - 18:00	5	496	0.000	5	496	0.000	5	496	0.000
18:00 - 19:00	5	496	0.000	5	496	0.000	5	496	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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

Non-Motorised Vehicles (NMV)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	5	496	0.000	5	496	0.000	5	496	0.000
08:00 - 09:00	5	496	0.000	5	496	0.000	5	496	0.000
09:00 - 10:00	5	496	0.000	5	496	0.000	5	496	0.000
10:00 - 11:00	5	496	0.000	5	496	0.000	5	496	0.000
11:00 - 12:00	5	496	0.000	5	496	0.000	5	496	0.000
12:00 - 13:00	5	496	0.000	5	496	0.000	5	496	0.000
13:00 - 14:00	5	496	0.000	5	496	0.000	5	496	0.000
14:00 - 15:00	5	496	0.000	5	496	0.000	5	496	0.000
15:00 - 16:00	5	496	0.000	5	496	0.000	5	496	0.000
16:00 - 17:00	5	496	0.000	5	496	0.000	5	496	0.000
17:00 - 18:00	5	496	0.000	5	496	0.000	5	496	0.000
18:00 - 19:00	5	496	0.000	5	496	0.000	5	496	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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

Cycles

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	5	496	0.000	5	496	0.000	5	496	0.000
08:00 - 09:00	5	496	0.000	5	496	0.000	5	496	0.000
09:00 - 10:00	5	496	0.000	5	496	0.000	5	496	0.000
10:00 - 11:00	5	496	0.000	5	496	0.000	5	496	0.000
11:00 - 12:00	5	496	0.000	5	496	0.000	5	496	0.000
12:00 - 13:00	5	496	0.000	5	496	0.000	5	496	0.000
13:00 - 14:00	5	496	0.000	5	496	0.000	5	496	0.000
14:00 - 15:00	5	496	0.000	5	496	0.000	5	496	0.000
15:00 - 16:00	5	496	0.000	5	496	0.000	5	496	0.000
16:00 - 17:00	5	496	0.000	5	496	0.000	5	496	0.000
17:00 - 18:00	5	496	0.000	5	496	0.000	5	496	0.000
18:00 - 19:00	5	496	0.000	5	496	0.000	5	496	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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

Scooters

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	5	496	0.000	5	496	0.000	5	496	0.000
08:00 - 09:00	5	496	0.000	5	496	0.000	5	496	0.000
09:00 - 10:00	5	496	0.000	5	496	0.000	5	496	0.000
10:00 - 11:00	5	496	0.000	5	496	0.000	5	496	0.000
11:00 - 12:00	5	496	0.000	5	496	0.000	5	496	0.000
12:00 - 13:00	5	496	0.000	5	496	0.000	5	496	0.000
13:00 - 14:00	5	496	0.000	5	496	0.000	5	496	0.000
14:00 - 15:00	5	496	0.000	5	496	0.000	5	496	0.000
15:00 - 16:00	5	496	0.000	5	496	0.000	5	496	0.000
16:00 - 17:00	5	496	0.000	5	496	0.000	5	496	0.000
17:00 - 18:00	5	496	0.000	5	496	0.000	5	496	0.000
18:00 - 19:00	5	496	0.000	5	496	0.000	5	496	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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

Non-Vehicular People Movements (NVPM)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	5	496	0.000	5	496	0.000	5	496	0.000
08:00 - 09:00	5	496	0.000	5	496	0.000	5	496	0.000
09:00 - 10:00	5	496	0.000	5	496	0.000	5	496	0.000
10:00 - 11:00	5	496	0.000	5	496	0.000	5	496	0.000
11:00 - 12:00	5	496	0.000	5	496	0.000	5	496	0.000
12:00 - 13:00	5	496	0.000	5	496	0.000	5	496	0.000
13:00 - 14:00	5	496	0.000	5	496	0.000	5	496	0.000
14:00 - 15:00	5	496	0.000	5	496	0.000	5	496	0.000
15:00 - 16:00	5	496	0.000	5	496	0.000	5	496	0.000
16:00 - 17:00	5	496	0.000	5	496	0.000	5	496	0.000
17:00 - 18:00	5	496	0.000	5	496	0.000	5	496	0.000
18:00 - 19:00	5	496	0.000	5	496	0.000	5	496	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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Calculation Reference: AUDIT-656801-200327-0358

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : B - RESTAURANTS

VEHICLES

Selected regions and areas:

01	**GREATER LONDON**		
	BT	BRENT	1 days
02	**SOUTH EAST**		
	HC	HAMPSHIRE	1 days
05	**EAST MIDLANDS**		
	DS	DERBYSHIRE	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: Gross floor area
Actual Range: 150 to 350 (units: sqm)
Range Selected by User: 75 to 2400 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 25/09/19

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

Selected survey days:

Monday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Development Zone	2
Residential Zone	1

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

Secondary Filtering selection:

Use Class:

A3	3 days

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

Secondary Filtering selection (Cont.):

Population within 1 mile:

15,001 to 20,000	1 days
25,001 to 50,000	1 days
50,001 to 100,000	1 days

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

Population within 5 miles:

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	2 days
1.1 to 1.5	1 days

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

Travel Plan:

Yes	1 days
No	2 days

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

PTAL Rating:

No PTAL Present	2 days
5 Very Good	1 days

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.727	3	275	0.727	3	275	1.454
11:00 - 12:00	3	275	1.697	3	275	0.606	3	275	2.303
12:00 - 13:00	**3**	**275**	**2.667**	3	275	1.455	**3**	**275**	**4.122**
13:00 - 14:00	3	275	1.455	**3**	**275**	**2.667**	3	275	4.122
14:00 - 15:00	3	275	0.485	3	275	0.848	3	275	1.333
15:00 - 16:00	3	275	0.970	3	275	0.848	3	275	1.818
16:00 - 17:00	3	275	1.333	3	275	0.970	3	275	2.303
17:00 - 18:00	3	275	1.939	3	275	0.727	3	275	2.666
18:00 - 19:00	3	275	1.333	3	275	1.697	3	275	3.030
19:00 - 20:00	3	275	2.061	3	275	1.212	3	275	3.273
20:00 - 21:00	3	275	1.333	3	275	2.424	3	275	3.757
21:00 - 22:00	3	275	1.333	3	275	1.212	3	275	2.545
22:00 - 23:00	3	275	0.485	3	275	1.455	3	275	1.940
23:00 - 24:00	3	275	0.000	3	275	0.727	3	275	0.727
Total Rates:			17.818			17.575			35.393

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.

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Parameter summary

Trip rate parameter range selected:	150 - 350 (units: sqm)
Survey date date range:	01/01/12 - 25/09/19
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	**3**	**275**	**0.121**	3	275	0.000	3	275	0.121
17:00 - 18:00	3	275	0.000	**3**	**275**	**0.121**	3	275	0.121
18:00 - 19:00	3	275	0.121	3	275	0.121	**3**	**275**	**0.242**
19:00 - 20:00	3	275	0.000	3	275	0.000	3	275	0.000
20:00 - 21:00	3	275	0.121	3	275	0.121	3	275	0.242
21:00 - 22:00	3	275	0.121	3	275	0.121	3	275	0.242
22:00 - 23:00	3	275	0.000	3	275	0.000	3	275	0.000
23:00 - 24:00	3	275	0.000	3	275	0.000	3	275	0.000
Total Rates:			0.484			0.484			0.968

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	**3**	**275**	**0.121**	3	275	0.000	**3**	**275**	**0.121**
16:00 - 17:00	3	275	0.121	3	275	0.000	3	275	0.121
17:00 - 18:00	3	275	0.121	3	275	0.000	3	275	0.121
18:00 - 19:00	3	275	0.000	**3**	**275**	**0.121**	3	275	0.121
19:00 - 20:00	3	275	0.000	3	275	0.121	3	275	0.121
20:00 - 21:00	3	275	0.000	3	275	0.000	3	275	0.000
21:00 - 22:00	3	275	0.000	3	275	0.121	3	275	0.121
22:00 - 23:00	3	275	0.000	3	275	0.000	3	275	0.000
23:00 - 24:00	3	275	0.000	3	275	0.000	3	275	0.000
Total Rates:			0.363			0.363			0.726

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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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.485	3	275	0.485	3	275	0.970
11:00 - 12:00	3	275	1.576	3	275	0.485	3	275	2.061
12:00 - 13:00	**3**	**275**	**2.667**	3	275	1.455	**3**	**275**	**4.122**
13:00 - 14:00	3	275	1.091	**3**	**275**	**2.303**	3	275	3.394
14:00 - 15:00	3	275	0.364	3	275	0.727	3	275	1.091
15:00 - 16:00	3	275	0.970	3	275	0.848	3	275	1.818
16:00 - 17:00	3	275	0.970	3	275	0.970	3	275	1.940
17:00 - 18:00	3	275	1.818	3	275	0.485	3	275	2.303
18:00 - 19:00	3	275	1.212	3	275	1.455	3	275	2.667
19:00 - 20:00	3	275	2.061	3	275	1.091	3	275	3.152
20:00 - 21:00	3	275	1.212	3	275	2.303	3	275	3.515
21:00 - 22:00	3	275	1.212	3	275	1.091	3	275	2.303
22:00 - 23:00	3	275	0.485	3	275	1.455	3	275	1.940
23:00 - 24:00	3	275	0.000	3	275	0.727	3	275	0.727
Total Rates:			16.123			15.880			32.003

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.242	3	275	0.242	3	275	0.484
11:00 - 12:00	3	275	0.121	3	275	0.121	3	275	0.242
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	**3**	**275**	**0.364**	**3**	**275**	**0.364**	**3**	**275**	**0.728**
14:00 - 15:00	3	275	0.121	3	275	0.121	3	275	0.242
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.242	3	275	0.000	3	275	0.242
17:00 - 18:00	3	275	0.121	3	275	0.121	3	275	0.242
18:00 - 19:00	3	275	0.000	3	275	0.121	3	275	0.121
19:00 - 20:00	3	275	0.000	3	275	0.121	3	275	0.121
20:00 - 21:00	3	275	0.000	3	275	0.000	3	275	0.000
21:00 - 22:00	3	275	0.000	3	275	0.000	3	275	0.000
22:00 - 23:00	3	275	0.000	3	275	0.000	3	275	0.000
23:00 - 24:00	3	275	0.000	3	275	0.000	3	275	0.000
Total Rates:			1.211			1.211			2.422

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

Light Vehicles (LV)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00	3	275	0.000	3	275	0.000	3	275	0.000
20:00 - 21:00	3	275	0.000	3	275	0.000	3	275	0.000
21:00 - 22:00	3	275	0.000	3	275	0.000	3	275	0.000
22:00 - 23:00	3	275	0.000	3	275	0.000	3	275	0.000
23:00 - 24:00	3	275	0.000	3	275	0.000	3	275	0.000
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

Rigid Trucks - No Trailer (OGV1)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00	3	275	0.000	3	275	0.000	3	275	0.000
20:00 - 21:00	3	275	0.000	3	275	0.000	3	275	0.000
21:00 - 22:00	3	275	0.000	3	275	0.000	3	275	0.000
22:00 - 23:00	3	275	0.000	3	275	0.000	3	275	0.000
23:00 - 24:00	3	275	0.000	3	275	0.000	3	275	0.000
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

Trucks Towing Trailers (OGV2)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00	3	275	0.000	3	275	0.000	3	275	0.000
20:00 - 21:00	3	275	0.000	3	275	0.000	3	275	0.000
21:00 - 22:00	3	275	0.000	3	275	0.000	3	275	0.000
22:00 - 23:00	3	275	0.000	3	275	0.000	3	275	0.000
23:00 - 24:00	3	275	0.000	3	275	0.000	3	275	0.000
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

Buses

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00	3	275	0.000	3	275	0.000	3	275	0.000
20:00 - 21:00	3	275	0.000	3	275	0.000	3	275	0.000
21:00 - 22:00	3	275	0.000	3	275	0.000	3	275	0.000
22:00 - 23:00	3	275	0.000	3	275	0.000	3	275	0.000
23:00 - 24:00	3	275	0.000	3	275	0.000	3	275	0.000
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

Non-Motorised Vehicles (NMV)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00	3	275	0.000	3	275	0.000	3	275	0.000
20:00 - 21:00	3	275	0.000	3	275	0.000	3	275	0.000
21:00 - 22:00	3	275	0.000	3	275	0.000	3	275	0.000
22:00 - 23:00	3	275	0.000	3	275	0.000	3	275	0.000
23:00 - 24:00	3	275	0.000	3	275	0.000	3	275	0.000
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

Cycles

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00	3	275	0.000	3	275	0.000	3	275	0.000
20:00 - 21:00	3	275	0.000	3	275	0.000	3	275	0.000
21:00 - 22:00	3	275	0.000	3	275	0.000	3	275	0.000
22:00 - 23:00	3	275	0.000	3	275	0.000	3	275	0.000
23:00 - 24:00	3	275	0.000	3	275	0.000	3	275	0.000
Total Rates:			0.000			0.000			0.000

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.

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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

Scooters

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00	3	275	0.000	3	275	0.000	3	275	0.000
20:00 - 21:00	3	275	0.000	3	275	0.000	3	275	0.000
21:00 - 22:00	3	275	0.000	3	275	0.000	3	275	0.000
22:00 - 23:00	3	275	0.000	3	275	0.000	3	275	0.000
23:00 - 24:00	3	275	0.000	3	275	0.000	3	275	0.000
Total Rates:			0.000			0.000			0.000

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.

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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

Non-Vehicular People Movements (NVPM)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	275	0.000	3	275	0.000	3	275	0.000
11:00 - 12:00	3	275	0.000	3	275	0.000	3	275	0.000
12:00 - 13:00	3	275	0.000	3	275	0.000	3	275	0.000
13:00 - 14:00	3	275	0.000	3	275	0.000	3	275	0.000
14:00 - 15:00	3	275	0.000	3	275	0.000	3	275	0.000
15:00 - 16:00	3	275	0.000	3	275	0.000	3	275	0.000
16:00 - 17:00	3	275	0.000	3	275	0.000	3	275	0.000
17:00 - 18:00	3	275	0.000	3	275	0.000	3	275	0.000
18:00 - 19:00	3	275	0.000	3	275	0.000	3	275	0.000
19:00 - 20:00	3	275	0.000	3	275	0.000	3	275	0.000
20:00 - 21:00	3	275	0.000	3	275	0.000	3	275	0.000
21:00 - 22:00	3	275	0.000	3	275	0.000	3	275	0.000
22:00 - 23:00	3	275	0.000	3	275	0.000	3	275	0.000
23:00 - 24:00	3	275	0.000	3	275	0.000	3	275	0.000
Total Rates:			0.000			0.000			0.000

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.

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Calculation Reference: AUDIT-656801-200423-0459

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
Category : K - FITNESS CLUB (PRIVATE)

VEHICLES

Selected regions and areas:

01	**GREATER LONDON**		
	BT	BRENT	1 days
	EN	ENFIELD	1 days
02	**SOUTH EAST**		
	ES	EAST SUSSEX	1 days
	HC	HAMPSHIRE	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	WY	WEST YORKSHIRE	1 days
17	**ULSTER (NORTHERN IRELAND)**		
	DO	DOWN	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 550 to 8550 (units: sqm)
Range Selected by User: 204 to 15000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 14/03/19

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

Selected survey days:

Tuesday	2 days
Wednesday	2 days
Thursday	2 days

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

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	2
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Development Zone	1
Residential Zone	2
No Sub Category	3

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:

D2	6 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 1 mile:

15,001 to 20,000	2 days
25,001 to 50,000	3 days
50,001 to 100,000	1 days

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

Population within 5 miles:

125,001 to 250,000	1 days
250,001 to 500,000	2 days
500,001 or More	3 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	3 days
1.1 to 1.5	3 days

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

Travel Plan:

Yes	1 days
No	5 days

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

PTAL Rating:

No PTAL Present	4 days
5 Very Good	1 days
6a Excellent	1 days

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

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.862	6	4058	0.185	6	4058	1.047
07:00 - 08:00	6	4058	0.517	6	4058	0.641	6	4058	1.158
08:00 - 09:00	6	4058	0.854	6	4058	0.493	6	4058	1.347
09:00 - 10:00	6	4058	1.359	6	4058	0.608	6	4058	1.967
10:00 - 11:00	6	4058	0.932	6	4058	0.920	6	4058	1.852
11:00 - 12:00	6	4058	0.637	6	4058	0.957	6	4058	1.594
12:00 - 13:00	6	4058	0.587	6	4058	0.916	6	4058	1.503
13:00 - 14:00	6	4058	0.604	6	4058	0.674	6	4058	1.278
14:00 - 15:00	6	4058	0.559	6	4058	0.624	6	4058	1.183
15:00 - 16:00	6	4058	0.928	6	4058	0.715	6	4058	1.643
16:00 - 17:00	6	4058	1.351	6	4058	0.817	6	4058	2.168
17:00 - 18:00	**6**	**4058**	**1.606**	6	4058	1.105	6	4058	2.711
18:00 - 19:00	6	4058	1.528	**6**	**4058**	**1.614**	**6**	**4058**	**3.142**
19:00 - 20:00	6	4058	1.125	6	4058	1.507	6	4058	2.632
20:00 - 21:00	6	4058	0.702	6	4058	1.372	6	4058	2.074
21:00 - 22:00	5	3160	0.247	5	3160	0.930	5	3160	1.177
22:00 - 23:00	2	1075	0.093	2	1075	0.326	2	1075	0.419
23:00 - 24:00									
Total Rates:			14.491			14.404			28.895

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.

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Parameter summary

Trip rate parameter range selected:	550 - 8550 (units: sqm)
Survey date date range:	01/01/12 - 14/03/19
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
07:00 - 08:00	6	4058	0.004	6	4058	0.004	6	4058	0.008
08:00 - 09:00	6	4058	0.004	6	4058	0.004	6	4058	0.008
09:00 - 10:00	6	4058	0.008	6	4058	0.004	6	4058	0.012
10:00 - 11:00	6	4058	0.012	6	4058	0.012	6	4058	0.024
11:00 - 12:00	6	4058	0.008	6	4058	0.008	6	4058	0.016
12:00 - 13:00	**6**	**4058**	**0.025**	**6**	**4058**	**0.029**	**6**	**4058**	**0.054**
13:00 - 14:00	6	4058	0.025	6	4058	0.025	6	4058	0.050
14:00 - 15:00	6	4058	0.008	6	4058	0.008	6	4058	0.016
15:00 - 16:00	6	4058	0.008	6	4058	0.008	6	4058	0.016
16:00 - 17:00	6	4058	0.012	6	4058	0.012	6	4058	0.024
17:00 - 18:00	6	4058	0.012	6	4058	0.008	6	4058	0.020
18:00 - 19:00	6	4058	0.004	6	4058	0.008	6	4058	0.012
19:00 - 20:00	6	4058	0.008	6	4058	0.004	6	4058	0.012
20:00 - 21:00	6	4058	0.000	6	4058	0.004	6	4058	0.004
21:00 - 22:00	5	3160	0.000	5	3160	0.000	5	3160	0.000
22:00 - 23:00	2	1075	0.000	2	1075	0.000	2	1075	0.000
23:00 - 24:00									
Total Rates:			0.138			0.138			0.276

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.*

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
07:00 - 08:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
08:00 - 09:00	6	4058	0.004	6	4058	0.000	6	4058	0.004
09:00 - 10:00	6	4058	0.000	6	4058	0.004	6	4058	0.004
10:00 - 11:00	6	4058	0.008	6	4058	0.004	6	4058	0.012
11:00 - 12:00	6	4058	0.008	**6**	**4058**	**0.008**	**6**	**4058**	**0.016**
12:00 - 13:00	6	4058	0.004	6	4058	0.008	6	4058	0.012
13:00 - 14:00	6	4058	0.004	6	4058	0.004	6	4058	0.008
14:00 - 15:00	**6**	**4058**	**0.012**	6	4058	0.004	6	4058	0.016
15:00 - 16:00	6	4058	0.000	6	4058	0.004	6	4058	0.004
16:00 - 17:00	6	4058	0.000	6	4058	0.004	6	4058	0.004
17:00 - 18:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
18:00 - 19:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
19:00 - 20:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
20:00 - 21:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
21:00 - 22:00	5	3160	0.000	5	3160	0.000	5	3160	0.000
22:00 - 23:00	2	1075	0.000	2	1075	0.000	2	1075	0.000
23:00 - 24:00									
Total Rates:			0.040			0.040			0.080

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.*

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.008	6	4058	0.000	6	4058	0.008
07:00 - 08:00	6	4058	0.004	6	4058	0.004	6	4058	0.008
08:00 - 09:00	6	4058	0.025	6	4058	0.016	6	4058	0.041
09:00 - 10:00	6	4058	0.037	6	4058	0.025	6	4058	0.062
10:00 - 11:00	6	4058	0.025	6	4058	0.016	6	4058	0.041
11:00 - 12:00	6	4058	0.021	6	4058	0.045	6	4058	0.066
12:00 - 13:00	6	4058	0.016	6	4058	0.012	6	4058	0.028
13:00 - 14:00	6	4058	0.033	6	4058	0.029	6	4058	0.062
14:00 - 15:00	6	4058	0.025	6	4058	0.012	6	4058	0.037
15:00 - 16:00	6	4058	0.029	6	4058	0.033	6	4058	0.062
16:00 - 17:00	6	4058	0.029	6	4058	0.029	6	4058	0.058
17:00 - 18:00	**6**	**4058**	**0.057**	6	4058	0.037	6	4058	0.094
18:00 - 19:00	6	4058	0.049	6	4058	0.033	6	4058	0.082
19:00 - 20:00	6	4058	0.008	6	4058	0.029	6	4058	0.037
20:00 - 21:00	6	4058	0.008	6	4058	0.029	6	4058	0.037
21:00 - 22:00	5	3160	0.025	5	3160	0.025	5	3160	0.050
22:00 - 23:00	2	1075	0.000	**2**	**1075**	**0.140**	**2**	**1075**	**0.140**
23:00 - 24:00									
Total Rates:			0.399			0.514			0.913

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.*

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.834	6	4058	0.168	6	4058	1.002
07:00 - 08:00	6	4058	0.493	6	4058	0.620	6	4058	1.113
08:00 - 09:00	6	4058	0.830	6	4058	0.472	6	4058	1.302
09:00 - 10:00	6	4058	1.318	6	4058	0.579	6	4058	1.897
10:00 - 11:00	6	4058	0.875	6	4058	0.862	6	4058	1.737
11:00 - 12:00	6	4058	0.595	6	4058	0.916	6	4058	1.511
12:00 - 13:00	6	4058	0.534	6	4058	0.858	6	4058	1.392
13:00 - 14:00	6	4058	0.538	6	4058	0.612	6	4058	1.150
14:00 - 15:00	6	4058	0.497	6	4058	0.587	6	4058	1.084
15:00 - 16:00	6	4058	0.871	6	4058	0.661	6	4058	1.532
16:00 - 17:00	6	4058	1.257	6	4058	0.756	6	4058	2.013
17:00 - 18:00	**6**	**4058**	**1.511**	6	4058	1.031	6	4058	2.542
18:00 - 19:00	6	4058	1.466	**6**	**4058**	**1.520**	**6**	**4058**	**2.986**
19:00 - 20:00	6	4058	1.060	6	4058	1.462	6	4058	2.522
20:00 - 21:00	6	4058	0.694	6	4058	1.298	6	4058	1.992
21:00 - 22:00	5	3160	0.234	5	3160	0.873	5	3160	1.107
22:00 - 23:00	2	1075	0.047	2	1075	0.233	2	1075	0.280
23:00 - 24:00									
Total Rates:			13.654			13.508			27.162

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.*

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.025	6	4058	0.016	6	4058	0.041
07:00 - 08:00	6	4058	0.021	6	4058	0.012	6	4058	0.033
08:00 - 09:00	6	4058	0.012	6	4058	0.016	6	4058	0.028
09:00 - 10:00	6	4058	0.021	6	4058	0.016	6	4058	0.037
10:00 - 11:00	6	4058	0.033	6	4058	0.029	6	4058	0.062
11:00 - 12:00	6	4058	0.021	6	4058	0.021	6	4058	0.042
12:00 - 13:00	6	4058	0.021	6	4058	0.016	6	4058	0.037
13:00 - 14:00	6	4058	0.029	6	4058	0.025	6	4058	0.054
14:00 - 15:00	6	4058	0.012	6	4058	0.016	6	4058	0.028
15:00 - 16:00	6	4058	0.045	6	4058	0.029	6	4058	0.074
16:00 - 17:00	**6**	**4058**	**0.074**	6	4058	0.041	6	4058	0.115
17:00 - 18:00	6	4058	0.066	6	4058	0.053	**6**	**4058**	**0.119**
18:00 - 19:00	6	4058	0.053	6	4058	0.057	6	4058	0.110
19:00 - 20:00	6	4058	0.041	6	4058	0.033	6	4058	0.074
20:00 - 21:00	6	4058	0.008	**6**	**4058**	**0.062**	6	4058	0.070
21:00 - 22:00	5	3160	0.013	5	3160	0.051	5	3160	0.064
22:00 - 23:00	2	1075	0.000	2	1075	0.047	2	1075	0.047
23:00 - 24:00									
Total Rates:			0.495			0.540			1.035

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.*

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

MOTOR CYCLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.004	6	4058	0.000	6	4058	0.004
07:00 - 08:00	6	4058	0.000	6	4058	0.004	6	4058	0.004
08:00 - 09:00	6	4058	0.004	6	4058	0.000	6	4058	0.004
09:00 - 10:00	6	4058	0.012	6	4058	0.004	6	4058	0.016
10:00 - 11:00	6	4058	0.004	6	4058	0.012	6	4058	0.016
11:00 - 12:00	6	4058	0.004	6	4058	0.004	6	4058	0.008
12:00 - 13:00	6	4058	0.004	6	4058	0.004	6	4058	0.008
13:00 - 14:00	6	4058	0.008	6	4058	0.008	6	4058	0.016
14:00 - 15:00	6	4058	0.029	6	4058	0.008	6	4058	0.037
15:00 - 16:00	6	4058	0.004	6	4058	0.012	6	4058	0.016
16:00 - 17:00	6	4058	0.008	6	4058	0.004	6	4058	0.012
17:00 - 18:00	6	4058	0.016	6	4058	0.012	6	4058	0.028
18:00 - 19:00	6	4058	0.004	6	4058	0.025	6	4058	0.029
19:00 - 20:00	6	4058	0.016	6	4058	0.008	6	4058	0.024
20:00 - 21:00	6	4058	0.000	6	4058	0.008	6	4058	0.008
21:00 - 22:00	5	3160	0.000	5	3160	0.006	5	3160	0.006
22:00 - 23:00	**2**	**1075**	**0.047**	**2**	**1075**	**0.047**	**2**	**1075**	**0.094**
23:00 - 24:00									
Total Rates:			0.164			0.166			0.330

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.*

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

Light Vehicles (LV)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
07:00 - 08:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
08:00 - 09:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
09:00 - 10:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
10:00 - 11:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
11:00 - 12:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
12:00 - 13:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
13:00 - 14:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
14:00 - 15:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
15:00 - 16:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
16:00 - 17:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
17:00 - 18:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
18:00 - 19:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
19:00 - 20:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
20:00 - 21:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
21:00 - 22:00	5	3160	0.000	5	3160	0.000	5	3160	0.000
22:00 - 23:00	2	1075	0.000	2	1075	0.000	2	1075	0.000
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

Rigid Trucks - No Trailer (OGV1)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
07:00 - 08:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
08:00 - 09:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
09:00 - 10:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
10:00 - 11:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
11:00 - 12:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
12:00 - 13:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
13:00 - 14:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
14:00 - 15:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
15:00 - 16:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
16:00 - 17:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
17:00 - 18:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
18:00 - 19:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
19:00 - 20:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
20:00 - 21:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
21:00 - 22:00	5	3160	0.000	5	3160	0.000	5	3160	0.000
22:00 - 23:00	2	1075	0.000	2	1075	0.000	2	1075	0.000
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

Trucks Towing Trailers (OGV2)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
07:00 - 08:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
08:00 - 09:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
09:00 - 10:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
10:00 - 11:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
11:00 - 12:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
12:00 - 13:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
13:00 - 14:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
14:00 - 15:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
15:00 - 16:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
16:00 - 17:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
17:00 - 18:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
18:00 - 19:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
19:00 - 20:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
20:00 - 21:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
21:00 - 22:00	5	3160	0.000	5	3160	0.000	5	3160	0.000
22:00 - 23:00	2	1075	0.000	2	1075	0.000	2	1075	0.000
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

Buses

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
07:00 - 08:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
08:00 - 09:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
09:00 - 10:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
10:00 - 11:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
11:00 - 12:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
12:00 - 13:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
13:00 - 14:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
14:00 - 15:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
15:00 - 16:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
16:00 - 17:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
17:00 - 18:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
18:00 - 19:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
19:00 - 20:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
20:00 - 21:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
21:00 - 22:00	5	3160	0.000	5	3160	0.000	5	3160	0.000
22:00 - 23:00	2	1075	0.000	2	1075	0.000	2	1075	0.000
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

Non-Motorised Vehicles (NMV)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
07:00 - 08:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
08:00 - 09:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
09:00 - 10:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
10:00 - 11:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
11:00 - 12:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
12:00 - 13:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
13:00 - 14:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
14:00 - 15:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
15:00 - 16:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
16:00 - 17:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
17:00 - 18:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
18:00 - 19:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
19:00 - 20:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
20:00 - 21:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
21:00 - 22:00	5	3160	0.000	5	3160	0.000	5	3160	0.000
22:00 - 23:00	2	1075	0.000	2	1075	0.000	2	1075	0.000
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

Cycles

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
07:00 - 08:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
08:00 - 09:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
09:00 - 10:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
10:00 - 11:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
11:00 - 12:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
12:00 - 13:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
13:00 - 14:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
14:00 - 15:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
15:00 - 16:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
16:00 - 17:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
17:00 - 18:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
18:00 - 19:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
19:00 - 20:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
20:00 - 21:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
21:00 - 22:00	5	3160	0.000	5	3160	0.000	5	3160	0.000
22:00 - 23:00	2	1075	0.000	2	1075	0.000	2	1075	0.000
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

Scooters

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
07:00 - 08:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
08:00 - 09:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
09:00 - 10:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
10:00 - 11:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
11:00 - 12:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
12:00 - 13:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
13:00 - 14:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
14:00 - 15:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
15:00 - 16:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
16:00 - 17:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
17:00 - 18:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
18:00 - 19:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
19:00 - 20:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
20:00 - 21:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
21:00 - 22:00	5	3160	0.000	5	3160	0.000	5	3160	0.000
22:00 - 23:00	2	1075	0.000	2	1075	0.000	2	1075	0.000
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE)

Non-Vehicular People Movements (NVPM)

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
07:00 - 08:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
08:00 - 09:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
09:00 - 10:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
10:00 - 11:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
11:00 - 12:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
12:00 - 13:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
13:00 - 14:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
14:00 - 15:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
15:00 - 16:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
16:00 - 17:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
17:00 - 18:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
18:00 - 19:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
19:00 - 20:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
20:00 - 21:00	6	4058	0.000	6	4058	0.000	6	4058	0.000
21:00 - 22:00	5	3160	0.000	5	3160	0.000	5	3160	0.000
22:00 - 23:00	2	1075	0.000	2	1075	0.000	2	1075	0.000
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

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Appendix C

Traffic Flow Matrices

CS CONSULTING
GROUP

Peak Hour Junction Traffic Flow Matrices - Site 1

2020 Thursday AM Peak (08:00-09:00) — **SURVEYED TRAFFIC FLOWS**

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	52	8	62	**122**
Grange Road (E)	24	0	174	427	**625**
Grange Rise	3	61	0	110	**174**
Grange Road (W)	39	372	378	0	**790**
TOTALS	**66**	**485**	**561**	**599**	**1711**

2020 Thursday PM Peak (15:30-16:30) — **SURVEYED TRAFFIC FLOWS**

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	21	6	29	**56**
Grange Road (E)	30	0	82	399	**511**
Grange Rise	11	148	0	394	**553**
Grange Road (W)	32	411	181	0	**625**
TOTALS	**73**	**580**	**269**	**823**	**1745**

2023 Thursday AM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	-23	6	48	**32**
Grange Road (E)	-10	0	-6	-44	**-60**
Grange Rise	1	-1	0	0	**0**
Grange Road (W)	10	-14	0	0	**-3**
TOTALS	**1**	**-37**	**1**	**4**	**-32**

2023 Thursday PM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	-9	3	16	**10**
Grange Road (E)	-11	0	-3	-16	**-30**
Grange Rise	9	-8	0	0	**0**
Grange Road (W)	26	-25	0	0	**1**
TOTALS	**24**	**-42**	**0**	**0**	**-18**

2023 Thursday AM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	98	16	118	**232**
Grange Road (E)	60	0	3	23	**86**
Grange Rise	11	1	0	0	**12**
Grange Road (W)	99	9	0	0	**107**
TOTALS	**170**	**108**	**19**	**141**	**437**

2023 Thursday PM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	40	11	55	**107**
Grange Road (E)	53	0	2	12	**68**
Grange Rise	14	5	0	0	**19**
Grange Road (W)	57	16	0	0	**73**
TOTALS	**124**	**61**	**14**	**67**	**267**

2023 Thursday AM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	36	16	124	**176**
Grange Road (E)	26	0	0	0	**26**
Grange Rise	4	0	0	0	**4**
Grange Road (W)	90	0	0	0	**90**
TOTALS	**120**	**36**	**16**	**124**	**295**

2023 Thursday PM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	12	12	60	**84**
Grange Road (E)	17	0	0	0	**17**
Grange Rise	23	0	0	0	**23**
Grange Road (W)	67	0	0	0	**67**
TOTALS	**107**	**12**	**12**	**60**	**191**

2023 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	153	24	183	**360**
Grange Road (E)	85	0	186	471	**742**
Grange Rise	14	65	0	115	**194**
Grange Road (W)	140	399	397	0	**936**
TOTALS	**239**	**616**	**607**	**769**	**2232**

2023 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	62	18	86	**166**
Grange Road (E)	85	0	88	431	**604**
Grange Rise	25	160	0	414	**600**
Grange Road (W)	91	448	190	0	**729**
TOTALS	**201**	**670**	**296**	**930**	**2098**

2023 Thursday AM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	25	11	84	**121**
Grange Road (E)	8	0	0	0	**8**
Grange Rise	2	0	0	0	**2**
Grange Road (W)	33	0	0	0	**33**
TOTALS	**43**	**25**	**11**	**84**	**164**

2023 Thursday PM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	11	9	42	**62**
Grange Road (E)	19	0	0	0	**19**
Grange Rise	18	0	0	0	**18**
Grange Road (W)	51	0	0	0	**51**
TOTALS	**87**	**11**	**9**	**42**	**149**

2023 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	93	42	321	**457**
Grange Road (E)	48	0	177	404	**629**
Grange Rise	11	63	0	115	**189**
Grange Road (W)	174	377	397	0	**948**
TOTALS	**233**	**533**	**616**	**840**	**2223**

2023 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	36	31	148	**215**
Grange Road (E)	56	0	83	403	**542**
Grange Rise	61	146	0	414	**621**
Grange Road (W)	178	407	190	0	**775**
TOTALS	**295**	**590**	**303**	**965**	**2153**

2028 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	157	25	189	**371**
Grange Road (E)	87	0	201	508	**797**
Grange Rise	15	70	0	125	**210**
Grange Road (W)	143	432	430	0	**1005**
TOTALS	**245**	**659**	**656**	**822**	**2382**

2028 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	64	18	88	**171**
Grange Road (E)	87	0	96	466	**649**
Grange Rise	26	173	0	449	**648**
Grange Road (W)	94	484	206	0	**783**
TOTALS	**208**	**721**	**320**	**1003**	**2251**

2028 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	98	43	326	**467**
Grange Road (E)	50	0	192	441	**684**
Grange Rise	11	68	0	125	**204**
Grange Road (W)	178	409	430	0	**1017**
TOTALS	**239**	**575**	**666**	**893**	**2373**

2028 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	38	31	150	**220**
Grange Road (E)	59	0	90	438	**587**
Grange Rise	62	159	0	449	**670**
Grange Road (W)	181	443	206	0	**830**
TOTALS	**302**	**640**	**327**	**1037**	**2306**

2038 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	162	26	194	**381**
Grange Road (E)	89	0	216	545	**851**
Grange Rise	15	75	0	135	**225**
Grange Road (W)	147	464	463	0	**1073**
TOTALS	**251**	**701**	**704**	**873**	**2529**

2038 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	66	19	91	**175**
Grange Road (E)	90	0	103	500	**693**
Grange Rise	27	186	0	482	**696**
Grange Road (W)	97	519	222	0	**837**
TOTALS	**214**	**771**	**343**	**1073**	**2401**

2038 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	102	44	332	**478**
Grange Road (E)	52	0	207	478	**738**
Grange Rise	11	74	0	135	**219**
Grange Road (W)	181	441	463	0	**1085**
TOTALS	**245**	**617**	**714**	**944**	**2520**

2038 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	40	32	153	**225**
Grange Road (E)	62	0	97	472	**631**
Grange Rise	63	172	0	482	**717**
Grange Road (W)	184	478	222	0	**884**
TOTALS	**308**	**690**	**350**	**1107**	**2456**

2038 Thursday AM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	12	5	38	**55**
Grange Road (E)	5	0	0	0	**5**
Grange Rise	2	0	0	0	**2**
Grange Road (W)	21	0	0	0	**21**
TOTALS	**28**	**12**	**5**	**38**	**83**

2038 Thursday PM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	7	6	27	**41**
Grange Road (E)	12	0	0	0	**12**
Grange Rise	11	0	0	0	**11**
Grange Road (W)	32	0	0	0	**32**
TOTALS	**55**	**7**	**6**	**27**	**95**

2038 Thursday AM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + TII growth + reallocation + committed dev. + subject dev. + potential dev.)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	114	49	370	**533**
Grange Road (E)	57	0	207	478	**743**
Grange Rise	13	74	0	135	**221**
Grange Road (W)	202	441	463	0	**1106**
TOTALS	**273**	**628**	**719**	**983**	**2603**

2038 Thursday PM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + TII growth + reallocation + committed dev. + subject dev. + potential dev.)

From \ To	Longfield Road	Grange Road (E)	Grange Rise	Grange Road (W)	TOTALS
Longfield Road	0	47	37	180	**265**
Grange Road (E)	73	0	97	472	**642**
Grange Rise	74	172	0	482	**728**
Grange Road (W)	216	478	222	0	**916**
TOTALS	**363**	**698**	**356**	**1135**	**2551**

Peak Hour Junction Traffic Flow Matrices - Site 2

2020 Thursday AM Peak (08:00-09:00) — **SURVEYED TRAFFIC FLOWS**

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	8	23	458	**489**
Red Arches Road	87	1	69	**157**
Coast Road (N)	678	19	1	**698**
TOTALS	**772**	**43**	**528**	**1343**

2020 Thursday PM Peak (15:30-16:30) — **SURVEYED TRAFFIC FLOWS**

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	10	56	565	**632**
Red Arches Road	31	0	22	**53**
Coast Road (N)	381	31	4	**416**
TOTALS	**422**	**88**	**592**	**1101**

2023 Thursday AM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	0	-15	-23	**-37**
Red Arches Road	-50	0	18	**-32**
Coast Road (N)	-11	14	0	**3**
TOTALS	**-61**	**-1**	**-4**	**-66**

2023 Thursday PM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	0	-33	-9	**-42**
Red Arches Road	-19	0	9	**-10**
Coast Road (N)	-11	9	0	**-2**
TOTALS	**-30**	**-24**	**0**	**-54**

2023 Thursday AM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	0	16	43	**59**
Red Arches Road	45	0	36	**81**
Coast Road (N)	27	12	0	**39**
TOTALS	**72**	**28**	**79**	**179**

2023 Thursday PM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	0	36	17	**53**
Red Arches Road	23	0	16	**39**
Coast Road (N)	19	20	0	**39**
TOTALS	**42**	**56**	**33**	**131**

2023 Thursday AM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	0	16	0	**16**
Red Arches Road	39	0	108	**147**
Coast Road (N)	0	62	0	**62**
TOTALS	**39**	**79**	**108**	**226**

2023 Thursday PM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	0	32	0	**32**
Red Arches Road	20	0	47	**67**
Coast Road (N)	0	53	0	**53**
TOTALS	**20**	**85**	**47**	**152**

2023 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	8	40	524	**572**
Red Arches Road	136	1	108	**246**
Coast Road (N)	737	32	1	**771**
TOTALS	**882**	**73**	**633**	**1588**

2023 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	10	95	610	**715**
Red Arches Road	55	0	39	**95**
Coast Road (N)	418	53	5	**476**
TOTALS	**484**	**148**	**654**	**1286**

2023 Thursday AM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	0	8	0	**8**
Red Arches Road	25	0	67	**92**
Coast Road (N)	0	22	0	**22**
TOTALS	**25**	**29**	**67**	**121**

2023 Thursday PM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	0	19	0	**19**
Red Arches Road	11	0	29	**40**
Coast Road (N)	0	36	0	**36**
TOTALS	**11**	**55**	**29**	**95**

2023 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	8	33	457	**499**
Red Arches Road	106	1	266	**373**
Coast Road (N)	700	118	1	**819**
TOTALS	**814**	**152**	**724**	**1691**

2023 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	10	76	585	**671**
Red Arches Road	45	0	108	**153**
Coast Road (N)	389	131	5	**524**
TOTALS	**444**	**207**	**697**	**1348**

2028 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	9	42	564	**615**
Red Arches Road	144	1	114	**259**
Coast Road (N)	797	34	1	**832**
TOTALS	**950**	**77**	**679**	**1706**

2028 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	11	100	660	**771**
Red Arches Road	58	0	41	**99**
Coast Road (N)	452	56	5	**513**
TOTALS	**521**	**156**	**706**	**1383**

2028 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	9	35	498	**542**
Red Arches Road	113	1	272	**386**
Coast Road (N)	760	119	1	**880**
TOTALS	**882**	**156**	**771**	**1809**

2028 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	11	81	634	**727**
Red Arches Road	47	0	110	**157**
Coast Road (N)	422	134	5	**561**
TOTALS	**481**	**215**	**749**	**1445**

2038 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	10	44	603	**657**
Red Arches Road	152	1	120	**273**
Coast Road (N)	855	36	1	**892**
TOTALS	**1016**	**81**	**724**	**1821**

2038 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	12	105	708	**825**
Red Arches Road	61	0	43	**104**
Coast Road (N)	485	58	5	**548**
TOTALS	**558**	**163**	**756**	**1477**

2038 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	10	37	537	**584**
Red Arches Road	121	1	278	**400**
Coast Road (N)	818	121	1	**940**
TOTALS	**949**	**160**	**816**	**1924**

2038 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	12	86	683	**781**
Red Arches Road	50	0	112	**162**
Coast Road (N)	455	136	5	**596**
TOTALS	**517**	**222**	**800**	**1539**

2038 Thursday AM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	0	5	0	**5**
Red Arches Road	12	0	30	**42**
Coast Road (N)	0	14	0	**14**
TOTALS	**12**	**19**	**30**	**61**

2038 Thursday PM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	0	12	0	**12**
Red Arches Road	7	0	19	**26**
Coast Road (N)	0	22	0	**22**
TOTALS	**7**	**34**	**19**	**61**

2038 Thursday AM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + growth + realloc. + committed + subject + potential dev.)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	10	42	537	**589**
Red Arches Road	132	1	308	**442**
Coast Road (N)	818	135	1	**955**
TOTALS	**960**	**179**	**846**	**1985**

2038 Thursday PM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + growth + realloc. + committed + subject + potential dev.)

From \ To	Coast Road (S)	Red Arches Road	Coast Road (N)	TOTALS
Coast Road (S)	12	98	683	**793**
Red Arches Road	57	0	131	**188**
Coast Road (N)	455	159	5	**619**
TOTALS	**524**	**257**	**819**	**1600**

Peak Hour Junction Traffic Flow Matrices - Site 3

2020 Thursday AM Peak (08:00-09:00) — **SURVEYED TRAFFIC FLOWS**

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	44	383	**427**
Willie Nolan Road	182	0	53	**235**
Coast Road	622	108	0	**730**
TOTALS	**805**	**152**	**436**	**1393**

2020 Thursday PM Peak (15:30-16:30) — **SURVEYED TRAFFIC FLOWS**

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	73	494	**567**
Willie Nolan Road	153	0	93	**246**
Coast Road	347	71	0	**418**
TOTALS	**500**	**144**	**587**	**1230**

2023 Thursday AM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	0	0	**0**
Willie Nolan Road	0	0	-37	**-37**
Coast Road	0	-61	0	**-61**
TOTALS	**0**	**-61**	**-37**	**-98**

2023 Thursday PM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	0	0	**0**
Willie Nolan Road	0	0	-42	**-42**
Coast Road	0	-30	0	**-30**
TOTALS	**0**	**-30**	**-42**	**-72**

2023 Thursday AM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	0	6	**6**
Willie Nolan Road	0	0	53	**53**
Coast Road	20	52	0	**72**
TOTALS	**20**	**52**	**59**	**131**

2023 Thursday PM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	0	15	**15**
Willie Nolan Road	0	0	38	**38**
Coast Road	9	33	0	**42**
TOTALS	**9**	**33**	**53**	**94**

2023 Thursday AM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	0	16	**16**
Willie Nolan Road	0	0	0	**0**
Coast Road	39	0	0	**39**
TOTALS	**39**	**0**	**16**	**55**

2023 Thursday PM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	0	32	**32**
Willie Nolan Road	0	0	0	**0**
Coast Road	20	0	0	**20**
TOTALS	**20**	**0**	**32**	**52**

2023 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	46	408	**455**
Willie Nolan Road	191	0	108	**300**
Coast Road	673	166	0	**838**
TOTALS	**864**	**212**	**517**	**1593**

2023 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	77	533	**609**
Willie Nolan Road	160	0	135	**296**
Coast Road	372	108	0	**480**
TOTALS	**533**	**184**	**668**	**1385**

2023 Thursday AM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	0	8	**8**
Willie Nolan Road	0	0	0	**0**
Coast Road	25	0	0	**25**
TOTALS	**25**	**0**	**8**	**33**

2023 Thursday PM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	0	19	**19**
Willie Nolan Road	0	0	0	**0**
Coast Road	11	0	0	**11**
TOTALS	**11**	**0**	**19**	**30**

2023 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	46	426	**472**
Willie Nolan Road	191	0	18	**210**
Coast Road	718	53	0	**771**
TOTALS	**909**	**99**	**444**	**1452**

2023 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	77	569	**645**
Willie Nolan Road	160	0	56	**216**
Coast Road	395	44	0	**440**
TOTALS	**556**	**121**	**624**	**1301**

2028 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	50	442	**492**
Willie Nolan Road	207	0	113	**321**
Coast Road	727	175	0	**902**
TOTALS	**935**	**225**	**555**	**1715**

2028 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	83	576	**659**
Willie Nolan Road	174	0	144	**317**
Coast Road	403	114	0	**517**
TOTALS	**577**	**197**	**720**	**1493**

2028 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	50	460	**510**
Willie Nolan Road	207	0	23	**230**
Coast Road	772	62	0	**835**
TOTALS	**980**	**112**	**483**	**1575**

2028 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	83	612	**695**
Willie Nolan Road	174	0	64	**238**
Coast Road	426	51	0	**476**
TOTALS	**600**	**134**	**676**	**1409**

2038 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	54	475	**529**
Willie Nolan Road	223	0	118	**341**
Coast Road	781	184	0	**965**
TOTALS	**1004**	**238**	**593**	**1835**

2038 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	89	619	**708**
Willie Nolan Road	187	0	152	**339**
Coast Road	432	120	0	**553**
TOTALS	**619**	**209**	**770**	**1599**

2038 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	54	493	**547**
Willie Nolan Road	223	0	27	**250**
Coast Road	826	72	0	**897**
TOTALS	**1049**	**125**	**520**	**1694**

2038 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	89	654	**744**
Willie Nolan Road	187	0	72	**259**
Coast Road	455	57	0	**512**
TOTALS	**642**	**146**	**726**	**1515**

2038 Thursday AM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	0	5	**5**
Willie Nolan Road	0	0	0	**0**
Coast Road	12	0	0	**12**
TOTALS	**12**	**0**	**5**	**17**

2038 Thursday PM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	0	12	**12**
Willie Nolan Road	0	0	0	**0**
Coast Road	7	0	0	**7**
TOTALS	**7**	**0**	**12**	**19**

2038 Thursday AM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + growth + realloc. + committed + subject + potential dev.)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	54	498	**552**
Willie Nolan Road	223	0	27	**250**
Coast Road	838	72	0	**909**
TOTALS	**1061**	**125**	**525**	**1711**

2038 Thursday PM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + growth + realloc. + committed + subject + potential dev.)

From \ To	Main Street	Willie Nolan Road	Coast Road	TOTALS
Main Street	0	89	666	**755**
Willie Nolan Road	187	0	72	**259**
Coast Road	463	57	0	**519**
TOTALS	**650**	**146**	**738**	**1534**

Peak Hour Junction Traffic Flow Matrices - Site 4

2020 Thursday AM Peak (08:00-09:00) — **SURVEYED TRAFFIC FLOWS**

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	449	353	**803**
Strand Road	141	0	3	**143**
Main Street (S)	287	3	0	**290**
TOTALS	**428**	**452**	**356**	**1236**

2020 Thursday PM Peak (15:30-16:30) — **SURVEYED TRAFFIC FLOWS**

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	277	227	**504**
Strand Road	189	0	4	**193**
Main Street (S)	387	6	0	**393**
TOTALS	**576**	**283**	**231**	**1089**

2023 Thursday AM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	0	0	**0**
Strand Road	0	0	0	**0**
Main Street (S)	0	0	0	**0**
TOTALS	**0**	**0**	**0**	**0**

2023 Thursday PM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	0	0	**0**
Strand Road	0	0	0	**0**
Main Street (S)	0	0	0	**0**
TOTALS	**0**	**0**	**0**	**0**

2023 Thursday AM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	11	9	**20**
Strand Road	2	0	0	**2**
Main Street (S)	4	0	0	**4**
TOTALS	**6**	**11**	**9**	**26**

2023 Thursday PM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	5	4	**9**
Strand Road	5	0	0	**5**
Main Street (S)	10	0	0	**10**
TOTALS	**15**	**5**	**4**	**23**

2023 Thursday AM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	22	17	**39**
Strand Road	5	0	0	**5**
Main Street (S)	11	0	0	**11**
TOTALS	**16**	**22**	**17**	**55**

2023 Thursday PM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	11	9	**20**
Strand Road	10	0	0	**10**
Main Street (S)	21	0	0	**21**
TOTALS	**32**	**11**	**9**	**52**

2023 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	483	379	**862**
Strand Road	150	0	3	**152**
Main Street (S)	305	3	0	**308**
TOTALS	**455**	**486**	**382**	**1322**

2023 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	295	242	**537**
Strand Road	203	0	4	**207**
Main Street (S)	416	6	0	**422**
TOTALS	**619**	**302**	**246**	**1166**

2023 Thursday AM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	14	11	**25**
Strand Road	2	0	0	**2**
Main Street (S)	5	0	0	**5**
TOTALS	**8**	**14**	**11**	**33**

2023 Thursday PM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	6	5	**11**
Strand Road	6	0	0	**6**
Main Street (S)	13	0	0	**13**
TOTALS	**19**	**6**	**5**	**30**

2023 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	508	399	**907**
Strand Road	156	0	3	**158**
Main Street (S)	317	3	0	**320**
TOTALS	**472**	**511**	**402**	**1385**

2023 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	308	252	**560**
Strand Road	215	0	4	**219**
Main Street (S)	440	6	0	**446**
TOTALS	**655**	**314**	**256**	**1225**

2028 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	522	410	**932**
Strand Road	162	0	3	**165**
Main Street (S)	330	3	0	**333**
TOTALS	**492**	**525**	**413**	**1431**

2028 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	320	262	**581**
Strand Road	220	0	5	**224**
Main Street (S)	450	7	0	**457**
TOTALS	**669**	**327**	**266**	**1262**

2028 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	547	430	**977**
Strand Road	168	0	3	**171**
Main Street (S)	342	3	0	**345**
TOTALS	**510**	**551**	**433**	**1494**

2028 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	332	272	**604**
Strand Road	231	0	5	**236**
Main Street (S)	474	7	0	**481**
TOTALS	**705**	**339**	**276**	**1321**

2038 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	561	441	**1001**
Strand Road	174	0	3	**177**
Main Street (S)	355	4	0	**358**
TOTALS	**529**	**564**	**444**	**1537**

2038 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	344	281	**625**
Strand Road	236	0	5	**241**
Main Street (S)	483	7	0	**490**
TOTALS	**719**	**351**	**286**	**1356**

2038 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	586	461	**1046**
Strand Road	180	0	3	**183**
Main Street (S)	367	4	0	**370**
TOTALS	**547**	**590**	**464**	**1600**

2038 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	356	291	**648**
Strand Road	247	0	5	**252**
Main Street (S)	507	7	0	**514**
TOTALS	**755**	**364**	**296**	**1414**

2038 Thursday AM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	6	5	**12**
Strand Road	2	0	0	**2**
Main Street (S)	3	0	0	**3**
TOTALS	**5**	**6**	**5**	**17**

2038 Thursday PM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	4	3	**7**
Strand Road	4	0	0	**4**
Main Street (S)	8	0	0	**8**
TOTALS	**12**	**4**	**3**	**19**

2038 Thursday AM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + growth + realloc. + committed + subject + potential dev.)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	592	466	**1058**
Strand Road	182	0	3	**185**
Main Street (S)	370	4	0	**373**
TOTALS	**552**	**596**	**469**	**1616**

2038 Thursday PM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + growth + realloc. + committed + subject + potential dev.)

From \ To	Main Street (N)	Strand Road	Main Street (S)	TOTALS
Main Street (N)	0	360	295	**655**
Strand Road	251	0	5	**256**
Main Street (S)	515	7	0	**522**
TOTALS	**766**	**368**	**300**	**1433**

Peak Hour Junction Traffic Flow Matrices - Site 5

2020 Thursday AM Peak (08:00-09:00) — **SURVEYED TRAFFIC FLOWS**

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	226	157	**383**
The Mall	64	0	0	**64**
Strand Road (N)	456	0	0	**456**
TOTALS	**520**	**226**	**157**	**903**

2020 Thursday PM Peak (15:30-16:30) — **SURVEYED TRAFFIC FLOWS**

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	285	183	**468**
The Mall	58	0	3	**61**
Strand Road (N)	284	2	0	**286**
TOTALS	**342**	**287**	**186**	**815**

2023 Thursday AM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	0	0	**0**
The Mall	0	0	0	**0**
Strand Road (N)	0	0	0	**0**
TOTALS	**0**	**0**	**0**	**0**

2023 Thursday PM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	0	0	**0**
The Mall	0	0	0	**0**
Strand Road (N)	0	0	0	**0**
TOTALS	**0**	**0**	**0**	**0**

2023 Thursday AM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	14	2	**16**
The Mall	16	0	0	**16**
Strand Road (N)	11	0	0	**11**
TOTALS	**27**	**14**	**2**	**43**

2023 Thursday PM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	16	5	**21**
The Mall	6	0	0	**6**
Strand Road (N)	5	0	0	**5**
TOTALS	**11**	**16**	**5**	**31**

2023 Thursday AM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	11	5	**16**
The Mall	11	0	0	**11**
Strand Road (N)	22	0	0	**22**
TOTALS	**32**	**11**	**5**	**49**

2023 Thursday PM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	8	10	**18**
The Mall	3	0	0	**3**
Strand Road (N)	11	0	0	**11**
TOTALS	**14**	**8**	**10**	**32**

2023 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	251	167	**419**
The Mall	83	0	0	**83**
Strand Road (N)	490	0	0	**490**
TOTALS	**573**	**251**	**167**	**991**

2023 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	315	197	**512**
The Mall	66	0	3	**70**
Strand Road (N)	303	2	0	**305**
TOTALS	**369**	**317**	**200**	**887**

2023 Thursday AM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	3	2	**6**
The Mall	7	0	0	**7**
Strand Road (N)	14	0	0	**14**
TOTALS	**22**	**3**	**2**	**27**

2023 Thursday PM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	9	6	**15**
The Mall	3	0	0	**3**
Strand Road (N)	6	0	0	**6**
TOTALS	**9**	**9**	**6**	**24**

2023 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	251	173	**425**
The Mall	85	0	0	**85**
Strand Road (N)	515	0	0	**515**
TOTALS	**600**	**251**	**173**	**1024**

2023 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	316	209	**525**
The Mall	66	0	3	**69**
Strand Road (N)	315	2	0	**318**
TOTALS	**382**	**318**	**212**	**911**

2028 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	271	181	**452**
The Mall	89	0	0	**89**
Strand Road (N)	530	0	0	**530**
TOTALS	**618**	**271**	**181**	**1070**

2028 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	340	213	**553**
The Mall	71	0	3	**75**
Strand Road (N)	328	2	0	**330**
TOTALS	**399**	**343**	**216**	**958**

2028 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	271	187	**458**
The Mall	91	0	0	**91**
Strand Road (N)	555	0	0	**555**
TOTALS	**645**	**271**	**187**	**1104**

2028 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	341	225	**566**
The Mall	71	0	3	**75**
Strand Road (N)	340	2	0	**343**
TOTALS	**412**	**343**	**228**	**983**

2038 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	291	195	**485**
The Mall	94	0	0	**94**
Strand Road (N)	569	0	0	**569**
TOTALS	**663**	**291**	**195**	**1148**

2038 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	365	229	**593**
The Mall	76	0	4	**80**
Strand Road (N)	352	2	0	**355**
TOTALS	**429**	**367**	**232**	**1028**

2038 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	291	200	**491**
The Mall	96	0	0	**96**
Strand Road (N)	594	0	0	**594**
TOTALS	**690**	**291**	**200**	**1181**

2038 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	366	240	**606**
The Mall	76	0	4	**80**
Strand Road (N)	365	2	0	**367**
TOTALS	**441**	**368**	**244**	**1053**

2038 Thursday AM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	2	2	**4**
The Mall	3	0	0	**3**
Strand Road (N)	6	0	0	**6**
TOTALS	**10**	**2**	**2**	**14**

2038 Thursday PM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	5	4	**9**
The Mall	2	0	0	**2**
Strand Road (N)	4	0	0	**4**
TOTALS	**6**	**5**	**4**	**15**

2038 Thursday AM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + growth + realloc. + committed + subject + potential dev.)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	293	202	**495**
The Mall	99	0	0	**99**
Strand Road (N)	601	0	0	**601**
TOTALS	**700**	**293**	**202**	**1195**

2038 Thursday PM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + growth + realloc. + committed + subject + potential dev.)

From \ To	Strand Road (S)	The Mall	Strand Road (N)	TOTALS
Strand Road (S)	0	371	244	**615**
The Mall	78	0	4	**82**
Strand Road (N)	369	2	0	**371**
TOTALS	**447**	**373**	**248**	**1068**

Peak Hour Junction Traffic Flow Matrices - Site 6

2020 Thursday AM Peak (08:00-09:00) — **SURVEYED TRAFFIC FLOWS**

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	10	320	13	**342**
The Mall	110	0	5	122	**237**
Warrenhouse Road	183	7	0	165	**354**
Dublin Street	20	50	121	0	**191**
TOTALS	**313**	**67**	**446**	**299**	**1124**

2020 Thursday PM Peak (15:30-16:30) — **SURVEYED TRAFFIC FLOWS**

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	6	212	10	**228**
The Mall	121	0	4	154	**279**
Warrenhouse Road	255	5	0	181	**441**
Dublin Street	10	51	154	0	**215**
TOTALS	**386**	**62**	**370**	**345**	**1162**

2023 Thursday AM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	0	0	0	**0**
The Mall	0	0	0	0	**0**
Warrenhouse Road	0	0	0	0	**0**
Dublin Street	0	0	0	0	**0**
TOTALS	**0**	**0**	**0**	**0**	**1**

2023 Thursday PM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	0	0	0	**0**
The Mall	0	0	0	0	**0**
Warrenhouse Road	0	0	0	0	**0**
Dublin Street	0	0	0	0	**0**
TOTALS	**0**	**0**	**0**	**0**	**0**

2023 Thursday AM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	0	9	0	**9**
The Mall	0	0	0	14	**14**
Warrenhouse Road	4	0	0	19	**23**
Dublin Street	0	16	39	0	**55**
TOTALS	**4**	**16**	**48**	**33**	**101**

2023 Thursday PM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	0	4	0	**4**
The Mall	0	0	0	16	**16**
Warrenhouse Road	10	0	0	18	**28**
Dublin Street	0	6	18	0	**23**
TOTALS	**10**	**6**	**22**	**34**	**71**

2023 Thursday AM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	0	17	0	**17**
The Mall	0	0	0	11	**11**
Warrenhouse Road	11	0	0	15	**26**
Dublin Street	0	11	25	0	**36**
TOTALS	**11**	**11**	**43**	**26**	**90**

2023 Thursday PM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	0	9	0	**9**
The Mall	0	0	0	8	**8**
Warrenhouse Road	21	0	0	9	**31**
Dublin Street	0	3	9	0	**12**
TOTALS	**21**	**3**	**18**	**17**	**59**

2023 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	10	345	13	**368**
The Mall	115	0	5	142	**263**
Warrenhouse Road	196	7	0	192	**395**
Dublin Street	21	69	165	0	**255**
TOTALS	**332**	**86**	**515**	**347**	**1281**

2023 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	6	226	10	**243**
The Mall	127	0	4	178	**309**
Warrenhouse Road	277	5	0	208	**491**
Dublin Street	10	59	179	0	**249**
TOTALS	**415**	**71**	**409**	**396**	**1291**

2023 Thursday AM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	0	11	0	**11**
The Mall	0	0	0	3	**3**
Warrenhouse Road	5	0	0	4	**9**
Dublin Street	0	7	18	0	**25**
TOTALS	**5**	**7**	**29**	**8**	**49**

2023 Thursday PM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	0	5	0	**5**
The Mall	0	0	0	9	**9**
Warrenhouse Road	13	0	0	10	**23**
Dublin Street	0	3	8	0	**11**
TOTALS	**13**	**3**	**13**	**19**	**47**

2023 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	10	365	13	**388**
The Mall	115	0	5	142	**263**
Warrenhouse Road	208	7	0	192	**407**
Dublin Street	21	71	170	0	**262**
TOTALS	**344**	**88**	**540**	**348**	**1320**

2023 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	6	236	10	**253**
The Mall	127	0	4	179	**310**
Warrenhouse Road	302	5	0	209	**516**
Dublin Street	10	59	179	0	**248**
TOTALS	**439**	**70**	**419**	**398**	**1326**

2028 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	11	373	14	**398**
The Mall	125	0	6	153	**284**
Warrenhouse Road	212	8	0	207	**426**
Dublin Street	23	73	176	0	**272**
TOTALS	**360**	**92**	**555**	**374**	**1380**

2028 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	7	244	11	**263**
The Mall	138	0	5	191	**333**
Warrenhouse Road	300	6	0	224	**529**
Dublin Street	11	63	193	0	**268**
TOTALS	**449**	**76**	**442**	**427**	**1393**

2028 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	11	393	14	**418**
The Mall	125	0	6	153	**284**
Warrenhouse Road	224	8	0	207	**438**
Dublin Street	23	75	181	0	**279**
TOTALS	**372**	**94**	**579**	**374**	**1418**

2028 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	7	255	11	**273**
The Mall	138	0	5	192	**334**
Warrenhouse Road	324	6	0	225	**554**
Dublin Street	11	63	192	0	**267**
TOTALS	**473**	**76**	**452**	**428**	**1428**

2038 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	12	400	15	**427**
The Mall	135	0	6	163	**304**
Warrenhouse Road	228	9	0	221	**457**
Dublin Street	24	78	186	0	**288**
TOTALS	**387**	**98**	**593**	**399**	**1477**

2038 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	7	263	12	**282**
The Mall	148	0	5	205	**357**
Warrenhouse Road	322	6	0	239	**567**
Dublin Street	12	68	206	0	**286**
TOTALS	**482**	**81**	**473**	**456**	**1493**

2038 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	12	420	15	**447**
The Mall	135	0	6	163	**304**
Warrenhouse Road	239	9	0	221	**469**
Dublin Street	24	80	191	0	**295**
TOTALS	**398**	**100**	**617**	**400**	**1515**

2038 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	7	273	12	**293**
The Mall	148	0	5	205	**358**
Warrenhouse Road	346	6	0	240	**592**
Dublin Street	12	68	205	0	**285**
TOTALS	**506**	**81**	**483**	**458**	**1528**

2038 Thursday AM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	0	5	0	**5**
The Mall	0	0	0	2	**2**
Warrenhouse Road	3	0	0	3	**6**
Dublin Street	0	3	8	0	**12**
TOTALS	**3**	**3**	**13**	**5**	**25**

2038 Thursday PM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	0	3	0	**3**
The Mall	0	0	0	5	**5**
Warrenhouse Road	8	0	0	6	**14**
Dublin Street	0	2	6	0	**7**
TOTALS	**8**	**2**	**9**	**12**	**30**

2038 Thursday AM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + TII growth + reallocation + committed dev. + subject dev. + potential dev.)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	12	425	15	**452**
The Mall	135	0	6	165	**306**
Warrenhouse Road	243	9	0	224	**475**
Dublin Street	24	83	199	0	**307**
TOTALS	**402**	**103**	**631**	**404**	**1540**

2038 Thursday PM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + TII growth + reallocation + committed dev. + subject dev. + potential dev.)

From \ To	Main Street	The Mall	Warrenhouse Road	Dublin Street	TOTALS
Main Street	0	7	276	12	**296**
The Mall	148	0	5	211	**364**
Warrenhouse Road	354	6	0	246	**606**
Dublin Street	12	70	211	0	**293**
TOTALS	**514**	**83**	**492**	**469**	**1558**

Peak Hour Junction Traffic Flow Matrices - Site 7

2020 Thursday AM Peak (08:00-09:00) — **SURVEYED TRAFFIC FLOWS**

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	241	231	**472**
Willie Nolan Road	179	0	9	**188**
Brookstone Road	366	19	0	**385**
TOTALS	**545**	**260**	**240**	**1045**

2020 Thursday PM Peak (15:30-16:30) — **SURVEYED TRAFFIC FLOWS**

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	248	229	**477**
Willie Nolan Road	167	0	2	**169**
Brookstone Road	350	8	0	**358**
TOTALS	**517**	**256**	**231**	**1004**

2023 Thursday AM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	-37	0	**-37**
Willie Nolan Road	-61	0	0	**-61**
Brookstone Road	0	0	0	**0**
TOTALS	**-60**	**-37**	**0**	**-97**

2023 Thursday PM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	-42	0	**-42**
Willie Nolan Road	-30	0	0	**-30**
Brookstone Road	0	0	0	**0**
TOTALS	**-30**	**-42**	**0**	**-72**

2023 Thursday AM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	53	55	**108**
Willie Nolan Road	52	0	0	**52**
Brookstone Road	33	0	0	**33**
TOTALS	**86**	**53**	**55**	**194**

2023 Thursday PM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	38	23	**61**
Willie Nolan Road	33	0	0	**33**
Brookstone Road	34	0	0	**34**
TOTALS	**68**	**38**	**23**	**129**

2023 Thursday AM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	0	36	**36**
Willie Nolan Road	0	0	0	**0**
Brookstone Road	26	0	0	**26**
TOTALS	**26**	**0**	**36**	**62**

2023 Thursday PM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	0	12	**12**
Willie Nolan Road	0	0	0	**0**
Brookstone Road	17	0	0	**17**
TOTALS	**17**	**0**	**12**	**29**

2023 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	306	298	**604**
Willie Nolan Road	240	0	9	**249**
Brookstone Road	418	19	0	**437**
TOTALS	**658**	**325**	**307**	**1290**

2023 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	298	264	**562**
Willie Nolan Road	209	0	2	**211**
Brookstone Road	401	8	0	**410**
TOTALS	**610**	**307**	**266**	**1183**

2023 Thursday AM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	0	25	**25**
Willie Nolan Road	0	0	0	**0**
Brookstone Road	8	0	0	**8**
TOTALS	**8**	**0**	**25**	**33**

2023 Thursday PM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	0	11	**11**
Willie Nolan Road	0	0	0	**0**
Brookstone Road	19	0	0	**19**
TOTALS	**19**	**0**	**11**	**30**

2023 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	215	304	**520**
Willie Nolan Road	127	0	9	**136**
Brookstone Road	418	19	0	**437**
TOTALS	**545**	**235**	**314**	**1094**

2023 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	219	263	**482**
Willie Nolan Road	145	0	2	**147**
Brookstone Road	403	8	0	**411**
TOTALS	**548**	**227**	**265**	**1040**

2028 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	327	318	**645**
Willie Nolan Road	256	0	10	**266**
Brookstone Road	450	21	0	**471**
TOTALS	**705**	**348**	**328**	**1382**

2028 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	320	284	**604**
Willie Nolan Road	223	0	2	**226**
Brookstone Road	432	9	0	**441**
TOTALS	**655**	**329**	**286**	**1271**

2028 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	237	325	**561**
Willie Nolan Road	143	0	10	**153**
Brookstone Road	450	21	0	**471**
TOTALS	**593**	**258**	**335**	**1185**

2028 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	240	283	**524**
Willie Nolan Road	160	0	2	**162**
Brookstone Road	434	9	0	**443**
TOTALS	**594**	**250**	**285**	**1129**

2038 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	348	338	**686**
Willie Nolan Road	271	0	11	**282**
Brookstone Road	481	23	0	**504**
TOTALS	**752**	**370**	**349**	**1472**

2038 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	342	303	**645**
Willie Nolan Road	238	0	2	**240**
Brookstone Road	462	10	0	**472**
TOTALS	**700**	**351**	**306**	**1357**

2038 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	257	345	**602**
Willie Nolan Road	158	0	11	**169**
Brookstone Road	481	23	0	**504**
TOTALS	**639**	**280**	**356**	**1275**

2038 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed + TII growth + reallocation + committed + subject dev.)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	262	303	**565**
Willie Nolan Road	174	0	2	**177**
Brookstone Road	464	10	0	**473**
TOTALS	**638**	**272**	**305**	**1215**

2038 Thursday AM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	0	12	**12**
Willie Nolan Road	0	0	0	**0**
Brookstone Road	5	0	0	**5**
TOTALS	**5**	**0**	**12**	**17**

2038 Thursday PM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	0	7	**7**
Willie Nolan Road	0	0	0	**0**
Brookstone Road	12	0	0	**12**
TOTALS	**12**	**0**	**7**	**19**

2038 Thursday AM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + growth + realloc. + committed + subject + potential dev.)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	257	356	**614**
Willie Nolan Road	158	0	11	**169**
Brookstone Road	486	23	0	**509**
TOTALS	**644**	**280**	**367**	**1292**

2038 Thursday PM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + growth + realloc. + committed + subject + potential dev.)

From \ To	Grange Road	Willie Nolan Road	Brookstone Road	TOTALS
Grange Road	0	262	310	**572**
Willie Nolan Road	174	0	2	**177**
Brookstone Road	475	10	0	**485**
TOTALS	**650**	**272**	**313**	**1234**

Peak Hour Junction Traffic Flow Matrices - Site 8

2020 Thursday AM Peak (08:00-09:00) — **SURVEYED TRAFFIC FLOWS**

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	52	10	60	**122**
Grange Road (E)	16	0	1	472	**489**
Abbey Park	5	19	0	49	**73**
Grange Road (W)	15	400	11	0	**426**
TOTALS	**36**	**472**	**22**	**581**	**1110**

2020 Thursday PM Peak (15:30-16:30) — **SURVEYED TRAFFIC FLOWS**

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	21	6	29	**56**
Grange Road (E)	30	0	82	399	**511**
Abbey Park	11	148	0	394	**553**
Grange Road (W)	32	411	181	0	**625**
TOTALS	**73**	**580**	**269**	**823**	**1745**

2023 Thursday AM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	0	0	0	**0**
Grange Road (E)	0	0	0	-60	**-60**
Abbey Park	0	0	0	0	**0**
Grange Road (W)	0	-37	0	0	**-37**
TOTALS	**0**	**-37**	**0**	**-60**	**-97**

2023 Thursday PM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	0	0	0	**0**
Grange Road (E)	0	0	0	-30	**-30**
Abbey Park	0	0	0	0	**0**
Grange Road (W)	0	-42	0	0	**-42**
TOTALS	**0**	**-42**	**0**	**-30**	**-72**

2023 Thursday AM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	0	0	0	**0**
Grange Road (E)	0	0	0	86	**86**
Abbey Park	0	0	0	0	**0**
Grange Road (W)	0	108	0	0	**108**
TOTALS	**0**	**108**	**0**	**86**	**194**

2023 Thursday PM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	0	0	0	**0**
Grange Road (E)	0	0	0	68	**68**
Abbey Park	0	0	0	0	**0**
Grange Road (W)	0	61	0	0	**61**
TOTALS	**0**	**61**	**0**	**68**	**129**

2023 Thursday AM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	0	0	0	**0**
Grange Road (E)	0	0	0	26	**26**
Abbey Park	0	0	0	0	**0**
Grange Road (W)	0	36	0	0	**36**
TOTALS	**0**	**36**	**0**	**26**	**62**

2023 Thursday PM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	0	0	0	**0**
Grange Road (E)	0	0	0	17	**17**
Abbey Park	0	0	0	0	**0**
Grange Road (W)	0	12	0	0	**12**
TOTALS	**0**	**12**	**0**	**17**	**29**

2023 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	55	10	63	**128**
Grange Road (E)	17	0	1	581	**599**
Abbey Park	5	20	0	51	**76**
Grange Road (W)	16	528	11	0	**555**
TOTALS	**38**	**603**	**23**	**695**	**1359**

2023 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	22	6	30	**59**
Grange Road (E)	31	0	86	486	**604**
Abbey Park	12	155	0	414	**580**
Grange Road (W)	34	493	190	0	**717**
TOTALS	**77**	**670**	**282**	**931**	**1960**

2023 Thursday AM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	0	0	0	**0**
Grange Road (E)	0	0	0	8	**8**
Abbey Park	0	0	0	0	**0**
Grange Road (W)	0	25	0	0	**25**
TOTALS	**0**	**25**	**0**	**8**	**33**

2023 Thursday PM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	0	0	0	**0**
Grange Road (E)	0	0	0	19	**19**
Abbey Park	0	0	0	0	**0**
Grange Road (W)	0	11	0	0	**11**
TOTALS	**0**	**11**	**0**	**19**	**30**

2023 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	55	10	63	**128**
Grange Road (E)	17	0	1	469	**487**
Abbey Park	5	20	0	51	**76**
Grange Road (W)	16	444	11	0	**471**
TOTALS	**38**	**519**	**23**	**583**	**1162**

2023 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	22	6	30	**59**
Grange Road (E)	31	0	86	424	**542**
Abbey Park	12	155	0	414	**580**
Grange Road (W)	34	413	190	0	**637**
TOTALS	**77**	**590**	**282**	**869**	**1818**

2028 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	59	11	68	**139**
Grange Road (E)	18	0	1	623	**642**
Abbey Park	6	22	0	55	**83**
Grange Road (W)	17	563	12	0	**593**
TOTALS	**41**	**644**	**25**	**746**	**1456**

2028 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	24	7	33	**64**
Grange Road (E)	34	0	93	521	**649**
Abbey Park	13	168	0	449	**629**
Grange Road (W)	37	529	206	0	**772**
TOTALS	**83**	**721**	**306**	**1003**	**2113**

2028 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	59	11	68	**139**
Grange Road (E)	18	0	1	510	**530**
Abbey Park	6	22	0	55	**83**
Grange Road (W)	17	479	12	0	**509**
TOTALS	**41**	**560**	**25**	**634**	**1260**

2028 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	24	7	33	**64**
Grange Road (E)	34	0	93	459	**587**
Abbey Park	13	168	0	449	**629**
Grange Road (W)	37	449	206	0	**691**
TOTALS	**83**	**640**	**306**	**941**	**1971**

2038 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	64	12	73	**149**
Grange Road (E)	20	0	1	663	**684**
Abbey Park	6	23	0	59	**89**
Grange Road (W)	18	598	13	0	**629**
TOTALS	**44**	**685**	**27**	**796**	**1552**

2038 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	26	7	35	**68**
Grange Road (E)	37	0	100	556	**693**
Abbey Park	13	180	0	482	**676**
Grange Road (W)	39	565	222	0	**825**
TOTALS	**90**	**771**	**329**	**1074**	**2263**

2038 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	64	12	73	**149**
Grange Road (E)	20	0	1	551	**572**
Abbey Park	6	23	0	59	**89**
Grange Road (W)	18	514	13	0	**545**
TOTALS	**44**	**601**	**27**	**684**	**1355**

2038 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	26	7	35	**68**
Grange Road (E)	37	0	100	494	**631**
Abbey Park	13	180	0	482	**676**
Grange Road (W)	39	484	222	0	**745**
TOTALS	**90**	**690**	**329**	**1012**	**2121**

2038 Thursday AM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	0	0	0	**0**
Grange Road (E)	0	0	0	5	**5**
Abbey Park	0	0	0	0	**0**
Grange Road (W)	0	12	0	0	**12**
TOTALS	**0**	**12**	**0**	**5**	**17**

2038 Thursday PM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	0	0	0	**0**
Grange Road (E)	0	0	0	12	**12**
Abbey Park	0	0	0	0	**0**
Grange Road (W)	0	7	0	0	**7**
TOTALS	**0**	**7**	**0**	**12**	**19**

2038 Thursday AM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + TII growth + reallocation + committed dev. + subject dev. + potential dev.)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	64	12	73	**149**
Grange Road (E)	20	0	1	556	**576**
Abbey Park	6	23	0	59	**89**
Grange Road (W)	18	525	13	0	**557**
TOTALS	**44**	**612**	**27**	**689**	**1372**

2038 Thursday PM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + TII growth + reallocation + committed dev. + subject dev. + potential dev.)

From \ To	Grange Park	Grange Road (E)	Abbey Park	Grange Road (W)	TOTALS
Grange Park	0	26	7	35	**68**
Grange Road (E)	37	0	100	505	**642**
Abbey Park	13	180	0	482	**676**
Grange Road (W)	39	492	222	0	**752**
TOTALS	**90**	**698**	**329**	**1023**	**2140**

Peak Hour Junction Traffic Flow Matrices - Site 9

2020 Thursday AM Peak (08:00-09:00) — **SURVEYED TRAFFIC FLOWS**

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	133	287	78	**498**
Grange Road (E)	48	0	237	310	**595**
Grange Road (S)	225	211	0	352	**788**
Clarehall Avenue	131	480	492	0	**1102**
TOTALS	**404**	**824**	**1016**	**741**	**2983**

2020 Thursday PM Peak (15:30-16:30) — **SURVEYED TRAFFIC FLOWS**

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	19	113	255	170	**556**
Grange Road (E)	91	0	212	545	**847**
Grange Road (S)	312	206	2	333	**853**
Clarehall Avenue	167	348	343	1	**860**
TOTALS	**589**	**667**	**812**	**1049**	**3117**

2023 Thursday AM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	0	0	0	**0**
Grange Road (E)	0	0	0	0	**0**
Grange Road (S)	0	0	0	0	**0**
Clarehall Avenue	0	0	0	0	**0**
TOTALS	**0**	**0**	**0**	**0**	**0**

2023 Thursday PM Peak — **Reallocation of Existing Flows via New Road Link**

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	0	0	0	**0**
Grange Road (E)	0	0	0	0	**0**
Grange Road (S)	0	0	0	0	**0**
Clarehall Avenue	0	0	0	0	**0**
TOTALS	**0**	**0**	**0**	**0**	**0**

2023 Thursday AM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	17	0	0	**17**
Grange Road (E)	11	0	56	73	**141**
Grange Road (S)	0	28	0	0	**28**
Clarehall Avenue	0	63	0	0	**63**
TOTALS	**11**	**107**	**56**	**73**	**248**

2023 Thursday PM Peak — **Other committed development flows** (WITHOUT new road link)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	12	0	0	**12**
Grange Road (E)	7	0	17	43	**67**
Grange Road (S)	0	23	0	0	**23**
Clarehall Avenue	0	38	0	0	**38**
TOTALS	**7**	**73**	**17**	**43**	**140**

2023 Thursday AM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	14	0	0	**14**
Grange Road (E)	10	0	49	64	**124**
Grange Road (S)	0	23	0	0	**23**
Clarehall Avenue	0	52	0	0	**52**
TOTALS	**10**	**90**	**49**	**64**	**213**

2023 Thursday PM Peak — **Other committed development flows** (WITH new road link in place)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	11	0	0	**11**
Grange Road (E)	6	0	15	39	**60**
Grange Road (S)	0	21	0	0	**21**
Clarehall Avenue	0	35	0	0	**35**
TOTALS	**6**	**67**	**15**	**39**	**127**

2023 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	157	301	82	**540**
Grange Road (E)	62	0	305	398	**765**
Grange Road (S)	236	249	0	370	**855**
Clarehall Avenue	137	566	516	0	**1219**
TOTALS	**435**	**972**	**1122**	**850**	**3379**

2023 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	20	130	268	178	**596**
Grange Road (E)	102	0	239	615	**956**
Grange Road (S)	327	239	2	349	**918**
Clarehall Avenue	176	404	360	1	**941**
TOTALS	**625**	**773**	**869**	**1144**	**3411**

2023 Thursday AM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	5	0	0	**5**
Grange Road (E)	7	0	34	44	**84**
Grange Road (S)	0	8	0	0	**8**
Clarehall Avenue	0	19	0	0	**19**
TOTALS	**7**	**33**	**34**	**44**	**117**

2023 Thursday PM Peak — **SUBJECT DEVELOPMENT FLOWS**

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	9	0	0	**9**
Grange Road (E)	4	0	10	27	**42**
Grange Road (S)	0	16	0	0	**16**
Clarehall Avenue	0	27	0	0	**27**
TOTALS	**4**	**51**	**10**	**27**	**93**

2023 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	159	301	82	**542**
Grange Road (E)	67	0	332	433	**832**
Grange Road (S)	236	253	0	370	**859**
Clarehall Avenue	137	575	516	0	**1228**
TOTALS	**440**	**987**	**1149**	**885**	**3461**

2023 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	20	138	268	178	**604**
Grange Road (E)	106	0	248	637	**991**
Grange Road (S)	327	253	2	349	**932**
Clarehall Avenue	176	427	360	1	**964**
TOTALS	**629**	**818**	**878**	**1166**	**3491**

2028 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	168	326	89	**584**
Grange Road (E)	66	0	326	426	**818**
Grange Road (S)	256	267	0	401	**924**
Clarehall Avenue	148	608	559	0	**1316**
TOTALS	**470**	**1044**	**1211**	**915**	**3641**

2028 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	22	140	290	193	**645**
Grange Road (E)	110	0	258	663	**1031**
Grange Road (S)	355	257	2	379	**992**
Clarehall Avenue	190	434	390	1	**1016**
TOTALS	**677**	**831**	**941**	**1236**	**3684**

2028 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	171	326	89	**586**
Grange Road (E)	71	0	353	460	**885**
Grange Road (S)	256	271	0	401	**928**
Clarehall Avenue	148	617	559	0	**1324**
TOTALS	**476**	**1059**	**1238**	**950**	**3723**

2028 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	22	148	290	193	**653**
Grange Road (E)	114	0	267	685	**1065**
Grange Road (S)	355	271	2	379	**1006**
Clarehall Avenue	190	458	390	1	**1040**
TOTALS	**681**	**877**	**949**	**1258**	**3764**

2038 Thursday AM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	180	351	96	**626**
Grange Road (E)	70	0	346	452	**869**
Grange Road (S)	275	286	0	431	**992**
Clarehall Avenue	160	650	601	0	**1410**
TOTALS	**505**	**1115**	**1298**	**979**	**3897**

2038 Thursday PM Peak — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	23	150	312	208	**693**
Grange Road (E)	118	0	276	710	**1104**
Grange Road (S)	382	274	2	407	**1066**
Clarehall Avenue	205	464	420	1	**1090**
TOTALS	**727**	**889**	**1010**	**1326**	**3952**

2038 Thursday AM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	182	351	96	**629**
Grange Road (E)	75	0	373	487	**936**
Grange Road (S)	275	289	0	431	**996**
Clarehall Avenue	160	658	601	0	**1419**
TOTALS	**510**	**1130**	**1325**	**1014**	**3979**

2038 Thursday PM Peak — **WITH SUBJECT DEVELOPMENT** (surveyed flows + TII growth + reallocation + committed dev. flows + subject dev. flows)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	23	158	312	208	**700**
Grange Road (E)	122	0	285	732	**1138**
Grange Road (S)	382	288	2	407	**1080**
Clarehall Avenue	205	488	420	1	**1114**
TOTALS	**731**	**934**	**1019**	**1348**	**4032**

2038 Thursday AM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	3	0	0	**3**
Grange Road (E)	3	0	15	20	**38**
Grange Road (S)	0	5	0	0	**5**
Clarehall Avenue	0	12	0	0	**12**
TOTALS	**3**	**21**	**15**	**20**	**60**

2038 Thursday PM Peak — **Potential future development flows (GA1 amendment)**

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	5	0	0	**5**
Grange Road (E)	3	0	7	18	**27**
Grange Road (S)	0	10	0	0	**10**
Clarehall Avenue	0	17	0	0	**17**
TOTALS	**3**	**32**	**7**	**18**	**60**

2038 Thursday AM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + TII growth + reallocation + committed dev. + subject dev. + potential dev.)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	0	186	351	96	**632**
Grange Road (E)	79	0	388	507	**974**
Grange Road (S)	275	295	0	431	**1001**
Clarehall Avenue	160	671	601	0	**1431**
TOTALS	**514**	**1151**	**1340**	**1034**	**4039**

2038 Thursday PM Peak — **WITH POTENTIAL FUTURE DEVELOPMENT** (surveyed + TII growth + reallocation + committed dev. + subject dev. + potential dev.)

From \ To	Hole in the Wall Rd	Grange Road (E)	Grange Road (S)	Clarehall Avenue	TOTALS
Hole in the Wall Rd	23	163	312	208	**706**
Grange Road (E)	124	0	292	749	**1166**
Grange Road (S)	382	298	2	407	**1090**
Clarehall Avenue	205	505	420	1	**1131**
TOTALS	**734**	**966**	**1026**	**1366**	**4092**

Appendix D

TRANSYT and ARCADY Model Results

CS CONSULTING
GROUP

TRANSYT 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:45:29

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2020 WD Surveyed				
Network	D1	352.47	23.57	77% (TS 1B/1)	0 (0%)

A1 -
D1 - 2020 WD Surveyed, AM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	60	60
	2	62	62
1Ax	1	66	66
1B	1	601	601
	2	24	24
1Bx	1	485	485
1C	1	110	110
	2	64	64
1Cx	1	560	560
1D	1	411	411
	2	378	378
1Dx	1	599	599

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	52	8	62
	1-2	24	0	174	427
	1-3	3	61	0	110
	1-4	39	372	378	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	110
	2		1-3	1-1	1C/2, 1Ax/1	Normal	3
	3		1-3	1-2	1C/2, 1Bx/1	Normal	61
	4		1-4	1-1	1D/1, 1Ax/1	Normal	39
	5		1-4	1-2	1D/1, 1Bx/1	Normal	372
	6		1-4	1-3	1D/2, 1Cx/1	Normal	378
	7		1-1	1-2	1A/1, 1Bx/1	Normal	52
	8		1-1	1-3	1A/1, 1Cx/1	Normal	8
	9		1-1	1-4	1A/2, 1Dx/1	Normal	62
	10		1-2	1-4	1B/1, 1Dx/1	Normal	427
	11		1-2	1-3	1B/1, 1Cx/1	Normal	174
	12		1-2	1-1	1B/2, 1Ax/1	Normal	24

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	172, 64, 93, 119, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

R090 Baldoyle GA03 TRANSYT Results - Main Assessment

From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	172	5	1	1
	2	✓	2	C,G,H	177	64	67	1	1
	3	✓	3	E,G,H	69	93	24	1	1
	4	✓	4	E,F	98	119	21	1	1
	5	✓	5	A,B	124	143	19	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

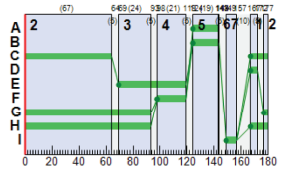
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	124	143	19
	B	1	✓	124	144	20
	C	1	✓	167	64	77
	D	1	✓	167	172	5
	E	1	✓	69	119	50
	F	1	✓	98	119	21
	G	1	✓	177	93	96
	H	1	✓	167	93	106
	I	1	✓	149	157	8

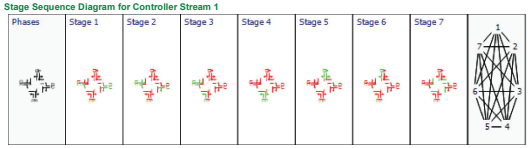
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	124	143	19
1A	2	1	1	B	124	144	20
1B	1	1	1	C	167	64	77
1B	2	1	1	D	167	172	5
1C	1	1	1	E	69	119	50
1C	2	1	1	F	98	119	21
1D	1	1	1	G	177	93	96
1D	2	1	1	H	167	93	106

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

					(PCU/hr)			cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	60	1800	19	2.00	30	200	84.38	77.42	93.13	2.81	2.73	100	100	0.00	19.02
	2	R	1	1	B	62	1800	20	0.00	30	205	83.28	76.32	92.43	2.89	2.80	100	100	0.00	19.38
1Ax	1	Exit				66	Unrestricted	180	137.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	601 <	1800	77	0.00	77	17	56.96	50.96	87.80	26.81 +	18.29	100	100	0.00	127.43
	2	R	1	1	D	24	1800	5	3.00	40	125	110.71	104.71	107.63	1.30	1.29	100	100	0.00	10.24
1Bx	1	Exit				485	Unrestricted	180	21.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	110	1800	50	0.00	22	317	61.61	50.21	75.97	4.22	3.97	100	100	0.00	22.83
	2	S / R	1	1	F	64	1800	21	0.00	29	209	86.65	75.25	91.75	2.96	2.87	100	100	0.00	19.73
1Cx	1	Exit				560	Unrestricted	180	57.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	411	1800	96	0.00	42	112	38.16	26.16	59.34	12.37	9.63	100	100	0.00	45.47
	2	R	1	1	H	378 <	849	106	0.00	75	20	68.23	56.23	95.48	18.20 +	8.75	100	100	0.00	88.36
1Dx	1	Exit				599	Unrestricted	180	3.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	558.52	42.19	13.24	20.72	2.85	334.75	17.73	0.00	352.47
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	558.52	42.19	13.24	20.72	2.85	334.75	17.73	0.00	352.47

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:47:11

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2020 WD Surveyed				
Network	D1	352.47	23.57	77% (TS 1B/1)	0 (0%)

A1 -
D2 - 2020 WD Surveyed, PM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	27	27
	2	29	29
1Ax	1	73	73
1B	1	481	481
	2	30	30
1Bx	1	580	580
1C	1	394	394
	2	159	159
1Cx	1	269	269
1D	1	443	443
	2	181	181
1Dx	1	822	822

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	21	6	29
	1-2	30	0	82	399
	1-3	11	148	0	394
	1-4	32	411	181	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	394
	2		1-3	1-1	1C/2, 1Ax/1	Normal	11
	3		1-3	1-2	1C/2, 1Bx/1	Normal	148
	4		1-4	1-1	1D/1, 1Ax/1	Normal	32
	5		1-4	1-2	1D/1, 1Bx/1	Normal	411
	6		1-4	1-3	1D/2, 1Cx/1	Normal	181
	7		1-1	1-2	1A/1, 1Bx/1	Normal	21
	8		1-1	1-3	1A/1, 1Cx/1	Normal	6
	9		1-1	1-4	1A/2, 1Dx/1	Normal	29
	10		1-2	1-4	1B/1, 1Dx/1	Normal	399
	11		1-2	1-3	1B/1, 1Cx/1	Normal	82
	12		1-2	1-1	1B/2, 1Ax/1	Normal	30

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	171, 55, 87, 133, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	171	4	1	1
	2	✓	2	C,G,H	176	55	59	1	1
	3	✓	3	E,G,H	60	87	27	1	1
	4	✓	4	E,F	92	133	41	1	1
	5	✓	5	A,B	138	143	5	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

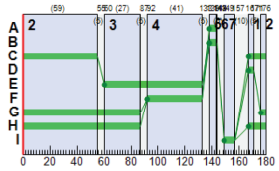
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	138	143	5
	B	1	✓	138	144	6
	C	1	✓	167	55	68
	D	1	✓	167	171	4
	E	1	✓	60	133	73
	F	1	✓	92	133	41
	G	1	✓	176	87	91
	H	1	✓	167	87	100
	I	1	✓	149	157	8

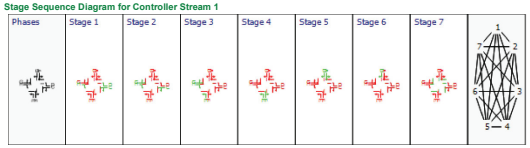
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	138	143	5
1A	2	1	1	B	138	144	6
1B	1	1	1	C	167	55	68
1B	2	1	1	D	167	171	4
1C	1	1	1	E	60	133	73
1C	2	1	1	F	92	133	41
1D	1	1	1	G	176	87	91
1D	2	1	1	H	167	87	100

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
15:30-16:30	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.
					(PCU/hr)		cycle))	cycle))										per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	27	1800	5	3.00	45	100	116.03	109.07	109.84	1.50	1.48	100	100	0.00	11.99
	2	R	1	1	B	29	1800	6	4.00	41	117	109.19	102.23	106.17	1.55	1.54	100	100	0.00	12.08
1Ax	1	Exit				73	Unrestricted	180	125.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	481 <	1800	68	0.00	70	29	58.63	52.63	86.19	20.97 +	15.62	100	100	0.00	105.05
	2	R	1	1	D	30	1800	4	2.00	60	50	141.60	135.60	123.17	1.88	1.87	100	100	0.00	16.51
1Bx	1	Exit				580	Unrestricted	180	16.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	394	1800	73	0.00	53	69	54.12	42.72	75.72	15.08	11.90	100	100	0.00	70.13
	2	S / R	1	1	F	159	1800	41	0.00	38	138	72.03	60.63	84.60	6.78	6.21	100	100	0.00	39.71
1Cx	1	Exit				269	Unrestricted	180	68.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	443	1800	91	0.00	48	87	42.35	30.35	64.61	14.50	11.05	100	100	0.00	56.62
	2	R	1	1	H	181	926	100	0.00	35	158	44.88	32.88	72.21	6.63	4.06	100	100	0.00	25.11
1Dx	1	Exit				822	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	650.60	44.23	14.71	20.29	2.25	320.12	17.07	0.00	337.19
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	650.60	44.23	14.71	20.29	2.25	320.12	17.07	0.00	337.19

- *P = link is a pedestrian link*
- *< = 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 16

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:48:05

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2023 WD No Dev				
Network	D3	607.39	40.91	90% (TS 1D/2)	0 (0%)

A1 -
D3 - 2023 WD No Dev, AM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	177	177
	2	183	183
1Ax	1	239	239
1B	1	657	657
	2	85	85
1Bx	1	617	617
1C	1	115	115
	2	79	79
1Cx	1	607	607
1D	1	539	539
	2	397	397
1Dx	1	769	769

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	153	24	183
	1-2	85	0	186	471
	1-3	14	65	0	115
	1-4	140	399	397	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	115
	2		1-3	1-1	1C/2, 1Ax/1	Normal	14
	3		1-3	1-2	1C/2, 1Bx/1	Normal	65
	4		1-4	1-1	1D/1, 1Ax/1	Normal	140
	5		1-4	1-2	1D/1, 1Bx/1	Normal	399
	6		1-4	1-3	1D/2, 1Cx/1	Normal	397
	7		1-1	1-2	1A/1, 1Bx/1	Normal	153
	8		1-1	1-3	1A/1, 1Cx/1	Normal	24
	9		1-1	1-4	1A/2, 1Dx/1	Normal	183
	10		1-2	1-4	1B/1, 1Dx/1	Normal	471
	11		1-2	1-3	1B/1, 1Cx/1	Normal	186
	12		1-2	1-1	1B/2, 1Ax/1	Normal	85

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	178, 61, 87, 105, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

R090 Baldoyle GA03 TRANSYT Results - Main Assessment

		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	178	11	1	1
	2	✓	2	C,G,H	3	61	58	1	1
	3	✓	3	E,G,H	66	87	21	1	1
	4	✓	4	E,F	92	105	13	1	1
	5	✓	5	A,B	110	143	33	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

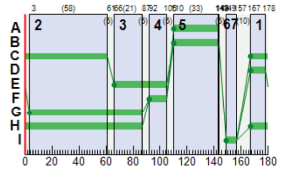
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	110	143	33
	B	1	✓	110	144	34
	C	1	✓	167	61	74
	D	1	✓	167	178	11
	E	1	✓	66	105	39
	F	1	✓	92	105	13
	G	1	✓	3	87	84
	H	1	✓	167	87	100
	I	1	✓	149	157	8

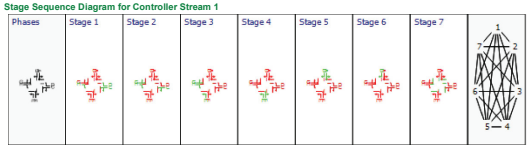
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	110	143	33
1A	2	1	1	B	110	144	34
1B	1	1	1	C	167	61	74
1B	2	1	1	D	167	178	11
1C	1	1	1	E	66	105	39
1C	2	1	1	F	92	105	13
1D	1	1	1	G	3	87	84
1D	2	1	1	H	167	87	100

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

					(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	9999999999	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	177	1800	33	0.00	52	73	78.32	71.36	91.92	8.20	7.46	100	100	0.00	51.86
	2	R	1	1	B	183	1800	34	0.00	52	72	77.56	70.60	91.78	8.47	7.65	100	100	0.00	53.07
1Ax	1	Exit				239	Unrestricted	180	65.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	657 <	1800	74	0.00	88	3	69.92	63.92	98.94	32.98 +	22.03	100	100	0.00	173.81
	2	R	1	1	D	85	1800	11	0.00	71	27	121.86	115.86	114.91	4.95	4.76	100	100	0.00	40.07
1Bx	1	Exit				617	Unrestricted	180	22.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	115	1800	39	0.00	29	213	71.38	59.98	83.12	4.82	4.53	100	100	0.00	28.41
	2	S / R	1	1	F	79	1800	13	0.00	56	59	107.64	96.24	104.24	4.15	4.00	100	100	0.00	31.02
1Cx	1	Exit				607	Unrestricted	180	49.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	539 <	1800	84	0.00	63	42	51.43	39.43	76.05	20.76 +	14.77	100	100	0.00	88.97
	2	R	1	1	H	397 <	786	100	0.00	90	0	97.96	85.96	112.07	22.57 +	12.10	100	100	0.00	140.19
1Dx	1	Exit				769	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	712.20	64.65	11.02	32.35	8.56	580.92	26.47	0.00	607.39
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	712.20	64.65	11.02	32.35	8.56	580.92	26.47	0.00	607.39

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:54:45

Summary of network performance

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2023 WD No Dev				
Network	D4	504.35	33.88	79% (TS 1B/1)	0 (0%)

A1 -
D4 - 2023 WD No Dev, PM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	80	80
	2	86	86
1Ax	1	201	201
1B	1	519	519
	2	85	85
1Bx	1	670	670
1C	1	414	414
	2	185	185
1Cx	1	296	296
1D	1	539	539
	2	190	190
1Dx	1	931	931

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	62	18	86
	1-2	85	0	88	431
	1-3	25	160	0	414
	1-4	91	448	190	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	414
	2		1-3	1-1	1C/2, 1Ax/1	Normal	25
	3		1-3	1-2	1C/2, 1Bx/1	Normal	160
	4		1-4	1-1	1D/1, 1Ax/1	Normal	91
	5		1-4	1-2	1D/1, 1Bx/1	Normal	448
	6		1-4	1-3	1D/2, 1Cx/1	Normal	190
	7		1-1	1-2	1A/1, 1Bx/1	Normal	62
	8		1-1	1-3	1A/1, 1Cx/1	Normal	18
	9		1-1	1-4	1A/2, 1Dx/1	Normal	86
	10		1-2	1-4	1B/1, 1Dx/1	Normal	431
	11		1-2	1-3	1B/1, 1Cx/1	Normal	88
	12		1-2	1-1	1B/2, 1Ax/1	Normal	85

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	178, 52, 80, 124, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

R090 Baldoyle GA03 TRANSYT Results - Main Assessment

		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	178	11	1	1
	2	✓	2	C,G,H	3	52	49	1	1
	3	✓	3	E,G,H	57	80	23	1	1
	4	✓	4	E,F	85	124	39	1	1
	5	✓	5	A,B	129	143	14	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

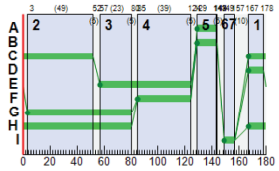
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	129	143	14
	B	1	✓	129	144	15
	C	1	✓	167	52	65
	D	1	✓	167	178	11
	E	1	✓	57	124	67
	F	1	✓	85	124	39
	G	1	✓	3	80	77
	H	1	✓	167	80	93
	I	1	✓	149	157	8

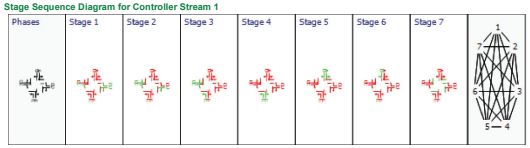
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	129	143	14
1A	2	1	1	B	129	144	15
1B	1	1	1	C	167	52	65
1B	2	1	1	D	167	178	11
1C	1	1	1	E	57	124	67
1C	2	1	1	F	85	124	39
1D	1	1	1	G	3	80	77
1D	2	1	1	H	167	80	93

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
15:30-16:30	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

					(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	80	1800	14	0.00	53	69	99.51	92.55	102.20	4.12	3.96	100	100	0.00	30.23
	2	R	1	1	B	86	1800	15	0.00	54	67	98.21	91.25	101.82	4.41	4.22	100	100	0.00	32.05
1Ax	1	Exit				201	Unrestricted	180	65.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	519 <	1800	65	0.00	79	14	66.46	60.46	93.01	24.47 +	17.84	100	100	0.00	129.83
	2	R	1	1	D	85	1800	11	0.00	71	27	121.86	115.86	114.91	4.95	4.76	100	100	0.00	40.07
1Bx	1	Exit				670	Unrestricted	180	20.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	414 <	1800	67	0.00	61	48	60.74	49.34	81.91	17.14 +	13.35	100	100	0.00	84.83
	2	S / R	1	1	F	185	1800	39	0.00	46	95	75.93	64.53	87.68	8.21	7.39	100	100	0.00	49.12
1Cx	1	Exit				296	Unrestricted	180	67.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	539 <	1800	77	0.00	69	30	58.35	46.35	82.40	22.47 +	16.04	100	100	0.00	104.12
	2	R	1	1	H	190	863	93	0.00	42	114	54.86	42.86	82.67	7.96	4.69	100	100	0.00	34.09
1Dx	1	Exit				931	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	754.07	59.02	12.78	29.50	4.38	481.12	23.22	0.00	504.35
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	754.07	59.02	12.78	29.50	4.38	481.12	23.22	0.00	504.35

- *P = link is a pedestrian link*
- *< = 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 16

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:56:27

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2023 WD With Dev				
Network	D5	575.44	38.72	85% (TS 1D/2)	0 (0%)

A1 -
D5 - 2023 WD With Dev, AM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	135	135
	2	321	321
1Ax	1	233	233
1B	1	581	581
	2	48	48
1Bx	1	533	533
1C	1	115	115
	2	74	74
1Cx	1	616	616
1D	1	551	551
	2	397	397
1Dx	1	840	840

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	93	42	321
	1-2	48	0	177	404
	1-3	11	63	0	115
	1-4	174	377	397	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	115
	2		1-3	1-1	1C/2, 1Ax/1	Normal	11
	3		1-3	1-2	1C/2, 1Bx/1	Normal	63
	4		1-4	1-1	1D/1, 1Ax/1	Normal	174
	5		1-4	1-2	1D/1, 1Bx/1	Normal	377
	6		1-4	1-3	1D/2, 1Cx/1	Normal	397
	7		1-1	1-2	1A/1, 1Bx/1	Normal	93
	8		1-1	1-3	1A/1, 1Cx/1	Normal	42
	9		1-1	1-4	1A/2, 1Dx/1	Normal	321
	10		1-2	1-4	1B/1, 1Dx/1	Normal	404
	11		1-2	1-3	1B/1, 1Cx/1	Normal	177
	12		1-2	1-1	1B/2, 1Ax/1	Normal	48

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	175, 60, 87, 101, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

R090 Baldoyle GA03 TRANSYT Results - Main Assessment

		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	175	8	1	1
	2	✓	2	C,G,H	0	60	60	1	1
	3	✓	3	E,G,H	65	87	22	1	1
	4	✓	4	E,F	92	101	9	1	1
	5	✓	5	A,B	106	143	37	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

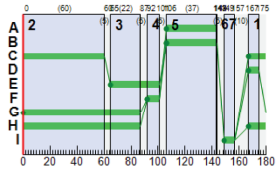
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	106	143	37
	B	1	✓	106	144	38
	C	1	✓	167	60	73
	D	1	✓	167	175	8
	E	1	✓	65	101	36
	F	1	✓	92	101	9
	G	1	✓	0	87	87
	H	1	✓	167	87	100
	I	1	✓	149	157	8

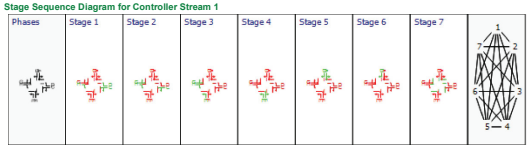
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	106	143	37
1A	2	1	1	B	106	144	38
1B	1	1	1	C	167	60	73
1B	2	1	1	D	167	175	8
1C	1	1	1	E	65	101	36
1C	2	1	1	F	92	101	9
1D	1	1	1	G	0	87	87
1D	2	1	1	H	167	87	100

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

					(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.40282346638529E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	135	1800	37	0.00	36	153	70.12	63.16	85.76	5.84	5.42	100	100	0.00	35.09
	2	R	1	1	B	321 <	1800	38	0.00	82	9	94.14	87.18	105.01	17.03 +	14.35	100	100	0.00	114.61
1Ax	1	Exit				233	Unrestricted	180	66.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	581 <	1800	73	0.00	79	15	60.74	54.74	90.38	26.57 +	18.50	100	100	0.00	132.03
	2	R	1	1	D	48	1800	8	4.00	53	69	111.47	105.47	108.42	2.63	2.57	100	100	0.00	20.62
1Bx	1	Exit				533	Unrestricted	180	27.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	115	1800	36	0.00	31	190	74.27	62.87	85.00	4.93	4.64	100	100	0.00	29.75
	2	S / R	1	1	F	74	1800	9	0.00	74	22	140.55	129.15	121.37	4.57	4.43	100	100	0.00	38.82
1Cx	1	Exit				616	Unrestricted	180	47.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	551 <	1800	87	0.00	63	44	49.29	37.29	74.23	20.72 +	14.60	100	100	0.00	86.17
	2	R	1	1	H	397 <	834	100	0.00	85	6	84.26	72.26	104.39	20.93 +	10.90	100	100	0.00	118.36
1Dx	1	Exit				840	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	716.84	62.62	11.45	31.44	7.28	549.85	25.59	0.00	575.44
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	716.84	62.62	11.45	31.44	7.28	549.85	25.59	0.00	575.44

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:56:56

Summary of network performance

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2023 WD With Dev				
Network	D6	525.65	35.33	75% (TS 1B/1)	0 (0%)

A1 -
D6 - 2023 WD With Dev, PM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	67	67
	2	148	148
1Ax	1	295	295
1B	1	486	486
	2	56	56
1Bx	1	589	589
1C	1	414	414
	2	207	207
1Cx	1	304	304
1D	1	585	585
	2	190	190
1Dx	1	965	965

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	36	31	148
	1-2	56	0	83	403
	1-3	61	146	0	414
	1-4	178	407	190	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	414
	2		1-3	1-1	1C/2, 1Ax/1	Normal	61
	3		1-3	1-2	1C/2, 1Bx/1	Normal	146
	4		1-4	1-1	1D/1, 1Ax/1	Normal	178
	5		1-4	1-2	1D/1, 1Bx/1	Normal	407
	6		1-4	1-3	1D/2, 1Cx/1	Normal	190
	7		1-1	1-2	1A/1, 1Bx/1	Normal	36
	8		1-1	1-3	1A/1, 1Cx/1	Normal	31
	9		1-1	1-4	1A/2, 1Dx/1	Normal	148
	10		1-2	1-4	1B/1, 1Dx/1	Normal	403
	11		1-2	1-3	1B/1, 1Cx/1	Normal	83
	12		1-2	1-1	1B/2, 1Ax/1	Normal	56

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	174, 51, 79, 119, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

R090 Baldoyle GA03 TRANSYT Results - Main Assessment

From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	174	7	1	1
	2	✓	2	C,G,H	179	51	52	1	1
	3	✓	3	E,G,H	56	79	23	1	1
	4	✓	4	E,F	84	119	35	1	1
	5	✓	5	A,B	124	143	19	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

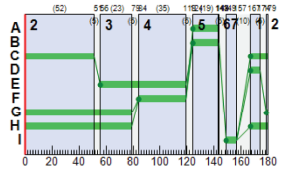
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	124	143	19
	B	1	✓	124	144	20
	C	1	✓	167	51	64
	D	1	✓	167	174	7
	E	1	✓	56	119	63
	F	1	✓	84	119	35
	G	1	✓	179	79	80
	H	1	✓	167	79	92
	I	1	✓	149	157	8

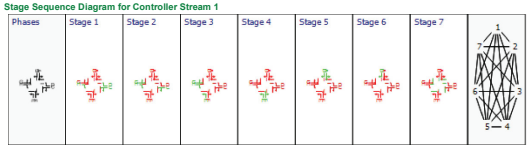
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	124	143	19
1A	2	1	1	B	124	144	20
1B	1	1	1	C	167	51	64
1B	2	1	1	D	167	174	7
1C	1	1	1	E	56	119	63
1C	2	1	1	F	84	119	35
1D	1	1	1	G	179	79	80
1D	2	1	1	H	167	79	92

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
15:30-16:30	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	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)	Mean end of red queue (PCU)	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£ per hr)	P.I.
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS Controller stream	SIGNALS Phase	FLOWS Calculated flow entering (PCU/hr)	FLOWS Calculated sat flow (PCU/hr)	PERFORMANCE Actual green (s (per cycle))	PERFORMANCE Wasted time total (s (per cycle))	PERFORMANCE Degree of saturation (%)	PERFORMANCE Practical reserve capacity (%)	PER PCU JourneyTime (s)	PER PCU Mean Delay per Veh (s)	PER PCU Mean stops per Veh (%)	QUEUES Mean max queue (PCU)	QUEUES Mean end of red queue (PCU)	WEIGHTS Delay weighting multiplier (%)	WEIGHTS Stop weighting multiplier (%)	PENALTIES Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	67	1800	19	0.00	33	169	85.34	78.38	94.01	3.17	3.06	100	100	0.00	21.50
	2	R	1	1	B	148	1800	20	0.00	70	28	103.00	96.04	105.89	7.91	7.34	100	100	0.00	58.03
1Ax	1	Exit				295	Unrestricted	180	49.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	486 <	1800	64	0.00	75	20	64.35	58.35	90.69	22.28 +	16.61	100	100	0.00	117.39
	2	R	1	1	D	56	1800	7	2.00	70	29	137.78	131.78	122.13	3.48	3.41	100	100	0.00	29.97
1Bx	1	Exit				589	Unrestricted	180	25.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	414 <	1800	63	0.00	65	39	65.04	53.64	85.31	17.84 +	13.93	100	100	0.00	92.02
	2	S / R	1	1	F	207	1800	35	0.00	57	57	83.17	71.77	92.99	9.70	8.66	100	100	0.00	61.01
1Cx	1	Exit				304	Unrestricted	180	65.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	585 <	1800	80	0.00	72	25	58.03	46.03	83.25	24.65 +	17.01	100	100	0.00	112.32
	2	R	1	1	H	190	885	92	0.00	42	117	53.99	41.99	81.28	7.80	4.74	100	100	0.00	33.41
1Dx	1	Exit				965	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	757.57	60.58	12.51	30.58	4.74	501.63	24.02	0.00	525.65
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	757.57	60.58	12.51	30.58	4.74	501.63	24.02	0.00	525.65

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:57:19

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2028 WD No Dev				
Network	D7	769.52	52.03	97% (TS 1D/2)	2 (12%)

A1 -
D7 - 2028 WD No Dev, AM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	182	182
	2	189	189
1Ax	1	245	245
1B	1	709	709
	2	87	87
1Bx	1	659	659
1C	1	125	125
	2	85	85
1Cx	1	656	656
1D	1	575	575
	2	430	430
1Dx	1	822	822

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	157	25	189
	1-2	87	0	201	508
	1-3	15	70	0	125
	1-4	143	432	430	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	125
	2		1-3	1-1	1C/2, 1Ax/1	Normal	15
	3		1-3	1-2	1C/2, 1Bx/1	Normal	70
	4		1-4	1-1	1D/1, 1Ax/1	Normal	143
	5		1-4	1-2	1D/1, 1Bx/1	Normal	432
	6		1-4	1-3	1D/2, 1Cx/1	Normal	430
	7		1-1	1-2	1A/1, 1Bx/1	Normal	157
	8		1-1	1-3	1A/1, 1Cx/1	Normal	25
	9		1-1	1-4	1A/2, 1Dx/1	Normal	189
	10		1-2	1-4	1B/1, 1Dx/1	Normal	508
	11		1-2	1-3	1B/1, 1Cx/1	Normal	201
	12		1-2	1-1	1B/2, 1Ax/1	Normal	87

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	0, 60, 88, 106, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

R090 Baldoyle GA03 TRANSYT Results - Main Assessment

From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	0	13	1	1
	2	✓	2	C,G,H	5	60	55	1	1
	3	✓	3	E,G,H	65	88	23	1	1
	4	✓	4	E,F	93	106	13	1	1
	5	✓	5	A,B	111	143	32	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

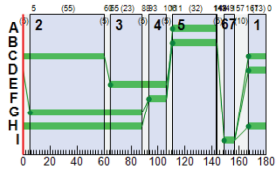
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	111	143	32
	B	1	✓	111	144	33
	C	1	✓	167	60	73
	D	1	✓	167	0	13
	E	1	✓	65	106	41
	F	1	✓	93	106	13
	G	1	✓	5	88	83
	H	1	✓	167	88	101
	I	1	✓	149	157	8

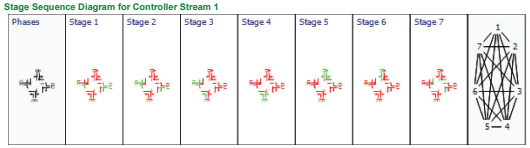
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	111	143	32
1A	2	1	1	B	111	144	33
1B	1	1	1	C	167	60	73
1B	2	1	1	D	167	0	13
1C	1	1	1	E	65	106	41
1C	2	1	1	F	93	106	13
1D	1	1	1	G	5	88	83
1D	2	1	1	H	167	88	101

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

					(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	182	1800	32	0.00	55	63	80.37	73.41	93.50	8.58	7.77	100	100	0.00	54.83
	2	R	1	1	B	189	1800	33	0.00	56	62	79.67	72.71	93.26	8.90	8.01	100	100	0.00	56.41
1Ax	1	Exit				245	Unrestricted	180	63.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	709 <	1800	73	0.00	98	-6	93.98	87.98	114.87	41.45 +	28.06	100	100	0.00	256.26
	2	R	1	1	D	87	1800	13	0.00	62	45	106.70	100.70	106.95	4.69	4.50	100	100	0.00	35.72
1Bx	1	Exit				659	Unrestricted	180	23.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	125	1800	41	0.00	30	202	70.07	58.67	82.50	5.20	4.85	100	100	0.00	30.22
	2	S / R	1	1	F	85	1800	13	0.00	61	48	110.88	99.48	106.31	4.56	4.37	100	100	0.00	34.49
1Cx	1	Exit				656	Unrestricted	180	45.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	575 <	1800	83	0.00	68	31	54.22	42.22	79.48	23.10 +	16.07	100	100	0.00	101.48
	2	R	1	1	H	430 <	786	101	0.00	97	-7	125.95	113.95	126.67	27.90 +	16.08	100	100	0.00	200.10
1Dx	1	Exit				822	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	761.24	77.40	9.83	35.66	16.37	738.82	30.71	0.00	769.52
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	761.24	77.40	9.83	35.66	16.37	738.82	30.71	0.00	769.52

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:57:48

Summary of network performance

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2028 WD No Dev				
Network	D8	572.50	38.50	85% (TS 1B/1)	0 (0%)

A1 -
D8 - 2028 WD No Dev, PM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	82	82
	2	88	88
1Ax	1	207	207
1B	1	562	562
	2	87	87
1Bx	1	721	721
1C	1	449	449
	2	199	199
1Cx	1	320	320
1D	1	578	578
	2	206	206
1Dx	1	1003	1003

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	64	18	88
	1-2	87	0	96	466
	1-3	26	173	0	449
	1-4	94	484	206	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	449
	2		1-3	1-1	1C/2, 1Ax/1	Normal	26
	3		1-3	1-2	1C/2, 1Bx/1	Normal	173
	4		1-4	1-1	1D/1, 1Ax/1	Normal	94
	5		1-4	1-2	1D/1, 1Bx/1	Normal	484
	6		1-4	1-3	1D/2, 1Cx/1	Normal	206
	7		1-1	1-2	1A/1, 1Bx/1	Normal	64
	8		1-1	1-3	1A/1, 1Cx/1	Normal	18
	9		1-1	1-4	1A/2, 1Dx/1	Normal	88
	10		1-2	1-4	1B/1, 1Dx/1	Normal	466
	11		1-2	1-3	1B/1, 1Cx/1	Normal	96
	12		1-2	1-1	1B/2, 1Ax/1	Normal	87

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	178, 52, 79, 125, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

R090 Baldoyle GA03 TRANSYT Results - Main Assessment

From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	178	11	1	1
	2	✓	2	C,G,H	3	52	49	1	1
	3	✓	3	E,G,H	57	79	22	1	1
	4	✓	4	E,F	84	125	41	1	1
	5	✓	5	A,B	130	143	13	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

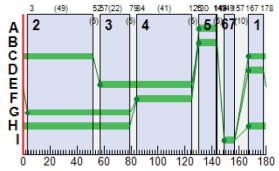
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	130	143	13
	B	1	✓	130	144	14
	C	1	✓	167	52	65
	D	1	✓	167	178	11
	E	1	✓	57	125	68
	F	1	✓	84	125	41
	G	1	✓	3	79	76
	H	1	✓	167	79	92
	I	1	✓	149	157	8

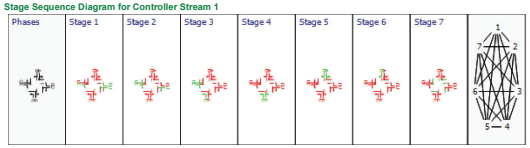
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	130	143	13
1A	2	1	1	B	130	144	14
1B	1	1	1	C	167	52	65
1B	2	1	1	D	167	178	11
1C	1	1	1	E	57	125	68
1C	2	1	1	F	84	125	41
1D	1	1	1	G	3	79	76
1D	2	1	1	H	167	79	92

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
15:30-16:30	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

				(PCU/hr)			cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	82	1800	13	0.00	59	54	104.74	97.78	104.99	4.34	4.18	100	100	0.00	32.71
	2	R	1	1	B	88	1800	14	0.00	59	53	102.99	96.03	104.42	4.63	4.44	100	100	0.00	34.49
1Ax	1	Exit				207	Unrestricted	180	65.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	562 <	1800	65	0.00	85	6	73.19	67.19	98.72	28.05 +	20.09	100	100	0.00	155.89
	2	R	1	1	D	87	1800	11	0.00	72	24	124.47	118.47	116.19	5.13	4.93	100	100	0.00	41.92
1Bx	1	Exit				721	Unrestricted	180	19.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	449 <	1800	68	0.00	65	38	61.81	50.41	83.51	18.93 +	14.44	100	100	0.00	93.98
	2	S / R	1	1	F	199	1800	41	0.00	47	90	74.71	63.31	87.34	8.78	7.84	100	100	0.00	51.88
1Cx	1	Exit				320	Unrestricted	180	68.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	578 <	1800	76	0.00	75	20	62.31	50.31	86.72	25.35 +	17.65	100	100	0.00	120.99
	2	R	1	1	H	206	835	92	0.00	48	88	59.25	47.25	86.93	9.03	5.20	100	100	0.00	40.64
1Dx	1	Exit				1003	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	811.18	65.53	12.38	32.39	6.11	546.63	25.87	0.00	572.50
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	811.18	65.53	12.38	32.39	6.11	546.63	25.87	0.00	572.50

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:58:14

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2028 WD With Dev				
Network	D9	676.18	45.59	90% (TS 1D/2)	1 (6%)

A1 -
D9 - 2028 WD With Dev, AM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	141	141
	2	326	326
1Ax	1	239	239
1B	1	633	633
	2	50	50
1Bx	1	575	575
1C	1	125	125
	2	79	79
1Cx	1	665	665
1D	1	587	587
	2	430	430
1Dx	1	892	892

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	98	43	326
	1-2	50	0	192	441
	1-3	11	68	0	125
	1-4	178	409	430	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	125
	2		1-3	1-1	1C/2, 1Ax/1	Normal	11
	3		1-3	1-2	1C/2, 1Bx/1	Normal	68
	4		1-4	1-1	1D/1, 1Ax/1	Normal	178
	5		1-4	1-2	1D/1, 1Bx/1	Normal	409
	6		1-4	1-3	1D/2, 1Cx/1	Normal	430
	7		1-1	1-2	1A/1, 1Bx/1	Normal	98
	8		1-1	1-3	1A/1, 1Cx/1	Normal	43
	9		1-1	1-4	1A/2, 1Dx/1	Normal	326
	10		1-2	1-4	1B/1, 1Dx/1	Normal	441
	11		1-2	1-3	1B/1, 1Cx/1	Normal	192
	12		1-2	1-1	1B/2, 1Ax/1	Normal	50

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	175, 58, 88, 102, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

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		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	175	8	1	1
	2	✓	2	C,G,H	0	58	58	1	1
	3	✓	3	E,G,H	63	88	25	1	1
	4	✓	4	E,F	93	102	9	1	1
	5	✓	5	A,B	107	143	36	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

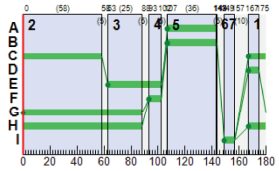
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	107	143	36
	B	1	✓	107	144	37
	C	1	✓	167	58	71
	D	1	✓	167	175	8
	E	1	✓	63	102	39
	F	1	✓	93	102	9
	G	1	✓	0	88	88
	H	1	✓	167	88	101
	I	1	✓	149	157	8

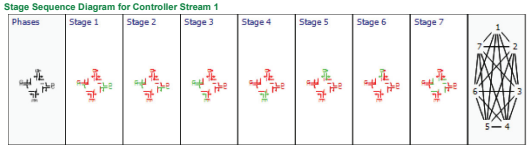
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	107	143	36
1A	2	1	1	B	107	144	37
1B	1	1	1	C	167	58	71
1B	2	1	1	D	167	175	8
1C	1	1	1	E	63	102	39
1C	2	1	1	F	93	102	9
1D	1	1	1	G	0	88	88
1D	2	1	1	H	167	88	101

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

				(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	141	1800	36	0.00	38	136	71.58	64.62	86.93	6.19	5.72	100	100	0.00	37.47
	2	R	1	1	B	326 <	1800	37	0.00	86	5	100.95	93.99	108.99	17.98 +	15.18	100	100	0.00	125.32
1Ax	1	Exit				239	Unrestricted	180	65.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	633 <	1800	71	0.00	88	2	72.70	66.70	100.23	32.13 +	21.93	100	100	0.00	174.49
	2	R	1	1	D	50	1800	8	4.00	56	62	113.50	107.50	109.43	2.76	2.71	100	100	0.00	21.89
1Bx	1	Exit				575	Unrestricted	180	26.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	125	1800	39	0.00	31	188	71.96	60.56	83.78	5.28	4.93	100	100	0.00	31.17
	2	S / R	1	1	F	79	1800	9	0.00	79	14	152.15	140.75	126.86	5.13	4.98	100	100	0.00	45.11
1Cx	1	Exit				665	Unrestricted	180	44.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	587 <	1800	88	0.00	66	36	50.02	38.02	75.72	22.48 +	15.47	100	100	0.00	93.60
	2	R	1	1	H	430 <	843	101	0.00	90	0	95.22	83.22	110.67	24.11 +	12.76	100	100	0.00	147.12
1Dx	1	Exit				892	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	765.40	71.11	10.76	34.50	11.10	647.44	28.74	0.00	676.18
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	765.40	71.11	10.76	34.50	11.10	647.44	28.74	0.00	676.18

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:58:39

Summary of network performance

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2028 WD With Dev				
Network	D10	591.31	39.76	81% (TS 1B/1)	0 (0%)

A1 -
D10 - 2028 WD With Dev, PM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	69	69
	2	150	150
1Ax	1	302	302
1B	1	528	528
	2	59	59
1Bx	1	640	640
1C	1	449	449
	2	221	221
1Cx	1	327	327
1D	1	624	624
	2	206	206
1Dx	1	1037	1037

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	38	31	150
	1-2	59	0	90	438
	1-3	62	159	0	449
	1-4	181	443	206	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	449
	2		1-3	1-1	1C/2, 1Ax/1	Normal	62
	3		1-3	1-2	1C/2, 1Bx/1	Normal	159
	4		1-4	1-1	1D/1, 1Ax/1	Normal	181
	5		1-4	1-2	1D/1, 1Bx/1	Normal	443
	6		1-4	1-3	1D/2, 1Cx/1	Normal	206
	7		1-1	1-2	1A/1, 1Bx/1	Normal	38
	8		1-1	1-3	1A/1, 1Cx/1	Normal	31
	9		1-1	1-4	1A/2, 1Dx/1	Normal	150
	10		1-2	1-4	1B/1, 1Dx/1	Normal	438
	11		1-2	1-3	1B/1, 1Cx/1	Normal	90
	12		1-2	1-1	1B/2, 1Ax/1	Normal	59

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	174, 51, 79, 119, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

R090 Baldoyle GA03 TRANSYT Results - Main Assessment

From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	174	7	1	1
	2	✓	2	C,G,H	179	51	52	1	1
	3	✓	3	E,G,H	56	79	23	1	1
	4	✓	4	E,F	84	119	35	1	1
	5	✓	5	A,B	124	143	19	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

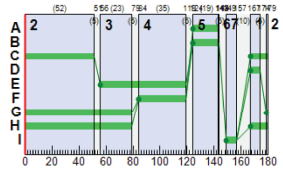
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	124	143	19
	B	1	✓	124	144	20
	C	1	✓	167	51	64
	D	1	✓	167	174	7
	E	1	✓	56	119	63
	F	1	✓	84	119	35
	G	1	✓	179	79	80
	H	1	✓	167	79	92
	I	1	✓	149	157	8

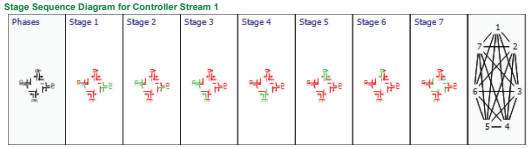
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	124	143	19
1A	2	1	1	B	124	144	20
1B	1	1	1	C	167	51	64
1B	2	1	1	D	167	174	7
1C	1	1	1	E	56	119	63
1C	2	1	1	F	84	119	35
1D	1	1	1	G	179	79	80
1D	2	1	1	H	167	79	92

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
15:30-16:30	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	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)	Mean end of red queue (PCU)	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£ per hr)	P.I.
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS Controller stream	SIGNALS Phase	FLOWS Calculated flow entering (PCU/hr)	FLOWS Calculated sat flow (PCU/hr)	PERFORMANCE Actual green (s (per cycle))	PERFORMANCE Wasted time total (s (per cycle))	PERFORMANCE Degree of saturation (%)	PERFORMANCE Practical reserve capacity (%)	PER PCU JourneyTime (s)	PER PCU Mean Delay per Veh (s)	PER PCU Mean stops per Veh (%)	QUEUES Mean max queue (PCU)	QUEUES Mean end of red queue (PCU)	WEIGHTS Delay weighting multiplier (%)	WEIGHTS Stop weighting multiplier (%)	PENALTIES Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	69	1800	19	0.00	34	161	85.63	78.67	94.16	3.27	3.16	100	100	0.00	22.23
	2	R	1	1	B	150	1800	20	0.00	71	26	103.95	96.99	106.42	8.06	7.47	100	100	0.00	59.39
1Ax	1	Exit				302	Unrestricted	180	49.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	528 <	1800	64	0.00	81	11	69.50	63.50	95.38	25.45 +	18.56	100	100	0.00	138.56
	2	R	1	1	D	59	1800	7	2.00	74	22	145.72	139.72	125.89	3.80	3.72	100	100	0.00	33.45
1Bx	1	Exit				640	Unrestricted	180	25.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	449 <	1800	63	0.00	70	28	67.71	56.31	88.24	20.02 +	15.28	100	100	0.00	104.70
	2	S / R	1	1	F	221	1800	35	0.00	61	47	84.89	73.49	94.51	10.55	9.32	100	100	0.00	66.68
1Cx	1	Exit				327	Unrestricted	180	65.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	624 <	1800	80	0.00	77	17	60.97	48.97	86.82	27.44 +	18.42	100	100	0.00	127.32
	2	R	1	1	H	206	867	92	0.00	46	96	57.26	45.26	85.63	8.89	5.17	100	100	0.00	38.99
1Dx	1	Exit				1037	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	814.64	66.92	12.17	33.49	6.28	564.66	26.65	0.00	591.31
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	814.64	66.92	12.17	33.49	6.28	564.66	26.65	0.00	591.31

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:59:04

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2038 WD No Dev				
Network	D11	1043.66	70.94	103% (TS 1D/2)	2 (12%)

A1 - D11 - 2038 WD No Dev, AM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	188	188
	2	194	194
1Ax	1	251	251
1B	1	761	761
	2	89	89
1Bx	1	701	701
1C	1	135	135
	2	90	90
1Cx	1	705	705
1D	1	611	611
	2	463	463
1Dx	1	874	874

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	162	26	194
	1-2	89	0	216	545
	1-3	15	75	0	135
	1-4	147	464	463	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	135
	2		1-3	1-1	1C/2, 1Ax/1	Normal	15
	3		1-3	1-2	1C/2, 1Bx/1	Normal	75
	4		1-4	1-1	1D/1, 1Ax/1	Normal	147
	5		1-4	1-2	1D/1, 1Bx/1	Normal	464
	6		1-4	1-3	1D/2, 1Cx/1	Normal	463
	7		1-1	1-2	1A/1, 1Bx/1	Normal	162
	8		1-1	1-3	1A/1, 1Cx/1	Normal	26
	9		1-1	1-4	1A/2, 1Dx/1	Normal	194
	10		1-2	1-4	1B/1, 1Dx/1	Normal	545
	11		1-2	1-3	1B/1, 1Cx/1	Normal	216
	12		1-2	1-1	1B/2, 1Ax/1	Normal	89

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	0, 61, 90, 108, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

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From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	0	13	1	1
	2	✓	2	C,G,H	5	61	56	1	1
	3	✓	3	E,G,H	66	90	24	1	1
	4	✓	4	E,F	95	108	13	1	1
	5	✓	5	A,B	113	143	30	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

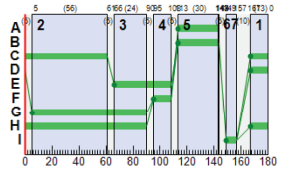
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	113	143	30
	B	1	✓	113	144	31
	C	1	✓	167	61	74
	D	1	✓	167	0	13
	E	1	✓	66	108	42
	F	1	✓	95	108	13
	G	1	✓	5	90	85
	H	1	✓	167	90	103
	I	1	✓	149	157	8

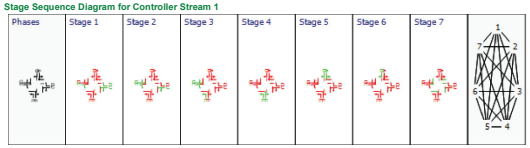
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	113	143	30
1A	2	1	1	B	113	144	31
1B	1	1	1	C	167	61	74
1B	2	1	1	D	167	0	13
1C	1	1	1	E	66	108	42
1C	2	1	1	F	95	108	13
1D	1	1	1	G	5	90	85
1D	2	1	1	H	167	90	103

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

				(PCU/hr)			cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	188	1800	30	0.00	61	48	84.62	77.66	96.30	9.13	8.24	100	100	0.00	59.86
	2	R	1	1	B	194	1800	31	0.00	61	48	83.67	76.71	95.68	9.35	8.43	100	100	0.00	61.03
1Ax	1	Exit				251	Unrestricted	180	61.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	761 <	1800	74	0.00	101	-11	134.99	128.99	138.76	53.62 +	38.20	100	100	0.00	400.23
	2	R	1	1	D	89	1800	13	0.00	64	42	108.00	102.00	107.58	4.83	4.63	100	100	0.00	37.01
1Bx	1	Exit				701	Unrestricted	180	21.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	135	1800	42	0.00	31	187	69.68	58.28	82.40	5.62	5.21	100	100	0.00	32.43
	2	S / R	1	1	F	90	1800	13	0.00	64	40	114.07	102.67	107.91	4.90	4.70	100	100	0.00	37.67
1Cx	1	Exit				689	Unrestricted	180	39.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	611 <	1800	85	0.00	71	27	54.23	42.23	80.45	24.96 +	16.81	100	100	0.00	107.94
	2	R	1	1	H	463 <	780	103	0.00	103	-12	175.64	163.64	152.90	36.22 +	23.32	100	100	0.00	307.49
1Dx	1	Exit				866	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	805.23	97.78	8.23	37.87	33.07	1007.40	36.26	0.00	1043.66
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	805.23	97.78	8.23	37.87	33.07	1007.40	36.26	0.00	1043.66

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:59:30

Summary of network performance

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2038 WD No Dev				
Network	D12	661.36	44.55	91% (TS 1B/1)	1 (6%)

A1 -
D12 - 2038 WD No Dev, PM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	85	85
	2	91	91
1Ax	1	214	214
1B	1	603	603
	2	90	90
1Bx	1	771	771
1C	1	482	482
	2	213	213
1Cx	1	344	344
1D	1	616	616
	2	222	222
1Dx	1	1073	1073

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	66	19	91
	1-2	90	0	103	500
	1-3	27	186	0	482
	1-4	97	519	222	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	482
	2		1-3	1-1	1C/2, 1Ax/1	Normal	27
	3		1-3	1-2	1C/2, 1Bx/1	Normal	186
	4		1-4	1-1	1D/1, 1Ax/1	Normal	97
	5		1-4	1-2	1D/1, 1Bx/1	Normal	519
	6		1-4	1-3	1D/2, 1Cx/1	Normal	222
	7		1-1	1-2	1A/1, 1Bx/1	Normal	66
	8		1-1	1-3	1A/1, 1Cx/1	Normal	19
	9		1-1	1-4	1A/2, 1Dx/1	Normal	91
	10		1-2	1-4	1B/1, 1Dx/1	Normal	500
	11		1-2	1-3	1B/1, 1Cx/1	Normal	103
	12		1-2	1-1	1B/2, 1Ax/1	Normal	90

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	177, 52, 79, 125, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

R090 Baldoyle GA03 TRANSYT Results - Main Assessment

From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	177	10	1	1
	2	✓	2	C,G,H	2	52	50	1	1
	3	✓	3	E,G,H	57	79	22	1	1
	4	✓	4	E,F	84	125	41	1	1
	5	✓	5	A,B	130	143	13	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

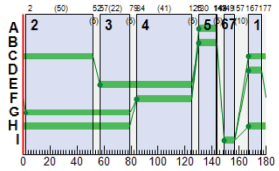
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	130	143	13
	B	1	✓	130	144	14
	C	1	✓	167	52	65
	D	1	✓	167	177	10
	E	1	✓	57	125	68
	F	1	✓	84	125	41
	G	1	✓	2	79	77
	H	1	✓	167	79	92
	I	1	✓	149	157	8

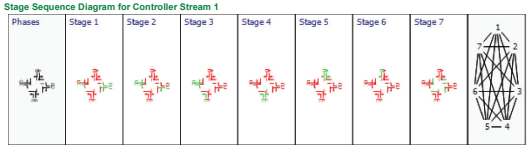
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	130	143	13
1A	2	1	1	B	130	144	14
1B	1	1	1	C	167	52	65
1B	2	1	1	D	167	177	10
1C	1	1	1	E	57	125	68
1C	2	1	1	F	84	125	41
1D	1	1	1	G	2	79	77
1D	2	1	1	H	167	79	92

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
15:30-16:30	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

				(PCU/hr)			cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	85	1800	13	0.00	61	48	106.44	99.48	106.31	4.56	4.37	100	100	0.00	34.49
	2	R	1	1	B	91	1800	14	0.00	61	48	104.49	97.53	105.14	4.82	4.62	100	100	0.00	36.21
1Ax	1	Exit				214	Unrestricted	180	63.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	603 <	1800	65	0.00	91	-1	84.82	78.82	107.05	32.75 +	23.20	100	100	0.00	195.57
	2	R	1	1	D	90	1800	10	0.00	82	10	149.38	143.38	128.31	5.92	5.72	100	100	0.00	52.35
1Bx	1	Exit				771	Unrestricted	180	17.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	482 <	1800	68	0.00	70	29	64.10	52.70	86.25	21.02 +	15.66	100	100	0.00	105.41
	2	S / R	1	1	F	213	1800	41	0.00	51	77	75.78	64.38	88.36	9.49	8.42	100	100	0.00	56.45
1Cx	1	Exit				344	Unrestricted	180	67.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	616 <	1800	77	0.00	79	14	64.37	52.37	89.32	27.79 +	18.90	100	100	0.00	134.16
	2	R	1	1	H	222	817	92	0.00	53	71	62.54	50.54	88.92	9.97	5.65	100	100	0.00	46.73
1Dx	1	Exit				1073	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	867.09	73.45	11.81	35.25	9.30	632.54	28.82	0.00	661.36
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	867.09	73.45	11.81	35.25	9.30	632.54	28.82	0.00	661.36

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 11:59:54

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2038 WD With Dev				
Network	D13	881.71	59.72	98% (TS 1D/2)	2 (12%)

A1 -
D13 - 2038 WD With Dev, AM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	146	146
	2	332	332
1Ax	1	244	244
1B	1	685	685
	2	52	52
1Bx	1	617	617
1C	1	135	135
	2	85	85
1Cx	1	714	714
1D	1	622	622
	2	463	463
1Dx	1	945	945

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	102	44	332
	1-2	52	0	207	478
	1-3	11	74	0	135
	1-4	181	441	463	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	135
	2		1-3	1-1	1C/2, 1Ax/1	Normal	11
	3		1-3	1-2	1C/2, 1Bx/1	Normal	74
	4		1-4	1-1	1D/1, 1Ax/1	Normal	181
	5		1-4	1-2	1D/1, 1Bx/1	Normal	441
	6		1-4	1-3	1D/2, 1Cx/1	Normal	463
	7		1-1	1-2	1A/1, 1Bx/1	Normal	102
	8		1-1	1-3	1A/1, 1Cx/1	Normal	44
	9		1-1	1-4	1A/2, 1Dx/1	Normal	332
	10		1-2	1-4	1B/1, 1Dx/1	Normal	478
	11		1-2	1-3	1B/1, 1Cx/1	Normal	207
	12		1-2	1-1	1B/2, 1Ax/1	Normal	52

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	175, 57, 88, 102, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

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		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	175	8	1	1
	2	✓	2	C,G,H	0	57	57	1	1
	3	✓	3	E,G,H	62	88	26	1	1
	4	✓	4	E,F	93	102	9	1	1
	5	✓	5	A,B	107	143	36	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

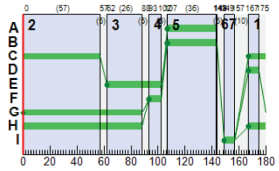
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	107	143	36
	B	1	✓	107	144	37
	C	1	✓	167	57	70
	D	1	✓	167	175	8
	E	1	✓	62	102	40
	F	1	✓	93	102	9
	G	1	✓	0	88	88
	H	1	✓	167	88	101
	I	1	✓	149	157	8

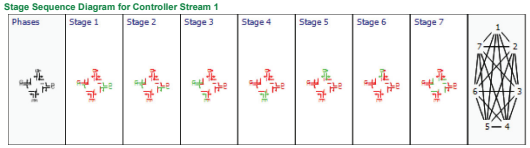
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	107	143	36
1A	2	1	1	B	107	144	37
1B	1	1	1	C	167	57	70
1B	2	1	1	D	167	175	8
1C	1	1	1	E	62	102	40
1C	2	1	1	F	93	102	9
1D	1	1	1	G	0	88	88
1D	2	1	1	H	167	88	101

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

					(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	146	1800	36	0.00	39	128	71.94	64.98	87.19	6.41	5.93	100	100	0.00	39.02
	2	R	1	1	B	332 <	1800	37	0.00	87	3	104.23	97.27	110.83	18.68 +	15.73	100	100	0.00	131.99
1Ax	1	Exit				244	Unrestricted	180	64.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	685 <	1800	70	0.00	96	-7	100.17	94.17	117.68	41.08 +	28.52	100	100	0.00	264.55
	2	R	1	1	D	52	1800	8	3.00	58	56	115.71	109.71	110.98	2.92	2.85	100	100	0.00	23.23
1Bx	1	Exit				617	Unrestricted	180	25.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	135	1800	40	0.00	33	173	71.58	60.18	83.77	5.71	5.29	100	100	0.00	33.46
	2	S / R	1	1	F	85	1800	9	0.00	85	6	171.28	159.88	136.12	5.99	5.80	100	100	0.00	55.06
1Cx	1	Exit				714	Unrestricted	180	41.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	622 <	1800	88	0.00	70	29	51.79	39.79	78.34	24.65 +	16.52	100	100	0.00	103.73
	2	R	1	1	H	463 <	832	101	0.00	98	-8	134.14	122.14	131.03	31.23 +	18.37	100	100	0.00	230.67
1Dx	1	Exit				945	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	814.28	86.87	9.37	37.79	21.93	848.08	33.63	0.00	881.71
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	814.28	86.87	9.37	37.79	21.93	848.08	33.63	0.00	881.71

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 12:00:25

Summary of network performance

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2038 WD With Dev				
Network	D14	675.09	45.46	88% (TS 1B/1)	0 (0%)

A1 - D14 - 2038 WD With Dev, PM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	72	72
	2	153	153
1Ax	1	309	309
1B	1	569	569
	2	62	62
1Bx	1	690	690
1C	1	482	482
	2	235	235
1Cx	1	351	351
1D	1	662	662
	2	222	222
1Dx	1	1107	1107

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	40	32	153
	1-2	62	0	97	472
	1-3	63	172	0	482
	1-4	184	478	222	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	482
	2		1-3	1-1	1C/2, 1Ax/1	Normal	63
	3		1-3	1-2	1C/2, 1Bx/1	Normal	172
	4		1-4	1-1	1D/1, 1Ax/1	Normal	184
	5		1-4	1-2	1D/1, 1Bx/1	Normal	478
	6		1-4	1-3	1D/2, 1Cx/1	Normal	222
	7		1-1	1-2	1A/1, 1Bx/1	Normal	40
	8		1-1	1-3	1A/1, 1Cx/1	Normal	32
	9		1-1	1-4	1A/2, 1Dx/1	Normal	153
	10		1-2	1-4	1B/1, 1Dx/1	Normal	472
	11		1-2	1-3	1B/1, 1Cx/1	Normal	97
	12		1-2	1-1	1B/2, 1Ax/1	Normal	62

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	174, 51, 78, 120, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	174	7	1	1
	2	✓	2	C,G,H	179	51	52	1	1
	3	✓	3	E,G,H	56	78	22	1	1
	4	✓	4	E,F	83	120	37	1	1
	5	✓	5	A,B	125	143	18	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

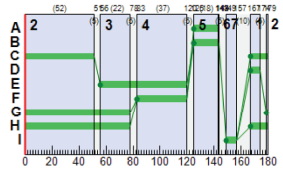
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	125	143	18
	B	1	✓	125	144	19
	C	1	✓	167	51	64
	D	1	✓	167	174	7
	E	1	✓	56	120	64
	F	1	✓	83	120	37
	G	1	✓	179	78	79
	H	1	✓	167	78	91
	I	1	✓	149	157	8

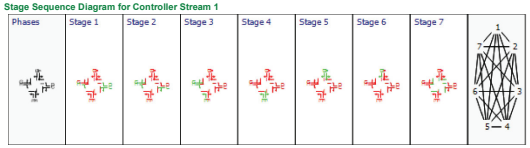
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	125	143	18
1A	2	1	1	B	125	144	19
1B	1	1	1	C	167	51	64
1B	2	1	1	D	167	174	7
1C	1	1	1	E	56	120	64
1C	2	1	1	F	83	120	37
1D	1	1	1	G	179	78	79
1D	2	1	1	H	167	78	91

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
15:30-16:30	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

					(PCU/hr)			cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	72	1800	18	0.00	38	138	87.71	80.75	95.28	3.45	3.33	100	100	0.00	23.79
	2	R	1	1	B	153	1800	19	0.00	77	18	111.78	104.82	110.51	8.55	7.95	100	100	0.00	65.38
1Ax	1	Exit				309	Unrestricted	180	48.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	569 <	1800	64	0.00	88	3	77.55	71.55	101.69	29.37 +	20.99	100	100	0.00	167.83
	2	R	1	1	D	62	1800	7	0.00	78	16	155.31	149.31	130.82	4.17	4.07	100	100	0.00	37.53
1Bx	1	Exit				690	Unrestricted	180	23.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	482 <	1800	64	0.00	74	21	69.35	57.95	90.19	21.93 +	16.44	100	100	0.00	115.63
	2	S / R	1	1	F	235	1800	37	0.00	62	46	83.39	71.99	93.90	11.13	9.76	100	100	0.00	69.49
1Cx	1	Exit				351	Unrestricted	180	65.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	662 <	1800	79	0.00	83	9	66.32	54.32	92.06	30.96 +	20.30	100	100	0.00	149.48
	2	R	1	1	H	222	839	91	0.00	52	74	61.67	49.67	88.38	9.90	5.70	100	100	0.00	45.96
1Dx	1	Exit				1107	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	870.55	74.48	11.69	36.55	8.91	645.52	29.57	0.00	675.09
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	870.55	74.48	11.69	36.55	8.91	645.52	29.57	0.00	675.09

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 12:00:53

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2038 WD With Dev+GA1				
Network	D15	977.20	66.29	98% (TS 1D/2)	4 (25%)

A1 -
D15 - 2038 WD With Dev+GA1, AM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	163	163
	2	370	370
1Ax	1	272	272
1B	1	685	685
	2	57	57
1Bx	1	629	629
1C	1	135	135
	2	87	87
1Cx	1	719	719
1D	1	643	643
	2	463	463
1Dx	1	983	983

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	114	49	370
	1-2	57	0	207	478
	1-3	13	74	0	135
	1-4	202	441	463	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	135
	2		1-3	1-1	1C/2, 1Ax/1	Normal	13
	3		1-3	1-2	1C/2, 1Bx/1	Normal	74
	4		1-4	1-1	1D/1, 1Ax/1	Normal	202
	5		1-4	1-2	1D/1, 1Bx/1	Normal	441
	6		1-4	1-3	1D/2, 1Cx/1	Normal	463
	7		1-1	1-2	1A/1, 1Bx/1	Normal	114
	8		1-1	1-3	1A/1, 1Cx/1	Normal	49
	9		1-1	1-4	1A/2, 1Dx/1	Normal	370
	10		1-2	1-4	1B/1, 1Dx/1	Normal	478
	11		1-2	1-3	1B/1, 1Cx/1	Normal	207
	12		1-2	1-1	1B/2, 1Ax/1	Normal	57

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	175, 57, 88, 101, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

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		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	175	8	1	1
	2	✓	2	C,G,H	0	57	57	1	1
	3	✓	3	E,G,H	62	88	26	1	1
	4	✓	4	E,F	93	101	8	1	1
	5	✓	5	A,B	106	143	37	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

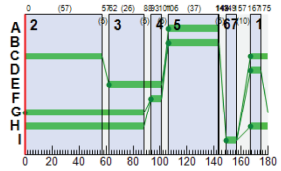
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	106	143	37
	B	1	✓	106	144	38
	C	1	✓	167	57	70
	D	1	✓	167	175	8
	E	1	✓	62	101	39
	F	1	✓	93	101	8
	G	1	✓	0	88	88
	H	1	✓	167	88	101
	I	1	✓	149	157	8

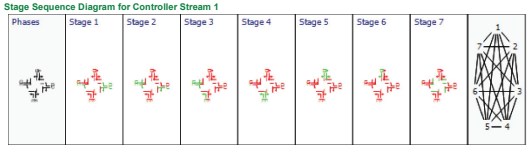
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	106	143	37
1A	2	1	1	B	106	144	38
1B	1	1	1	C	167	57	70
1B	2	1	1	D	167	175	8
1C	1	1	1	E	62	101	39
1C	2	1	1	F	93	101	8
1D	1	1	1	G	0	88	88
1D	2	1	1	H	167	88	101

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS Controller stream	SIGNALS Phase	FLOWS Calculated flow entering (PCU/hr)	FLOWS Calculated sat flow (PCU/hr)	PERFORMANCE Actual green (s (per cycle))	PERFORMANCE Wasted time total (s (per cycle))	PERFORMANCE Degree of saturation (%)	PERFORMANCE Practical reserve capacity (%)	PER PCU JourneyTime (s)	PER PCU Mean Delay per Veh (s)	PER PCU Mean stops per Veh (%)	QUEUES Mean max queue (PCU)	QUEUES Mean end of red queue (PCU)	WEIGHTS Delay weighting multiplier (%)	WEIGHTS Stop weighting multiplier (%)	PENALTIES Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	163	1800	37	0.00	43	110	72.09	65.13	87.75	7.22	6.59	100	100	0.00	43.67
	2	R	1	1	B	370 <	1800	38	0.00	95	-5	128.81	121.85	124.54	23.57 +	19.87	100	100	0.00	183.62
1Ax	1	Exit				272	Unrestricted	180	63.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	685 <	1800	70	0.00	96	-7	100.17	94.17	117.68	41.08 +	28.52	100	100	0.00	264.55
	2	R	1	1	D	57	1800	8	3.00	63	42	122.22	116.22	114.29	3.30	3.22	100	100	0.00	26.95
1Bx	1	Exit				629	Unrestricted	180	24.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	135	1800	39	0.00	34	167	72.55	61.15	84.44	5.75	5.34	100	100	0.00	33.99
	2	S / R	1	1	F	87	1800	8	0.00	97	-7	242.81	231.41	165.48	7.86	7.66	100	100	0.00	81.22
1Cx	1	Exit				719	Unrestricted	180	38.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	643 <	1800	88	0.00	72	25	52.98	40.98	80.11	26.11 +	17.18	100	100	0.00	110.40
	2	R	1	1	H	463 <	831	101	0.00	98	-8	135.29	123.29	131.52	31.36 +	18.50	100	100	0.00	232.80
1Dx	1	Exit				983	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	840.11	94.30	8.91	39.45	26.85	941.38	35.82	0.00	977.20
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	840.11	94.30	8.91	39.45	26.85	941.38	35.82	0.00	977.20

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Main 20210615.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 12:01:35

Summary of network performance

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2038 WD With Dev+GA1				
Network	D16	757.05	51.07	91% (TS 1B/2)	1 (6%)

A1 -
D16 - 2038 WD With Dev+GA1, PM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	84	84
	2	180	180
1Ax	1	363	363
1B	1	569	569
	2	73	73
1Bx	1	697	697
1C	1	482	482
	2	246	246
1Cx	1	356	356
1D	1	694	694
	2	222	222
1Dx	1	1134	1134

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	47	37	180
	1-2	73	0	97	472
	1-3	74	172	0	482
	1-4	216	478	222	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	482
	2		1-3	1-1	1C/2, 1Ax/1	Normal	74
	3		1-3	1-2	1C/2, 1Bx/1	Normal	172
	4		1-4	1-1	1D/1, 1Ax/1	Normal	216
	5		1-4	1-2	1D/1, 1Bx/1	Normal	478
	6		1-4	1-3	1D/2, 1Cx/1	Normal	222
	7		1-1	1-2	1A/1, 1Bx/1	Normal	47
	8		1-1	1-3	1A/1, 1Cx/1	Normal	37
	9		1-1	1-4	1A/2, 1Dx/1	Normal	180
	10		1-2	1-4	1B/1, 1Dx/1	Normal	472
	11		1-2	1-3	1B/1, 1Cx/1	Normal	97
	12		1-2	1-1	1B/2, 1Ax/1	Normal	73

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	174, 51, 77, 117, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

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From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	174	7	1	1
	2	✓	2	C,G,H	179	51	52	1	1
	3	✓	3	E,G,H	56	77	21	1	1
	4	✓	4	E,F	82	117	35	1	1
	5	✓	5	A,B	122	143	21	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

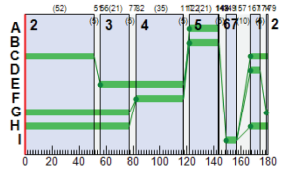
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	122	143	21
	B	1	✓	122	144	22
	C	1	✓	167	51	64
	D	1	✓	167	174	7
	E	1	✓	56	117	61
	F	1	✓	82	117	35
	G	1	✓	179	77	78
	H	1	✓	167	77	90
	I	1	✓	149	157	8

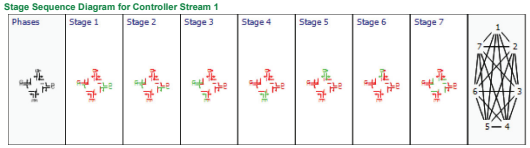
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	122	143	21
1A	2	1	1	B	122	144	22
1B	1	1	1	C	167	51	64
1B	2	1	1	D	167	174	7
1C	1	1	1	E	56	117	61
1C	2	1	1	F	82	117	35
1D	1	1	1	G	179	77	78
1D	2	1	1	H	167	77	90

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
15:30-16:30	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

					(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	84	1800	21	0.00	38	136	84.73	77.77	93.78	3.97	3.80	100	100	0.00	26.75
	2	R	1	1	B	180	1800	22	0.00	78	15	109.06	102.10	109.88	10.00	9.15	100	100	0.00	74.97
1Ax	1	Exit				363	Unrestricted	180	50.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	569 <	1800	64	0.00	88	3	77.55	71.55	101.69	29.37 +	20.99	100	100	0.00	167.83
	2	R	1	1	D	73	1800	7	0.00	91	-1	212.03	206.03	155.61	6.07	5.93	100	100	0.00	60.75
1Bx	1	Exit				697	Unrestricted	180	24.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	482 <	1800	61	0.00	78	16	74.07	62.67	93.63	22.87 +	17.12	100	100	0.00	124.80
	2	S / R	1	1	F	246	1800	35	0.00	68	32	88.65	77.25	97.29	12.06	10.56	100	100	0.00	77.96
1Cx	1	Exit				356	Unrestricted	180	64.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	694 <	1800	78	0.00	88	2	73.38	61.38	98.11	34.56 +	22.41	100	100	0.00	176.55
	2	R	1	1	H	222	825	90	0.00	53	69	63.33	51.33	89.21	9.98	5.79	100	100	0.00	47.43
1Dx	1	Exit				1134	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	893.80	80.87	11.05	39.12	11.96	725.22	31.83	0.00	757.05
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	893.80	80.87	11.05	39.12	11.96	725.22	31.83	0.00	757.05

- *P = link is a pedestrian link*
- *< = 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 8

ARCADY 8 - Roundabout Module

Filename: R090 Junction 2 ARCADY Model 20210615.arc8
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 12:11:45

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)	Network Residual Capacity
	Standard - 2020 WD Surveyed									
Arm A	0.52	3.44	0.34	7.04	31 % [Arm C]	0.78	4.07	0.44	4.47	112 % [Arm A]
Arm B	0.17	3.59	0.15			0.06	3.45	0.05		
Arm C	2.17	10.35	0.69			0.66	5.21	0.40		
	Standard - 2023 WD No Dev									
Arm A	0.66	3.79	0.40	9.20	16 % [Arm C]	1.01	4.64	0.50	5.04	84 % [Arm A]
Arm B	0.31	4.17	0.24			0.11	3.72	0.10		
Arm C	3.39	14.81	0.78			0.85	5.89	0.46		
	Standard - 2023 WD With Dev									
Arm A	0.56	3.70	0.36	10.54	12 % [Arm C]	0.95	4.67	0.49	5.26	78 % [Arm C]
Arm B	0.53	4.70	0.35			0.18	3.92	0.15		
Arm C	4.19	17.37	0.81			1.02	6.39	0.51		
	Standard - 2028 WD No Dev									
Arm A	0.75	4.00	0.43	12.31	8 % [Arm C]	1.19	5.06	0.54	5.45	71 % [Arm A]
Arm B	0.35	4.39	0.26			0.12	3.88	0.11		
Arm C	5.09	20.93	0.84			0.99	6.34	0.50		
	Standard - 2028 WD With Dev									
Arm A	0.64	3.90	0.39	14.77	4 % [Arm C]	1.12	5.08	0.53	5.68	66 % [Arm C]
Arm B	0.58	4.97	0.37			0.20	4.09	0.16		
Arm C	6.56	25.77	0.88			1.17	6.90	0.54		
	Standard - 2038 WD No Dev									
Arm A	0.84	4.22	0.46	18.52	0 % [Arm C]	1.39	5.53	0.58	5.91	60 % [Arm A]
Arm B	0.39	4.63	0.28			0.13	4.05	0.11		
Arm C	8.51	33.30	0.91			1.14	6.83	0.53		
	Standard - 2038 WD With Dev									
Arm A	0.73	4.11	0.42	23.93	-3 % [Arm C]	1.32	5.57	0.57	6.18	57 % [Arm C]
Arm B	0.64	5.28	0.39			0.21	4.27	0.17		
Arm C	11.90	44.17	0.94			1.35	7.48	0.58		
	Standard - 2038 WD With Dev + GA1									
Arm A	0.75	4.18	0.43	28.25	-5 % [Arm C]	1.40	5.83	0.59	6.49	50 % [Arm C]
Arm B	0.76	5.65	0.43			0.25	4.43	0.20		

Arm C	14.82	53.56	0.96			1.49	7.97	0.60		

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

"D1 - 2020 WD Surveyed, AM " model duration: 07:45 - 09:15
"D2 - 2020 WD Surveyed, PM" model duration: 15:15 - 16:45
"D3 - 2023 WD No Dev, AM" model duration: 07:45 - 09:15
"D4 - 2023 WD No Dev, PM" model duration: 15:15 - 16:45
"D5 - 2023 WD With Dev, AM" model duration: 07:45 - 09:15
"D6 - 2023 WD With Dev, PM" model duration: 15:15 - 16:45
"D7 - 2028 WD No Dev, AM" model duration: 07:45 - 09:15
"D8 - 2028 WD No Dev, PM" model duration: 15:15 - 16:45
"D9 - 2028 WD With Dev, AM" model duration: 07:45 - 09:15
"D10 - 2028 WD With Dev, PM" model duration: 15:15 - 16:45
"D11 - 2038 WD No Dev, AM" model duration: 07:45 - 09:15
"D12 - 2038 WD No Dev, PM" model duration: 15:15 - 16:45
"D13 - 2038 WD With Dev, AM" model duration: 07:45 - 09:15
"D14 - 2038 WD With Dev, PM" model duration: 15:15 - 16:45
"D15 - 2038 WD With Dev + GA1, AM" model duration: 07:45 - 09:15
"D16 - 2038 WD With Dev + GA1, PM" model duration: 15:15 - 16:45

Run using Junctions 8.0.3.332 at 07/07/2021 12:11:39

File summary

File Description

Title	Baldoyle GA3
Location	Baldoyle, Dublin 13
Site Number	2
Date	15/06/2021
Version	Main Assessment
Status	
Identifier	
Client	
Jobnumber	R090
Enumerator	GF
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75		✓	Delay	0.90	36.00	20.00

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

Standard - 2020 WD Surveyed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2020 WD Surveyed, AM	2020 WD Surveyed	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				7.04	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	31	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	492.00	100.000
B	ONE HOUR	✓	157.00	100.000
C	ONE HOUR	✓	698.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	370.40	370.40		
07:45-08:00	B	118.20	118.20		
07:45-08:00	C	525.49	525.49		
08:00-08:15	A	442.30	442.30		
08:00-08:15	B	141.14	141.14		
08:00-08:15	C	627.49	627.49		
08:15-08:30	A	541.70	541.70		
08:15-08:30	B	172.86	172.86		
08:15-08:30	C	768.51	768.51		
08:30-08:45	A	541.70	541.70		
08:30-08:45	B	172.86	172.86		
08:30-08:45	C	768.51	768.51		
08:45-09:00	A	442.30	442.30		
08:45-09:00	B	141.14	141.14		
08:45-09:00	C	627.49	627.49		
09:00-09:15	A	370.40	370.40		
09:00-09:15	B	118.20	118.20		
09:00-09:15	C	525.49	525.49		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	11.000	23.000	458.000
	B	87.000	1.000	69.000
	C	678.000	19.000	1.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.02	0.05	0.93
	B	0.55	0.01	0.44
	C	0.97	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.34	3.44	0.52	A	451.47	677.20	35.96	3.19	0.40	35.96	3.19
B	0.15	3.59	0.17	A	144.07	216.10	12.06	3.35	0.13	12.06	3.35
C	0.69	10.35	2.17	B	640.50	960.75	126.35	7.89	1.40	126.37	7.89

Standard - 2020 WD Surveyed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2020 WD Surveyed, PM	2020 WD Surveyed	PM		ONE HOUR	15:15	16:45	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				4.47	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	112	Arm A

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	631.00	100.000
B	ONE HOUR	✓	53.00	100.000
C	ONE HOUR	✓	416.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:15-15:30	A	475.05	475.05		
15:15-15:30	B	39.90	39.90		
15:15-15:30	C	313.19	313.19		
15:30-15:45	A	567.26	567.26		
15:30-15:45	B	47.65	47.65		
15:30-15:45	C	373.98	373.98		
15:45-16:00	A	694.74	694.74		
15:45-16:00	B	58.35	58.35		
15:45-16:00	C	458.02	458.02		
16:00-16:15	A	694.74	694.74		
16:00-16:15	B	58.35	58.35		
16:00-16:15	C	458.02	458.02		
16:15-16:30	A	567.26	567.26		
16:15-16:30	B	47.65	47.65		
16:15-16:30	C	373.98	373.98		
16:30-16:45	A	475.05	475.05		
16:30-16:45	B	39.90	39.90		
16:30-16:45	C	313.19	313.19		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

	To		
	A	B	C

From	A	10.000	56.000	565.000
	B	31.000	0.000	22.000
	C	381.000	31.000	4.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.02	0.09	0.90
	B	0.58	0.00	0.42
	C	0.92	0.07	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.44	4.07	0.78	A	579.02	868.52	52.75	3.64	0.59	52.75	3.64
B	0.05	3.45	0.06	A	48.63	72.95	3.94	3.24	0.04	3.94	3.24
C	0.40	5.21	0.66	A	381.73	572.59	45.02	4.72	0.50	45.03	4.72

Standard - 2023 WD No Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2023 WD No Dev, AM	2023 WD No Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				9.20	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	16	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	572.00	100.000
B	ONE HOUR	✓	245.00	100.000
C	ONE HOUR	✓	770.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	430.63	430.63		
07:45-08:00	B	184.45	184.45		
07:45-08:00	C	579.70	579.70		
08:00-08:15	A	514.22	514.22		
08:00-08:15	B	220.25	220.25		
08:00-08:15	C	692.21	692.21		
08:15-08:30	A	629.78	629.78		
08:15-08:30	B	269.75	269.75		
08:15-08:30	C	847.79	847.79		
08:30-08:45	A	629.78	629.78		
08:30-08:45	B	269.75	269.75		
08:30-08:45	C	847.79	847.79		
08:45-09:00	A	514.22	514.22		
08:45-09:00	B	220.25	220.25		
08:45-09:00	C	692.21	692.21		
09:00-09:15	A	430.63	430.63		
09:00-09:15	B	184.45	184.45		
09:00-09:15	C	579.70	579.70		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	8.000	40.000	524.000
	B	136.000	1.000	108.000
	C	737.000	32.000	1.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.01	0.07	0.92
	B	0.56	0.00	0.44
	C	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.40	3.79	0.66	A	524.88	787.32	45.19	3.44	0.50	45.19	3.44
B	0.24	4.17	0.31	A	224.82	337.22	21.22	3.78	0.24	21.22	3.78
C	0.78	14.81	3.39	B	706.57	1059.85	178.14	10.09	1.98	178.18	10.09

Standard - 2023 WD No Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2023 WD No Dev, PM	2023 WD No Dev	PM		ONE HOUR	15:15	16:45	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				5.04	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	84	Arm A

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	715.00	100.000
B	ONE HOUR	✓	94.00	100.000
C	ONE HOUR	✓	476.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:15-15:30	A	538.29	538.29		
15:15-15:30	B	70.77	70.77		
15:15-15:30	C	358.36	358.36		
15:30-15:45	A	642.77	642.77		
15:30-15:45	B	84.50	84.50		
15:30-15:45	C	427.91	427.91		
15:45-16:00	A	787.23	787.23		
15:45-16:00	B	103.50	103.50		
15:45-16:00	C	524.09	524.09		
16:00-16:15	A	787.23	787.23		
16:00-16:15	B	103.50	103.50		
16:00-16:15	C	524.09	524.09		
16:15-16:30	A	642.77	642.77		
16:15-16:30	B	84.50	84.50		
16:15-16:30	C	427.91	427.91		
16:30-16:45	A	538.29	538.29		
16:30-16:45	B	70.77	70.77		
16:30-16:45	C	358.36	358.36		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	95.000	610.000
	B	55.000	0.000	39.000
	C	418.000	53.000	5.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.01	0.13	0.85
	B	0.59	0.00	0.41
	C	0.88	0.11	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.50	4.64	1.01	A	656.10	984.14	66.16	4.03	0.74	66.17	4.03
B	0.10	3.72	0.11	A	86.26	129.38	7.43	3.45	0.08	7.43	3.45
C	0.46	5.89	0.85	A	436.79	655.18	56.72	5.19	0.63	56.72	5.19

Standard - 2023 WD With Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

	Scenario	Time		Traffic	Model Start	Model Finish	Model Time	Time Segment	Results For	Single Time		Run	Use	

Name	Name	Period Name	Description	Profile Type	Time (HH:mm)	Time (HH:mm)	Period Length (min)	Length (min)	Central Hour Only	Segment Only	Locked	Automatically	Relationship	Relationship
2023 WD With Dev, AM	2023 WD With Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				10.54	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	12	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
				HV	2.00					

		✓	✓	Percentages					✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	498.00	100.000
B	ONE HOUR	✓	373.00	100.000
C	ONE HOUR	✓	819.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	374.92	374.92		
07:45-08:00	B	280.81	280.81		
07:45-08:00	C	616.59	616.59		
08:00-08:15	A	447.69	447.69		
08:00-08:15	B	335.32	335.32		
08:00-08:15	C	736.26	736.26		
08:15-08:30	A	548.31	548.31		
08:15-08:30	B	410.68	410.68		
08:15-08:30	C	901.74	901.74		
08:30-08:45	A	548.31	548.31		
08:30-08:45	B	410.68	410.68		
08:30-08:45	C	901.74	901.74		
08:45-09:00	A	447.69	447.69		
08:45-09:00	B	335.32	335.32		
08:45-09:00	C	736.26	736.26		
09:00-09:15	A	374.92	374.92		
09:00-09:15	B	280.81	280.81		
09:00-09:15	C	616.59	616.59		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	8.000	33.000	457.000
	B	106.000	1.000	266.000
	C	700.000	118.000	1.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.02	0.07	0.92
	B	0.28	0.00	0.71
	C	0.85	0.14	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.36	3.70	0.56	A	456.97	685.46	38.61	3.38	0.43	38.61	3.38
B	0.35	4.70	0.53	A	342.27	513.41	35.44	4.14	0.39	35.44	4.14
C	0.81	17.37	4.19	C	751.53	1127.29	210.32	11.19	2.34	210.36	11.20

Standard - 2023 WD With Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2023 WD With Dev, PM	2023 WD With Dev	PM		ONE HOUR	15:15	16:45	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				5.26	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	78	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	671.00	100.000
B	ONE HOUR	✓	153.00	100.000
C	ONE HOUR	✓	525.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:15-15:30	A	505.16	505.16		
15:15-15:30	B	115.19	115.19		
15:15-15:30	C	395.25	395.25		
15:30-15:45	A	603.22	603.22		
15:30-15:45	B	137.54	137.54		
15:30-15:45	C	471.96	471.96		
15:45-16:00	A	738.78	738.78		
15:45-16:00	B	168.46	168.46		
15:45-16:00	C	578.04	578.04		
16:00-16:15	A	738.78	738.78		
16:00-16:15	B	168.46	168.46		
16:00-16:15	C	578.04	578.04		

16:15-16:30	A	603.22	603.22		
16:15-16:30	B	137.54	137.54		
16:15-16:30	C	471.96	471.96		
16:30-16:45	A	505.16	505.16		
16:30-16:45	B	115.19	115.19		
16:30-16:45	C	395.25	395.25		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	76.000	585.000
	B	45.000	0.000	108.000
	C	389.000	131.000	5.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.01	0.11	0.87
	B	0.29	0.00	0.71
	C	0.74	0.25	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.49	4.67	0.95	A	615.72	923.58	62.40	4.05	0.69	62.41	4.05
B	0.15	3.92	0.18	A	140.40	210.59	12.60	3.59	0.14	12.60	3.59
C	0.51	6.39	1.02	A	481.75	722.62	66.64	5.53	0.74	66.64	5.53

Standard - 2028 WD No Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

	Roundabout		Include In	Use Specific	Specific		Network Flow	Network Capacity	Reason For

Name	Capacity Model	Description	Report	Demand Set(s)	Demand Set(s)	Locked	Scaling Factor (%)	Scaling Factor (%)	Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2028 WD No Dev, AM	2028 WD No Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				12.31	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	8	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	615.00	100.000
B	ONE HOUR	✓	259.00	100.000
C	ONE HOUR	✓	832.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	463.00	463.00		
07:45-08:00	B	194.99	194.99		
07:45-08:00	C	626.37	626.37		
08:00-08:15	A	552.87	552.87		
08:00-08:15	B	232.84	232.84		
08:00-08:15	C	747.95	747.95		
08:15-08:30	A	677.13	677.13		
08:15-08:30	B	285.16	285.16		
08:15-08:30	C	916.05	916.05		
08:30-08:45	A	677.13	677.13		
08:30-08:45	B	285.16	285.16		
08:30-08:45	C	916.05	916.05		
08:45-09:00	A	552.87	552.87		
08:45-09:00	B	232.84	232.84		
08:45-09:00	C	747.95	747.95		
09:00-09:15	A	463.00	463.00		
09:00-09:15	B	194.99	194.99		
09:00-09:15	C	626.37	626.37		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	9.000	42.000	564.000
	B	144.000	1.000	114.000
	C	797.000	34.000	1.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.01	0.07	0.92
	B	0.56	0.00	0.44
	C	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.43	4.00	0.75	A	564.33	846.50	50.65	3.59	0.56	50.65	3.59
B	0.26	4.39	0.35	A	237.66	356.49	23.36	3.93	0.26	23.36	3.93
C	0.84	20.93	5.09	C	763.46	1145.19	241.03	12.63	2.68	241.07	12.63

Standard - 2028 WD No Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2028 WD No Dev, PM	2028 WD No Dev	PM		ONE HOUR	15:15	16:45	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				5.45	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	71	Arm A

Arms

Arms

Arm	Name	Description

A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	771.00	100.000
B	ONE HOUR	✓	99.00	100.000
C	ONE HOUR	✓	513.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:15-15:30	A	580.45	580.45		
15:15-15:30	B	74.53	74.53		
15:15-15:30	C	386.21	386.21		
15:30-15:45	A	693.11	693.11		
15:30-15:45	B	89.00	89.00		
15:30-15:45	C	461.18	461.18		
15:45-16:00	A	848.89	848.89		

15:45-16:00	B	109.00	109.00		
15:45-16:00	C	564.82	564.82		
16:00-16:15	A	848.89	848.89		
16:00-16:15	B	109.00	109.00		
16:00-16:15	C	564.82	564.82		
16:15-16:30	A	693.11	693.11		
16:15-16:30	B	89.00	89.00		
16:15-16:30	C	461.18	461.18		
16:30-16:45	A	580.45	580.45		
16:30-16:45	B	74.53	74.53		
16:30-16:45	C	386.21	386.21		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	11.000	100.000	660.000
	B	58.000	0.000	41.000
	C	452.000	56.000	5.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.01	0.13	0.86
	B	0.59	0.00	0.41
	C	0.88	0.11	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.54	5.06	1.19	A	707.48	1061.22	76.18	4.31	0.85	76.19	4.31
B	0.11	3.88	0.12	A	90.84	136.27	8.10	3.56	0.09	8.10	3.56
C	0.50	6.34	0.99	A	470.74	706.11	64.66	5.49	0.72	64.67	5.50

Standard - 2028 WD With Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2028 WD With Dev, AM	2028 WD With Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				14.77	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	4	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	542.00	100.000
B	ONE HOUR	✓	386.00	100.000
C	ONE HOUR	✓	880.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	408.05	408.05		
07:45-08:00	B	290.60	290.60		
07:45-08:00	C	662.51	662.51		
08:00-08:15	A	487.25	487.25		
08:00-08:15	B	347.01	347.01		
08:00-08:15	C	791.10	791.10		
08:15-08:30	A	596.75	596.75		
08:15-08:30	B	424.99	424.99		
08:15-08:30	C	968.90	968.90		
08:30-08:45	A	596.75	596.75		
08:30-08:45	B	424.99	424.99		
08:30-08:45	C	968.90	968.90		
08:45-09:00	A	487.25	487.25		
08:45-09:00	B	347.01	347.01		
08:45-09:00	C	791.10	791.10		
09:00-09:15	A	408.05	408.05		
09:00-09:15	B	290.60	290.60		
09:00-09:15	C	662.51	662.51		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	9.000	35.000	498.000
	B	113.000	1.000	272.000
	C	760.000	119.000	1.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.02	0.06	0.92
	B	0.29	0.00	0.70
	C	0.86	0.14	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.39	3.90	0.64	A	497.35	746.02	43.78	3.52	0.49	43.78	3.52
B	0.37	4.97	0.58	A	354.20	531.30	38.34	4.33	0.43	38.34	4.33
C	0.88	25.77	6.56	D	807.50	1211.26	290.64	14.40	3.23	290.69	14.40

Standard - 2028 WD With Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2028 WD With Dev, PM	2028 WD With Dev	PM		ONE HOUR	15:15	16:45	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				5.68	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	66	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	726.00	100.000
B	ONE HOUR	✓	157.00	100.000
C	ONE HOUR	✓	561.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time	Arm	Direct Demand Entry Flow	DirectDemandEntryFlowInPCU	Direct Demand Exit Flow	Direct Demand Pedestrian Flow

Segment		(PCU/hr)	(PCU/hr)	(PCU/hr)	(Ped/hr)
15:15-15:30	A	546.57	546.57		
15:15-15:30	B	118.20	118.20		
15:15-15:30	C	422.35	422.35		
15:30-15:45	A	652.66	652.66		
15:30-15:45	B	141.14	141.14		
15:30-15:45	C	504.33	504.33		
15:45-16:00	A	799.34	799.34		
15:45-16:00	B	172.86	172.86		
15:45-16:00	C	617.67	617.67		
16:00-16:15	A	799.34	799.34		
16:00-16:15	B	172.86	172.86		
16:00-16:15	C	617.67	617.67		
16:15-16:30	A	652.66	652.66		
16:15-16:30	B	141.14	141.14		
16:15-16:30	C	504.33	504.33		
16:30-16:45	A	546.57	546.57		
16:30-16:45	B	118.20	118.20		
16:30-16:45	C	422.35	422.35		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	11.000	81.000	634.000
	B	47.000	0.000	110.000
	C	422.000	134.000	5.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.02	0.11	0.87
	B	0.30	0.00	0.70
	C	0.75	0.24	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.53	5.08	1.12	A	666.19	999.29	72.04	4.33	0.80	72.05	4.33
B	0.16	4.09	0.20	A	144.07	216.10	13.37	3.71	0.15	13.37	3.71
C	0.54	6.90	1.17	A	514.78	772.18	75.46	5.86	0.84	75.47	5.86

Standard - 2038 WD No Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2038 WD No Dev, AM	2038 WD No Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				18.52	C

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	0	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	657.00	100.000
B	ONE HOUR	✓	273.00	100.000
C	ONE HOUR	✓	892.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	494.62	494.62		
07:45-08:00	B	205.53	205.53		
07:45-08:00	C	671.54	671.54		
08:00-08:15	A	590.63	590.63		
08:00-08:15	B	245.42	245.42		
08:00-08:15	C	801.89	801.89		
08:15-08:30	A	723.37	723.37		
08:15-08:30	B	300.58	300.58		
08:15-08:30	C	982.11	982.11		
08:30-08:45	A	723.37	723.37		
08:30-08:45	B	300.58	300.58		
08:30-08:45	C	982.11	982.11		
08:45-09:00	A	590.63	590.63		
08:45-09:00	B	245.42	245.42		
08:45-09:00	C	801.89	801.89		
09:00-09:15	A	494.62	494.62		
09:00-09:15	B	205.53	205.53		
09:00-09:15	C	671.54	671.54		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	44.000	603.000
	B	152.000	1.000	120.000
	C	855.000	36.000	1.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.02	0.07	0.92
	B	0.56	0.00	0.44
	C	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.46	4.22	0.84	A	602.87	904.31	56.46	3.75	0.63	56.46	3.75
B	0.28	4.63	0.39	A	250.51	375.76	25.66	4.10	0.29	25.66	4.10
C	0.91	33.30	8.51	D	818.51	1227.77	346.69	16.94	3.85	346.76	16.95

Standard - 2038 WD No Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2038 WD No Dev, PM	2038 WD No Dev	PM		ONE HOUR	15:15	16:45	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS

(untitled)	Roundabout	A,B,C				5.91	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	60	Arm A

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	825.00	100.000
B	ONE HOUR	✓	104.00	100.000
C	ONE HOUR	✓	548.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:15-15:30	A	621.10	621.10		
15:15-15:30	B	78.30	78.30		
15:15-15:30	C	412.56	412.56		
15:30-15:45	A	741.66	741.66		
15:30-15:45	B	93.49	93.49		
15:30-15:45	C	492.64	492.64		
15:45-16:00	A	908.34	908.34		
15:45-16:00	B	114.51	114.51		
15:45-16:00	C	603.36	603.36		
16:00-16:15	A	908.34	908.34		
16:00-16:15	B	114.51	114.51		
16:00-16:15	C	603.36	603.36		
16:15-16:30	A	741.66	741.66		
16:15-16:30	B	93.49	93.49		
16:15-16:30	C	492.64	492.64		
16:30-16:45	A	621.10	621.10		
16:30-16:45	B	78.30	78.30		
16:30-16:45	C	412.56	412.56		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	12.000	105.000	708.000
	B	61.000	0.000	43.000
	C	485.000	58.000	5.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.01	0.13	0.86
	B	0.59	0.00	0.41
	C	0.89	0.11	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.58	5.53	1.39	A	757.03	1135.55	87.20	4.61	0.97	87.21	4.61
B	0.11	4.05	0.13	A	95.43	143.15	8.80	3.69	0.10	8.80	3.69
C	0.53	6.83	1.14	A	502.85	754.28	73.11	5.82	0.81	73.12	5.82

Standard - 2038 WD With Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2038 WD With Dev, AM	2038 WD With Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				23.93	C

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-3	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	584.00	100.000
B	ONE HOUR	✓	400.00	100.000
C	ONE HOUR	✓	940.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	439.67	439.67		
07:45-08:00	B	301.14	301.14		
07:45-08:00	C	707.68	707.68		
08:00-08:15	A	525.00	525.00		
08:00-08:15	B	359.59	359.59		
08:00-08:15	C	845.04	845.04		
08:15-08:30	A	643.00	643.00		
08:15-08:30	B	440.41	440.41		
08:15-08:30	C	1034.96	1034.96		
08:30-08:45	A	643.00	643.00		
08:30-08:45	B	440.41	440.41		
08:30-08:45	C	1034.96	1034.96		
08:45-09:00	A	525.00	525.00		
08:45-09:00	B	359.59	359.59		
08:45-09:00	C	845.04	845.04		
09:00-09:15	A	439.67	439.67		
09:00-09:15	B	301.14	301.14		
09:00-09:15	C	707.68	707.68		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	37.000	537.000
	B	121.000	1.000	278.000
	C	818.000	121.000	1.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.02	0.06	0.92
	B	0.30	0.00	0.70
	C	0.87	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.42	4.11	0.73	A	535.89	803.83	49.17	3.67	0.55	49.18	3.67
B	0.39	5.28	0.64	A	367.05	550.57	41.61	4.53	0.46	41.61	4.53
C	0.94	44.17	11.90	E	862.56	1293.84	440.08	20.41	4.89	440.16	20.41

Standard - 2038 WD With Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2038 WD With Dev, PM	2038 WD With Dev	PM		ONE HOUR	15:15	16:45	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				6.18	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	57	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	781.00	100.000
B	ONE HOUR	✓	162.00	100.000
C	ONE HOUR	✓	596.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:15-15:30	A	587.98	587.98		
15:15-15:30	B	121.96	121.96		
15:15-15:30	C	448.70	448.70		
15:30-15:45	A	702.10	702.10		
15:30-15:45	B	145.63	145.63		
15:30-15:45	C	535.79	535.79		
15:45-16:00	A	859.90	859.90		
15:45-16:00	B	178.37	178.37		
15:45-16:00	C	656.21	656.21		
16:00-16:15	A	859.90	859.90		
16:00-16:15	B	178.37	178.37		
16:00-16:15	C	656.21	656.21		
16:15-16:30	A	702.10	702.10		
16:15-16:30	B	145.63	145.63		
16:15-16:30	C	535.79	535.79		
16:30-16:45	A	587.98	587.98		
16:30-16:45	B	121.96	121.96		
16:30-16:45	C	448.70	448.70		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	12.000	86.000	683.000
	B	50.000	0.000	112.000
	C	455.000	136.000	5.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.02	0.11	0.87
	B	0.31	0.00	0.69
	C	0.76	0.23	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.57	5.57	1.32	A	716.66	1074.99	83.04	4.63	0.92	83.04	4.64
B	0.17	4.27	0.21	A	148.65	222.98	14.31	3.85	0.16	14.31	3.85
C	0.58	7.48	1.35	A	546.90	820.35	85.23	6.23	0.95	85.24	6.23

Standard - 2038 WD With Dev + GA1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2038 WD With Dev + GA1, AM	2038 WD With Dev + GA1	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				28.25	D

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-5	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	589.00	100.000
B	ONE HOUR	✓	441.00	100.000
C	ONE HOUR	✓	954.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	443.43	443.43		
07:45-08:00	B	332.01	332.01		
07:45-08:00	C	718.22	718.22		
08:00-08:15	A	529.50	529.50		
08:00-08:15	B	396.45	396.45		
08:00-08:15	C	857.63	857.63		
08:15-08:30	A	648.50	648.50		
08:15-08:30	B	485.55	485.55		
08:15-08:30	C	1050.37	1050.37		
08:30-08:45	A	648.50	648.50		
08:30-08:45	B	485.55	485.55		
08:30-08:45	C	1050.37	1050.37		
08:45-09:00	A	529.50	529.50		
08:45-09:00	B	396.45	396.45		
08:45-09:00	C	857.63	857.63		
09:00-09:15	A	443.43	443.43		
09:00-09:15	B	332.01	332.01		
09:00-09:15	C	718.22	718.22		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	42.000	537.000
	B	132.000	1.000	308.000
	C	818.000	135.000	1.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.02	0.07	0.91
	B	0.30	0.00	0.70
	C	0.86	0.14	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.43	4.18	0.75	A	540.48	810.72	50.27	3.72	0.56	50.27	3.72
B	0.43	5.65	0.76	A	404.67	607.00	48.33	4.78	0.54	48.34	4.78
C	0.96	53.56	14.82	F	875.41	1313.11	512.58	23.42	5.70	512.67	23.43

Standard - 2038 WD With Dev + GA1, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

	Scenario	Time		Traffic	Model Start	Model Finish	Model Time	Time Segment	Results For	Single Time		Run	Use	

Name	Name	Period Name	Description	Profile Type	Time (HH:mm)	Time (HH:mm)	Period Length (min)	Length (min)	Central Hour Only	Segment Only	Locked	Automatically	Relationship	Relationship
2038 WD With Dev + GA1, PM	2038 WD With Dev + GA1	PM		ONE HOUR	15:15	16:45	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	A,B,C				6.49	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	50	Arm C

Arms

Arms

Arm	Name	Description
A	Coast Road (S)	
B	Red Arches Road	
C	Coast Road (N)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.40	6.30	30.00	19.00	29.00	46.00	
B	3.90	5.60	10.80	13.00	29.00	29.00	
C	3.50	5.50	4.10	15.00	29.00	53.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.621	1602.470
B		(calculated)	(calculated)	0.609	1489.409
C		(calculated)	(calculated)	0.521	1172.462

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	793.00	100.000
B	ONE HOUR	✓	188.00	100.000
C	ONE HOUR	✓	619.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:15-15:30	A	597.01	597.01		
15:15-15:30	B	141.54	141.54		
15:15-15:30	C	466.02	466.02		
15:30-15:45	A	712.89	712.89		
15:30-15:45	B	169.01	169.01		
15:30-15:45	C	556.47	556.47		
15:45-16:00	A	873.11	873.11		
15:45-16:00	B	206.99	206.99		
15:45-16:00	C	681.53	681.53		
16:00-16:15	A	873.11	873.11		
16:00-16:15	B	206.99	206.99		
16:00-16:15	C	681.53	681.53		
16:15-16:30	A	712.89	712.89		
16:15-16:30	B	169.01	169.01		
16:15-16:30	C	556.47	556.47		
16:30-16:45	A	597.01	597.01		
16:30-16:45	B	141.54	141.54		
16:30-16:45	C	466.02	466.02		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	12.000	98.000	683.000
	B	57.000	0.000	131.000
	C	455.000	159.000	5.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.02	0.12	0.86
	B	0.30	0.00	0.70
	C	0.74	0.26	0.01

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.59	5.83	1.40	A	727.67	1091.51	87.25	4.80	0.97	87.26	4.80
B	0.20	4.43	0.25	A	172.51	258.77	17.06	3.96	0.19	17.06	3.96
C	0.60	7.97	1.49	A	568.01	852.01	92.75	6.53	1.03	92.76	6.53

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.3.332 [14595,13/11/2013]

Filename: R090 Junction 9 ARCADY Model Main 20210615.arc8
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 12:16:09

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity
	Standard - 2020 WD Surveyed							
Arm A	1.01	6.66	0.50	12 %	0.93	5.47	0.48	4 %
Arm B	1.24	6.87	0.56	[Arm D]	3.17	12.53	0.77	[Arm C]
Arm C	1.80	7.54	0.65		5.12	20.56	0.85	
Arm D	3.51	10.65	0.78		1.83	7.03	0.65	
	Standard - 2023 WD No Dev							
Arm A	1.46	9.00	0.60	1 %	1.18	6.56	0.54	-4 %
Arm B	2.63	11.52	0.73	[Arm D]	6.63	23.96	0.88	[Arm C]
Arm C	2.71	10.57	0.73		13.20	49.80	0.96	
Arm D	7.25	20.51	0.89		2.62	9.29	0.73	
	Standard - 2023 WD With Dev							
Arm A	1.51	9.24	0.61	0 %	1.27	6.96	0.56	-6 %
Arm B	3.69	14.99	0.79	[Arm D]	8.76	30.84	0.91	[Arm C]
Arm C	2.96	11.52	0.75		18.14	65.15	0.98	
Arm D	7.92	22.31	0.90		2.93	10.16	0.75	
	Standard - 2028 WD No Dev							
Arm A	2.12	12.20	0.69	-7 %	1.54	7.91	0.61	-12 %
Arm B	4.04	16.80	0.81	[Arm D]	19.15	62.30	0.98	[Arm C]
Arm C	4.05	14.82	0.81		46.39	139.27	1.07	
Arm D	19.04	49.18	0.98		3.66	12.13	0.79	
	Standard - 2028 WD With Dev							
Arm A	2.20	12.57	0.69	-8 %	1.67	8.46	0.63	-13 %
Arm B	6.24	24.44	0.87	[Arm D]	29.06	86.48	1.02	[Arm C]
Arm C	4.54	16.64	0.83		56.34	165.67	1.10	
Arm D	21.94	55.40	0.99		4.13	13.42	0.81	
	Standard - 2038 WD No Dev							
Arm A	2.96	15.95	0.76	-13 %	2.05	9.85	0.68	-18 %
Arm B	6.48	25.88	0.88	[Arm D]	60.94	162.52	1.09	[Arm C]
Arm C	6.81	23.76	0.88		87.57	297.60	1.16	
Arm D	60.39	126.11	1.07		5.31	16.61	0.85	
	Standard - 2038 WD With Dev							
Arm A	3.00	16.15	0.76	-14 %	2.25	10.72	0.70	-19 %
Arm B	11.83	44.03	0.94	[Arm D]	78.64	202.94	1.13	[Arm C]
Arm C	7.95	27.81	0.90		96.48	336.22	1.17	
Arm D	65.97	136.24	1.08		6.19	19.07	0.87	
	Standard - 2038 WD With Dev + GA1							
Arm A	3.11	16.65	0.77	-15 %	2.41	11.40	0.71	-20 %
Arm B	17.88	61.91	0.98	[Arm D]	92.36	234.48	1.15	[Arm C]
Arm C	9.00	31.40	0.92		102.83	364.47	1.19	
Arm D	74.76	152.28	1.09		6.95	21.20	0.88	

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

"D1 - 2020 WD Surveyed, AM " model duration: 07:45 - 09:15
"D2 - 2020 WD Surveyed, PM" model duration: 15:15 - 16:45
"D3 - 2023 WD No Dev, AM" model duration: 07:45 - 09:15
"D4 - 2023 WD No Dev, PM" model duration: 15:15 - 16:45
"D5 - 2023 WD With Dev, AM" model duration: 07:45 - 09:15
"D6 - 2023 WD With Dev, PM" model duration: 15:15 - 16:45

"D7 - 2028 WD No Dev, AM" model duration: 07:45 - 09:15
"D8 - 2028 WD No Dev, PM" model duration: 15:15 - 16:45
"D9 - 2028 WD With Dev, AM" model duration: 07:45 - 09:15
"D10 - 2028 WD With Dev, PM" model duration: 15:15 - 16:45
"D11 - 2038 WD No Dev, AM" model duration: 07:45 - 09:15
"D12 - 2038 WD No Dev, PM" model duration: 15:15 - 16:45
"D13 - 2038 WD With Dev, AM" model duration: 07:45 - 09:15
"D14 - 2038 WD With Dev, PM" model duration: 15:15 - 16:45
"D15 - 2038 WD With Dev + GA1, AM" model duration: 07:45 - 09:15
"D16 - 2038 WD With Dev + GA1, PM" model duration: 15:15 - 16:45

Run using Junctions 8.0.3.332 at 07/07/2021 12:16:00

File summary

File Description

Title	Baldoyle GA3
Location	
Site Number	9
Date	15/06/2021
Version	Main Assessment
Status	
Identifier	
Client	
Jobnumber	R090
Enumerator	GF
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75		✓	RFC	0.90	36.00	20.00

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

Standard - 2020 WD Surveyed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2020 WD Surveyed, AM	2020 WD Surveyed	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				8.41	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	12	Arm D

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	498.00	100.000
B	ONE HOUR	✓	595.00	100.000
C	ONE HOUR	✓	788.00	100.000
D	ONE HOUR	✓	1103.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	374.92	374.92		
07:45-08:00	B	447.95	447.95		
07:45-08:00	C	593.25	593.25		
07:45-08:00	D	830.40	830.40		
08:00-08:15	A	447.69	447.69		
08:00-08:15	B	534.89	534.89		
08:00-08:15	C	708.40	708.40		
08:00-08:15	D	991.57	991.57		
08:15-08:30	A	548.31	548.31		
08:15-08:30	B	655.11	655.11		
08:15-08:30	C	867.60	867.60		
08:15-08:30	D	1214.43	1214.43		
08:30-08:45	A	548.31	548.31		
08:30-08:45	B	655.11	655.11		
08:30-08:45	C	867.60	867.60		
08:30-08:45	D	1214.43	1214.43		
08:45-09:00	A	447.69	447.69		
08:45-09:00	B	534.89	534.89		
08:45-09:00	C	708.40	708.40		
08:45-09:00	D	991.57	991.57		
09:00-09:15	A	374.92	374.92		
09:00-09:15	B	447.95	447.95		
09:00-09:15	C	593.25	593.25		
09:00-09:15	D	830.40	830.40		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	133.000	287.000	78.000
	B	48.000	0.000	237.000	310.000
	C	225.000	211.000	0.000	352.000
	D	131.000	480.000	492.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.27	0.58	0.16
	B	0.08	0.00	0.40	0.52
	C	0.29	0.27	0.00	0.45
	D	0.12	0.44	0.45	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

	To				
		A	B	C	D
	A	0.000	0.000	0.000	0.000

From	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.50	6.66	1.01	A	456.97	685.46	58.41	5.11	0.65	58.42	5.11
B	0.56	6.87	1.24	A	545.98	818.97	72.92	5.34	0.81	72.93	5.34
C	0.65	7.54	1.80	A	723.08	1084.62	104.62	5.79	1.16	104.63	5.79
D	0.78	10.65	3.51	B	1012.13	1518.20	178.32	7.05	1.98	178.34	7.05

Standard - 2020 WD Surveyed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D2 - 2020 WD Surveyed, PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2020 WD Surveyed, PM	2020 WD Surveyed	PM		ONE HOUR	15:15	16:45	90	15	✓			✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				11.95	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	4	Arm C

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	557.00	100.000
B	ONE HOUR	✓	848.00	100.000
C	ONE HOUR	✓	853.00	100.000
D	ONE HOUR	✓	859.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:30-15:45	A	500.73	500.73		
15:30-15:45	B	762.33	762.33		
15:30-15:45	C	766.83	766.83		
15:30-15:45	D	772.22	772.22		
15:45-16:00	A	613.27	613.27		
15:45-16:00	B	933.67	933.67		
15:45-16:00	C	939.17	939.17		
15:45-16:00	D	945.78	945.78		

16:00-16:15	A	613.27	613.27		
16:00-16:15	B	933.67	933.67		
16:00-16:15	C	939.17	939.17		
16:00-16:15	D	945.78	945.78		
16:15-16:30	A	500.73	500.73		
16:15-16:30	B	762.33	762.33		
16:15-16:30	C	766.83	766.83		
16:15-16:30	D	772.22	772.22		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	19.000	113.000	255.000	170.000
	B	91.000	0.000	212.000	545.000
	C	312.000	206.000	2.000	333.000
	D	167.000	348.000	343.000	1.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.03	0.20	0.46	0.31
	B	0.11	0.00	0.25	0.64
	C	0.37	0.24	0.00	0.39
	D	0.19	0.41	0.40	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.48	5.47	0.93	A	557.00	557.00	44.38	4.78	0.49	56.50	4.42
B	0.77	12.53	3.17	B	848.00	848.00	131.60	9.31	1.46	157.69	8.11
C	0.85	20.56	5.12	C	853.00	853.00	191.44	13.47	2.13	222.25	11.36
D	0.65	7.03	1.83	A	859.00	859.00	83.62	5.84	0.93	104.26	5.29

Standard - 2023 WD No Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2023 WD No Dev, AM	2023 WD No Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				14.12	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	1	Arm D

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	540.00	100.000
B	ONE HOUR	✓	765.00	100.000
C	ONE HOUR	✓	855.00	100.000
D	ONE HOUR	✓	1219.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	406.54	406.54		
07:45-08:00	B	575.93	575.93		
07:45-08:00	C	643.69	643.69		
07:45-08:00	D	917.73	917.73		
08:00-08:15	A	485.45	485.45		
08:00-08:15	B	687.72	687.72		
08:00-08:15	C	768.63	768.63		
08:00-08:15	D	1095.86	1095.86		
08:15-08:30	A	594.55	594.55		
08:15-08:30	B	842.28	842.28		
08:15-08:30	C	941.37	941.37		
08:15-08:30	D	1342.14	1342.14		
08:30-08:45	A	594.55	594.55		
08:30-08:45	B	842.28	842.28		
08:30-08:45	C	941.37	941.37		
08:30-08:45	D	1342.14	1342.14		
08:45-09:00	A	485.45	485.45		
08:45-09:00	B	687.72	687.72		
08:45-09:00	C	768.63	768.63		
08:45-09:00	D	1095.86	1095.86		
09:00-09:15	A	406.54	406.54		
09:00-09:15	B	575.93	575.93		
09:00-09:15	C	643.69	643.69		
09:00-09:15	D	917.73	917.73		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	157.000	301.000	82.000
	B	62.000	0.000	305.000	398.000
	C	236.000	249.000	0.000	370.000
	D	137.000	566.000	516.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.29	0.56	0.15
	B	0.08	0.00	0.40	0.52
	C	0.28	0.29	0.00	0.43
	D	0.11	0.46	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.60	9.00	1.46	A	495.51	743.27	78.35	6.32	0.87	78.35	6.32
B	0.73	11.52	2.63	B	701.98	1052.97	134.35	7.66	1.49	134.36	7.66
C	0.73	10.57	2.71	B	784.56	1176.84	143.75	7.33	1.60	143.77	7.33
D	0.89	20.51	7.25	C	1118.58	1677.86	300.68	10.75	3.34	300.71	10.75

Standard - 2023 WD No Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D4 - 2023 WD No Dev, PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship

2023 WD No Dev, PM	2023 WD No Dev	PM		ONE HOUR	15:15	16:45	90	15	✓			✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				23.82	C

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-4	Arm C

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default	Vehicle Mix	Vehicle Mix	Vehicle Mix	Vehicle Mix	PCU Factor for	Default	Estimate from	Turning	Turning	Turning

Vehicle Mix	Varies Over Time	Varies Over Turn	Varies Over Entry	Source	a HV (PCU)	Turning Proportions	entry/exit counts	Proportions Vary Over Time	Proportions Vary Over Turn	Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	596.00	100.000
B	ONE HOUR	✓	956.00	100.000
C	ONE HOUR	✓	917.00	100.000
D	ONE HOUR	✓	941.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:30-15:45	A	535.79	535.79		
15:30-15:45	B	859.42	859.42		
15:30-15:45	C	824.36	824.36		
15:30-15:45	D	845.94	845.94		
15:45-16:00	A	656.21	656.21		
15:45-16:00	B	1052.58	1052.58		
15:45-16:00	C	1009.64	1009.64		
15:45-16:00	D	1036.06	1036.06		
16:00-16:15	A	656.21	656.21		
16:00-16:15	B	1052.58	1052.58		
16:00-16:15	C	1009.64	1009.64		
16:00-16:15	D	1036.06	1036.06		
16:15-16:30	A	535.79	535.79		
16:15-16:30	B	859.42	859.42		
16:15-16:30	C	824.36	824.36		
16:15-16:30	D	845.94	845.94		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	20.000	130.000	268.000	178.000
	B	102.000	0.000	239.000	615.000
	C	327.000	239.000	2.000	349.000
	D	176.000	404.000	360.000	1.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.03	0.22	0.45	0.30
	B	0.11	0.00	0.25	0.64
	C	0.36	0.26	0.00	0.38
	D	0.19	0.43	0.38	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000

	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.54	6.56	1.18	A	596.00	596.00	55.15	5.55	0.61	69.15	5.06
B	0.88	23.96	6.63	C	956.00	956.00	235.43	14.78	2.62	269.39	12.28
C	0.96	49.80	13.20	E	917.00	917.00	385.38	25.22	4.28	423.84	20.15
D	0.73	9.29	2.62	A	941.00	941.00	113.96	7.27	1.27	138.93	6.44

Standard - 2023 WD With Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2023 WD With Dev, AM	2023 WD With Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				15.83	C

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	0	Arm D

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	542.00	100.000
B	ONE HOUR	✓	832.00	100.000
C	ONE HOUR	✓	859.00	100.000
D	ONE HOUR	✓	1228.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)

07:45-08:00	A	408.05	408.05		
07:45-08:00	B	626.37	626.37		
07:45-08:00	C	646.70	646.70		
07:45-08:00	D	924.50	924.50		
08:00-08:15	A	487.25	487.25		
08:00-08:15	B	747.95	747.95		
08:00-08:15	C	772.22	772.22		
08:00-08:15	D	1103.95	1103.95		
08:15-08:30	A	596.75	596.75		
08:15-08:30	B	916.05	916.05		
08:15-08:30	C	945.78	945.78		
08:15-08:30	D	1352.05	1352.05		
08:30-08:45	A	596.75	596.75		
08:30-08:45	B	916.05	916.05		
08:30-08:45	C	945.78	945.78		
08:30-08:45	D	1352.05	1352.05		
08:45-09:00	A	487.25	487.25		
08:45-09:00	B	747.95	747.95		
08:45-09:00	C	772.22	772.22		
08:45-09:00	D	1103.95	1103.95		
09:00-09:15	A	408.05	408.05		
09:00-09:15	B	626.37	626.37		
09:00-09:15	C	646.70	646.70		
09:00-09:15	D	924.50	924.50		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	159.000	301.000	82.000
	B	67.000	0.000	332.000	433.000
	C	236.000	253.000	0.000	370.000
	D	137.000	575.000	516.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.29	0.56	0.15
	B	0.08	0.00	0.40	0.52
	C	0.27	0.29	0.00	0.43
	D	0.11	0.47	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.61	9.24	1.51	A	497.35	746.02	80.06	6.44	0.89	80.06	6.44
B	0.79	14.99	3.69	B	763.46	1145.19	173.85	9.11	1.93	173.87	9.11
C	0.75	11.52	2.96	B	788.23	1182.35	153.10	7.77	1.70	153.12	7.77
D	0.90	22.31	7.92	C	1126.83	1690.25	319.30	11.33	3.55	319.34	11.34

Standard - 2023 WD With Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D6 - 2023 WD With Dev, PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2023 WD With Dev, PM	2023 WD With Dev	PM		ONE HOUR	15:15	16:45	90	15	✓			✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				30.15	D

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-6	Arm C

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	604.00	100.000
B	ONE HOUR	✓	991.00	100.000
C	ONE HOUR	✓	931.00	100.000
D	ONE HOUR	✓	964.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:30-15:45	A	542.98	542.98		
15:30-15:45	B	890.89	890.89		
15:30-15:45	C	836.95	836.95		
15:30-15:45	D	866.62	866.62		
15:45-16:00	A	665.02	665.02		
15:45-16:00	B	1091.11	1091.11		
15:45-16:00	C	1025.05	1025.05		
15:45-16:00	D	1061.38	1061.38		
16:00-16:15	A	665.02	665.02		
16:00-16:15	B	1091.11	1091.11		
16:00-16:15	C	1025.05	1025.05		
16:00-16:15	D	1061.38	1061.38		
16:15-16:30	A	542.98	542.98		
16:15-16:30	B	890.89	890.89		
16:15-16:30	C	836.95	836.95		
16:15-16:30	D	866.62	866.62		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	20.000	138.000	268.000	178.000
	B	106.000	0.000	248.000	637.000
	C	327.000	253.000	2.000	349.000
	D	176.000	427.000	360.000	1.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.03	0.23	0.44	0.29
	B	0.11	0.00	0.25	0.64
	C	0.35	0.27	0.00	0.37
	D	0.18	0.44	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.56	6.96	1.27	A	604.00	604.00	58.65	5.83	0.65	73.19	5.28
B	0.91	30.84	8.76	D	991.00	991.00	290.65	17.60	3.23	327.39	14.40
C	0.98	65.15	18.14	F	931.00	931.00	488.95	31.51	5.43	529.68	24.80
D	0.75	10.16	2.93	B	964.00	964.00	125.33	7.80	1.39	151.72	6.86

Standard - 2028 WD No Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout	Description	Include In	Use Specific	Specific	Locked	Network Flow	Network Capacity	Reason For

	Capacity Model		Report	Demand Set(s)	Demand Set(s)		Scaling Factor (%)	Scaling Factor (%)	Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2028 WD No Dev, AM	2028 WD No Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				27.26	D

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-7	Arm D

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	583.00	100.000
B	ONE HOUR	✓	818.00	100.000
C	ONE HOUR	✓	924.00	100.000
D	ONE HOUR	✓	1315.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	438.91	438.91		
07:45-08:00	B	615.83	615.83		
07:45-08:00	C	695.64	695.64		
07:45-08:00	D	990.00	990.00		
08:00-08:15	A	524.11	524.11		
08:00-08:15	B	735.37	735.37		
08:00-08:15	C	830.66	830.66		
08:00-08:15	D	1182.16	1182.16		
08:15-08:30	A	641.89	641.89		
08:15-08:30	B	900.63	900.63		
08:15-08:30	C	1017.34	1017.34		
08:15-08:30	D	1447.84	1447.84		
08:30-08:45	A	641.89	641.89		
08:30-08:45	B	900.63	900.63		
08:30-08:45	C	1017.34	1017.34		
08:30-08:45	D	1447.84	1447.84		
08:45-09:00	A	524.11	524.11		
08:45-09:00	B	735.37	735.37		
08:45-09:00	C	830.66	830.66		
08:45-09:00	D	1182.16	1182.16		
09:00-09:15	A	438.91	438.91		
09:00-09:15	B	615.83	615.83		
09:00-09:15	C	695.64	695.64		
09:00-09:15	D	990.00	990.00		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	168.000	326.000	89.000
	B	66.000	0.000	326.000	426.000
	C	256.000	267.000	0.000	401.000
	D	148.000	608.000	559.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.29	0.56	0.15
	B	0.08	0.00	0.40	0.52
	C	0.28	0.29	0.00	0.43
	D	0.11	0.46	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.69	12.20	2.12	B	534.97	802.46	104.47	7.81	1.16	104.48	7.81
B	0.81	16.80	4.04	C	750.61	1125.92	184.33	9.82	2.05	184.35	9.82
C	0.81	14.82	4.05	B	847.88	1271.82	194.48	9.17	2.16	194.50	9.18
D	0.98	49.18	19.04	E	1206.67	1810.00	583.84	19.35	6.49	583.89	19.36

Standard - 2028 WD No Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D8 - 2028 WD No Dev, PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2028 WD No Dev, PM	2028 WD No Dev	PM		ONE HOUR	15:15	16:45	90	15	✓			✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				59.70	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-12	Arm C

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	645.00	100.000
B	ONE HOUR	✓	1031.00	100.000
C	ONE HOUR	✓	993.00	100.000
D	ONE HOUR	✓	1015.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:30-15:45	A	579.84	579.84		
15:30-15:45	B	926.85	926.85		
15:30-15:45	C	892.69	892.69		
15:30-15:45	D	912.46	912.46		
15:45-16:00	A	710.16	710.16		
15:45-16:00	B	1135.15	1135.15		
15:45-16:00	C	1093.31	1093.31		
15:45-16:00	D	1117.54	1117.54		
16:00-16:15	A	710.16	710.16		
16:00-16:15	B	1135.15	1135.15		
16:00-16:15	C	1093.31	1093.31		
16:00-16:15	D	1117.54	1117.54		
16:15-16:30	A	579.84	579.84		
16:15-16:30	B	926.85	926.85		
16:15-16:30	C	892.69	892.69		
16:15-16:30	D	912.46	912.46		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	22.000	140.000	290.000	193.000
	B	110.000	0.000	258.000	663.000
	C	355.000	257.000	2.000	379.000
	D	190.000	434.000	390.000	1.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.03	0.22	0.45	0.30
	B	0.11	0.00	0.25	0.64
	C	0.36	0.26	0.00	0.38
	D	0.19	0.43	0.38	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.61	7.91	1.54	A	645.00	645.00	70.01	6.51	0.78	86.41	5.84
B	0.98	62.30	19.15	F	1031.00	1031.00	517.90	30.14	5.75	560.32	23.69
C	1.07	139.27	46.39	F	993.00	993.00	1203.64	72.73	13.37	1255.00	55.09
D	0.79	12.13	3.66	B	1015.00	1015.00	154.99	9.16	1.72	184.87	7.94

Standard - 2028 WD With Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2028 WD With Dev, AM	2028 WD With Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				31.64	D

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-8	Arm D

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	

D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	586.00	100.000
B	ONE HOUR	✓	884.00	100.000
C	ONE HOUR	✓	928.00	100.000
D	ONE HOUR	✓	1324.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	441.17	441.17		
07:45-08:00	B	665.52	665.52		
07:45-08:00	C	698.65	698.65		
07:45-08:00	D	996.78	996.78		

08:00-08:15	A	526.80	526.80		
08:00-08:15	B	794.70	794.70		
08:00-08:15	C	834.25	834.25		
08:00-08:15	D	1190.25	1190.25		
08:15-08:30	A	645.20	645.20		
08:15-08:30	B	973.30	973.30		
08:15-08:30	C	1021.75	1021.75		
08:15-08:30	D	1457.75	1457.75		
08:30-08:45	A	645.20	645.20		
08:30-08:45	B	973.30	973.30		
08:30-08:45	C	1021.75	1021.75		
08:30-08:45	D	1457.75	1457.75		
08:45-09:00	A	526.80	526.80		
08:45-09:00	B	794.70	794.70		
08:45-09:00	C	834.25	834.25		
08:45-09:00	D	1190.25	1190.25		
09:00-09:15	A	441.17	441.17		
09:00-09:15	B	665.52	665.52		
09:00-09:15	C	698.65	698.65		
09:00-09:15	D	996.78	996.78		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	171.000	326.000	89.000
	B	71.000	0.000	353.000	460.000
	C	256.000	271.000	0.000	401.000
	D	148.000	617.000	559.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.29	0.56	0.15
	B	0.08	0.00	0.40	0.52
	C	0.28	0.29	0.00	0.43
	D	0.11	0.47	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay

											(s)
A	0.69	12.57	2.20	B	537.72	806.59	107.44	7.99	1.19	107.45	7.99
B	0.87	24.44	6.24	C	811.17	1216.76	252.72	12.46	2.81	252.74	12.46
C	0.83	16.64	4.54	C	851.55	1277.32	210.41	9.88	2.34	210.43	9.88
D	0.99	55.40	21.94	F	1214.93	1822.39	646.29	21.28	7.18	646.34	21.28

Standard - 2028 WD With Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D10 - 2028 WD With Dev, PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2028 WD With Dev, PM	2028 WD With Dev	PM		ONE HOUR	15:15	16:45	90	15	✓			✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				73.97	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-13	Arm C

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	

B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	653.00	100.000
B	ONE HOUR	✓	1066.00	100.000
C	ONE HOUR	✓	1007.00	100.000
D	ONE HOUR	✓	1039.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:30-15:45	A	587.03	587.03		
15:30-15:45	B	958.31	958.31		
15:30-15:45	C	905.27	905.27		
15:30-15:45	D	934.04	934.04		
15:45-16:00	A	718.97	718.97		
15:45-16:00	B	1173.69	1173.69		
15:45-16:00	C	1108.73	1108.73		
15:45-16:00	D	1143.96	1143.96		
16:00-16:15	A	718.97	718.97		
16:00-16:15	B	1173.69	1173.69		
16:00-16:15	C	1108.73	1108.73		
16:00-16:15	D	1143.96	1143.96		
16:15-16:30	A	587.03	587.03		
16:15-16:30	B	958.31	958.31		
16:15-16:30	C	905.27	905.27		
16:15-16:30	D	934.04	934.04		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	22.000	148.000	290.000	193.000
	B	114.000	0.000	267.000	685.000
	C	355.000	271.000	2.000	379.000
	D	190.000	458.000	390.000	1.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.03	0.23	0.44	0.30
	B	0.11	0.00	0.25	0.64
	C	0.35	0.27	0.00	0.38
	D	0.18	0.44	0.38	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.63	8.46	1.67	A	653.00	653.00	74.81	6.87	0.83	91.96	6.14
B	1.02	86.48	29.06	F	1066.00	1066.00	730.88	41.14	8.12	777.08	31.78
C	1.10	165.67	56.34	F	1007.00	1007.00	1569.53	93.52	17.44	1651.51	71.49
D	0.81	13.42	4.13	B	1039.00	1039.00	171.70	9.92	1.91	203.89	8.55

Standard - 2038 WD No Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY						100.000	100.000	

			✓								

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2038 WD No Dev, AM	2038 WD No Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				60.02	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-13	Arm D

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	627.00	100.000
B	ONE HOUR	✓	868.00	100.000
C	ONE HOUR	✓	992.00	100.000
D	ONE HOUR	✓	1411.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	472.04	472.04		
07:45-08:00	B	653.48	653.48		
07:45-08:00	C	746.83	746.83		
07:45-08:00	D	1062.27	1062.27		
08:00-08:15	A	563.66	563.66		
08:00-08:15	B	780.31	780.31		
08:00-08:15	C	891.79	891.79		
08:00-08:15	D	1268.46	1268.46		
08:15-08:30	A	690.34	690.34		
08:15-08:30	B	955.69	955.69		
08:15-08:30	C	1092.21	1092.21		
08:15-08:30	D	1553.54	1553.54		
08:30-08:45	A	690.34	690.34		
08:30-08:45	B	955.69	955.69		
08:30-08:45	C	1092.21	1092.21		
08:30-08:45	D	1553.54	1553.54		
08:45-09:00	A	563.66	563.66		
08:45-09:00	B	780.31	780.31		
08:45-09:00	C	891.79	891.79		
08:45-09:00	D	1268.46	1268.46		
09:00-09:15	A	472.04	472.04		
09:00-09:15	B	653.48	653.48		
09:00-09:15	C	746.83	746.83		
09:00-09:15	D	1062.27	1062.27		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	180.000	351.000	96.000
	B	70.000	0.000	346.000	452.000
	C	275.000	286.000	0.000	431.000
	D	160.000	650.000	601.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.29	0.56	0.15
	B	0.08	0.00	0.40	0.52
	C	0.28	0.29	0.00	0.43
	D	0.11	0.46	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.76	15.95	2.96	C	575.35	863.02	143.07	9.95	1.59	143.08	9.95
B	0.88	25.88	6.48	D	796.49	1194.74	264.92	13.30	2.94	264.95	13.31
C	0.88	23.76	6.81	C	910.28	1365.41	281.48	12.37	3.13	281.52	12.37
D	1.07	126.11	60.39	F	1294.76	1942.14	1627.28	50.27	18.08	1627.36	50.28

Standard - 2038 WD No Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D12 - 2038 WD No Dev, PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2038 WD No Dev, PM	2038 WD No Dev	PM		ONE HOUR	15:15	16:45	90	15	✓			✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				131.91	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-18	Arm C

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	693.00	100.000
B	ONE HOUR	✓	1104.00	100.000
C	ONE HOUR	✓	1065.00	100.000
D	ONE HOUR	✓	1090.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:30-15:45	A	622.99	622.99		
15:30-15:45	B	992.47	992.47		
15:30-15:45	C	957.41	957.41		
15:30-15:45	D	979.89	979.89		
15:45-16:00	A	763.01	763.01		
15:45-16:00	B	1215.53	1215.53		
15:45-16:00	C	1172.59	1172.59		
15:45-16:00	D	1200.11	1200.11		
16:00-16:15	A	763.01	763.01		
16:00-16:15	B	1215.53	1215.53		
16:00-16:15	C	1172.59	1172.59		
16:00-16:15	D	1200.11	1200.11		
16:15-16:30	A	622.99	622.99		
16:15-16:30	B	992.47	992.47		
16:15-16:30	C	957.41	957.41		
16:15-16:30	D	979.89	979.89		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	23.000	150.000	312.000	208.000
	B	118.000	0.000	276.000	710.000
	C	382.000	274.000	2.000	407.000
	D	205.000	464.000	420.000	1.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.03	0.22	0.45	0.30
	B	0.11	0.00	0.25	0.64
	C	0.36	0.26	0.00	0.38
	D	0.19	0.43	0.39	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

	To				
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.68	9.85	2.05	A	693.00	693.00	89.23	7.73	0.99	108.94	6.85
B	1.09	162.52	60.94	F	1104.00	1104.00	1604.17	87.18	17.82	1663.10	65.67
C	1.16	297.60	87.57	F	1065.00	1065.00	2747.69	154.80	30.53	3335.54	136.53
D	0.85	16.61	5.31	C	1090.00	1090.00	210.71	11.60	2.34	250.17	10.00

Standard - 2038 WD With Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2038 WD With Dev, AM	2038 WD With Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				68.46	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-14	Arm D

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	629.00	100.000
B	ONE HOUR	✓	935.00	100.000
C	ONE HOUR	✓	995.00	100.000
D	ONE HOUR	✓	1419.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	473.54	473.54		
07:45-08:00	B	703.92	703.92		
07:45-08:00	C	749.09	749.09		
07:45-08:00	D	1068.30	1068.30		

08:00-08:15	A	565.46	565.46		
08:00-08:15	B	840.55	840.55		
08:00-08:15	C	894.48	894.48		
08:00-08:15	D	1275.65	1275.65		
08:15-08:30	A	692.54	692.54		
08:15-08:30	B	1029.45	1029.45		
08:15-08:30	C	1095.52	1095.52		
08:15-08:30	D	1562.35	1562.35		
08:30-08:45	A	692.54	692.54		
08:30-08:45	B	1029.45	1029.45		
08:30-08:45	C	1095.52	1095.52		
08:30-08:45	D	1562.35	1562.35		
08:45-09:00	A	565.46	565.46		
08:45-09:00	B	840.55	840.55		
08:45-09:00	C	894.48	894.48		
08:45-09:00	D	1275.65	1275.65		
09:00-09:15	A	473.54	473.54		
09:00-09:15	B	703.92	703.92		
09:00-09:15	C	749.09	749.09		
09:00-09:15	D	1068.30	1068.30		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	182.000	351.000	96.000
	B	75.000	0.000	373.000	487.000
	C	275.000	289.000	0.000	431.000
	D	160.000	658.000	601.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.29	0.56	0.15
	B	0.08	0.00	0.40	0.52
	C	0.28	0.29	0.00	0.43
	D	0.11	0.46	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay
A	0.76	16.15	3.00	C	577.18	865.77	145.99	10.12	1.62	146.01	10.12
B	0.94	44.03	11.83	E	857.97	1286.96	405.52	18.91	4.51	405.57	18.91
C	0.90	27.81	7.95	D	913.03	1369.54	312.04	13.67	3.47	312.08	13.67
D	1.08	136.24	65.97	F	1302.10	1953.15	1818.88	55.88	20.21	1818.97	55.88

Standard - 2038 WD With Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D14 - 2038 WD With Dev, PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2038 WD With Dev, PM	2038 WD With Dev	PM		ONE HOUR	15:15	16:45	90	15	✓			✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				154.40	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-19	Arm C

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	

B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	701.00	100.000
B	ONE HOUR	✓	1139.00	100.000
C	ONE HOUR	✓	1079.00	100.000
D	ONE HOUR	✓	1114.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:30-15:45	A	630.18	630.18		
15:30-15:45	B	1023.94	1023.94		
15:30-15:45	C	970.00	970.00		
15:30-15:45	D	1001.46	1001.46		
15:45-16:00	A	771.82	771.82		
15:45-16:00	B	1254.06	1254.06		
15:45-16:00	C	1188.00	1188.00		
15:45-16:00	D	1226.54	1226.54		
16:00-16:15	A	771.82	771.82		
16:00-16:15	B	1254.06	1254.06		
16:00-16:15	C	1188.00	1188.00		
16:00-16:15	D	1226.54	1226.54		
16:15-16:30	A	630.18	630.18		
16:15-16:30	B	1023.94	1023.94		
16:15-16:30	C	970.00	970.00		
16:15-16:30	D	1001.46	1001.46		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	23.000	158.000	312.000	208.000
	B	122.000	0.000	285.000	732.000
	C	382.000	288.000	2.000	407.000
	D	205.000	488.000	420.000	1.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.03	0.23	0.45	0.30
	B	0.11	0.00	0.25	0.64
	C	0.35	0.27	0.00	0.38
	D	0.18	0.44	0.38	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.70	10.72	2.25	B	701.00	701.00	96.31	8.24	1.07	116.82	7.26
B	1.13	202.94	78.64	F	1139.00	1139.00	2192.27	115.48	24.36	2329.74	89.16
C	1.17	336.22	96.48	F	1079.00	1079.00	3062.45	170.29	34.03	3950.13	159.58
D	0.87	19.07	6.19	C	1114.00	1114.00	238.06	12.82	2.65	280.10	10.96

Standard - 2038 WD With Dev + GA1, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY						100.000	100.000	

			✓						

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2038 WD With Dev + GA1, AM	2038 WD With Dev + GA1	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				79.29	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-15	Arm D

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	633.00	100.000
B	ONE HOUR	✓	974.00	100.000
C	ONE HOUR	✓	1001.00	100.000
D	ONE HOUR	✓	1432.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	476.56	476.56		
07:45-08:00	B	733.28	733.28		
07:45-08:00	C	753.61	753.61		
07:45-08:00	D	1078.08	1078.08		
08:00-08:15	A	569.05	569.05		
08:00-08:15	B	875.61	875.61		
08:00-08:15	C	899.88	899.88		
08:00-08:15	D	1287.34	1287.34		
08:15-08:30	A	696.95	696.95		
08:15-08:30	B	1072.39	1072.39		
08:15-08:30	C	1102.12	1102.12		
08:15-08:30	D	1576.66	1576.66		
08:30-08:45	A	696.95	696.95		
08:30-08:45	B	1072.39	1072.39		
08:30-08:45	C	1102.12	1102.12		
08:30-08:45	D	1576.66	1576.66		
08:45-09:00	A	569.05	569.05		
08:45-09:00	B	875.61	875.61		
08:45-09:00	C	899.88	899.88		
08:45-09:00	D	1287.34	1287.34		
09:00-09:15	A	476.56	476.56		
09:00-09:15	B	733.28	733.28		
09:00-09:15	C	753.61	753.61		
09:00-09:15	D	1078.08	1078.08		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	186.000	351.000	96.000
	B	79.000	0.000	388.000	507.000
	C	275.000	295.000	0.000	431.000
	D	160.000	671.000	601.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.29	0.55	0.15
	B	0.08	0.00	0.40	0.52
	C	0.27	0.29	0.00	0.43
	D	0.11	0.47	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.77	16.65	3.11	C	580.85	871.28	151.15	10.41	1.68	151.16	10.41
B	0.98	61.91	17.88	F	893.76	1340.64	547.87	24.52	6.09	547.92	24.52
C	0.92	31.40	9.00	D	918.54	1377.80	340.45	14.83	3.78	340.49	14.83
D	1.09	152.28	74.76	F	1314.03	1971.04	2142.98	65.23	23.81	2143.08	65.24

Standard - 2038 WD With Dev + GA1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D16 - 2038 WD With Dev + GA1, PM	Time results are shown for central hour only. (Model is run for a 90 minute period.)

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Standard	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2038 WD With Dev + GA1, PM	2038 WD With Dev + GA1	PM		ONE HOUR	15:15	16:45	90	15	✓			✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
Hole in the Wall Road Roundabout	Roundabout	A,B,C,D				171.62	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-20	Arm C

Arms

Arms

Arm	Name	Description
A	Hole in the Wall Road	
B	Grange Road (R809) East	
C	Grange Road (R809) South	
D	Clarehall Avenue (R139)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	6.00	6.80	3.40	21.00	57.00	46.00	
B	5.30	6.70	5.50	19.00	57.00	51.00	
C	4.80	6.30	4.20	23.00	57.00	42.00	
D	6.20	6.60	16.00	16.00	57.00	45.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.586	1852.224
B		(calculated)	(calculated)	0.553	1700.886
C		(calculated)	(calculated)	0.548	1607.736
D		(calculated)	(calculated)	0.585	1862.862

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	706.00	100.000
B	ONE HOUR	✓	1165.00	100.000
C	ONE HOUR	✓	1089.00	100.000
D	ONE HOUR	✓	1131.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:30-15:45	A	634.68	634.68		
15:30-15:45	B	1047.31	1047.31		
15:30-15:45	C	978.99	978.99		
15:30-15:45	D	1016.75	1016.75		
15:45-16:00	A	777.32	777.32		
15:45-16:00	B	1282.69	1282.69		
15:45-16:00	C	1199.01	1199.01		
15:45-16:00	D	1245.25	1245.25		
16:00-16:15	A	777.32	777.32		
16:00-16:15	B	1282.69	1282.69		
16:00-16:15	C	1199.01	1199.01		
16:00-16:15	D	1245.25	1245.25		
16:15-16:30	A	634.68	634.68		
16:15-16:30	B	1047.31	1047.31		
16:15-16:30	C	978.99	978.99		
16:15-16:30	D	1016.75	1016.75		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	23.000	163.000	312.000	208.000
	B	124.000	0.000	292.000	749.000
	C	382.000	298.000	2.000	407.000
	D	205.000	505.000	420.000	1.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.03	0.23	0.44	0.29
	B	0.11	0.00	0.25	0.64
	C	0.35	0.27	0.00	0.37
	D	0.18	0.45	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A	0.71	11.40	2.41	B	706.00	706.00	101.67	8.64	1.13	122.66	7.57
B	1.15	234.48	92.36	F	1165.00	1165.00	2652.32	136.60	29.47	2916.56	109.13
C	1.19	364.47	102.83	F	1089.00	1089.00	3290.08	181.27	36.56	4427.16	177.21
D	0.88	21.20	6.95	C	1131.00	1131.00	260.69	13.83	2.90	304.19	11.72

Appendix E

GoCar Letter of Intent

CS CONSULTING
GROUP

Richmond Homes,
Castle Vernon,
Clontarf,
Dublin 3

Dublin, 24th June 2021

To Whom It May Concern,

This is a letter to confirm that GoCar intends to provide ten (10) shared car sharing vehicles in the proposed residential development at Baldoyle Growth Area 3. GoCar representatives have discussed the project with representatives of CS Consulting, who are the Engineers for the Project, and are excited to provide a car sharing service at this location.

It is understood that these vehicles will be provided exclusively for use by residents of the new development. GoCar will work with the eventual managers of the property to make these arrangements and to promote the service within the development.

GoCar is Ireland's leading car sharing service with over 60,000 members and over 800 cars and vans on fleet. Each GoCar which is placed in a community has the potential to replace the journeys of up to 15 private cars. The Department of Housing's Design Standards for New Apartments - Guidelines for Planning Authorities 2018 outline: "For all types of location, where it is sought to eliminate or reduce car parking provision, it is necessary to ensure... provision is also to be made for alternative mobility solutions including facilities for car sharing club vehicles."

Carsharing is a sustainable service. By allowing multiple people to use the same vehicle at different times, car sharing reduces car ownership, car dependency, congestion, noise and air pollution. It frees up land which would otherwise be used for additional parking spaces. Most GoCar users only use a car when necessary, and walk and use public transport more often than car owners.

By having GoCar car sharing vehicles in a development such as this, the residents therein will have access to pay-as-you-go driving, in close proximity to their homes, which will increase usership of the service.

I trust that this information is satisfactory. For any queries, please do not hesitate to contact me.

Rob Kearns
Head of Growth
GoCar Carsharing Ltd
M: 083 822 3924
E: rob.kearns@gocar.ie

Appendix F

Supplementary Assessment

CS CONSULTING
GROUP

CS CONSULTING GROUP

HEAD OFFICE: 19-22 Dame Street, Dublin 2, D02 E267, Ireland

T | +353 1 5480863 | E | info@csconsulting.ie | www.csconsulting.ie

TECHNICAL NOTE

Date: 17.06.2021

Re: R090 Baldoyle Stapolin GA3 SHD

Planning Ref: ABP-308743-20

Stress Test of Junction 1

At the request of Fingal County Council, a further 'stress test' assessment has been carried out of Junction 1 (see Figure 1 for junction location). This represents an extreme worst-case scenario whereby:

- existing traffic currently travelling to/from Red Arches Road via Coast Road is redistributed via the new link such that approx. 60% of this traffic instead travels to/from Longfield Road via Grange Road (through Junction 1);
- all existing traffic currently travelling to/from Longfield Road via Grange Road (through Junction 1) continues to do so, despite a new link to Coast Road;
- all traffic generated by the subject proposed development and the 3no. identified committed developments travels to/from Longfield Road via Grange Road (through Junction 1).

At Junction 1, all such traffic has been distributed in accordance with the existing directional splits in each peak hour period, as recorded by the traffic survey.

The results of this stress test assessment at Junction 1 are given in Table 1, where:

- Arm A = Longfield Road (north)
- Arm B = Grange Road (east)
- Arm C = Grange Rise (south)
- Arm D = Grange Road (west)

Figure 1: Surveyed junction locations

Under this assessment scenario:

- the right-turning traffic stream on the western approach would exceed effective capacity during the AM peak in the year 2023 and would exceed ultimate capacity during the AM peak by the year 2028;
- the left-turn/straight-ahead traffic stream on the western approach would exceed effective capacity during the PM peak in the year 2023 but would remain within ultimate capacity past the year 2038;
- the right-turning traffic stream on the eastern approach would exceed effective capacity during the PM peak in the year 2023 and would exceed ultimate capacity during the PM peak by the year 2038;
- the left-turn/straight-ahead traffic stream on the eastern approach would exceed effective capacity during both peak hour periods by the year 2038 but would remain within ultimate capacity;
- the right-turn traffic stream on the northern approach would exceed effective capacity during the AM peak by the year 2028 but would remain within ultimate capacity past the year 2038;

- the right-turn/straight-ahead traffic stream on the southern approach would exceed effective capacity during the AM peak by the year 2038 but would remain within ultimate capacity.

Table 1 – Junction 1 Stress Test Results

Junction Approach Arm and Traffic Stream*		Degree of Saturation (%)		Mean Maximum Queue (PCU)		Maximum Queue at End of Red (PCU)		Mean Delay per Vehicle (seconds)		Practical Reserve Capacity (%)	
Arm	Stream	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
2023 – opening year assessment – WITH subject development in place											
A	S / L	75	58	16	8	14	7	75	82	20	54
	R	88	67	22	9	18	8	90	85	3	34
B	S / L	81	80	27	23	19	18	58	65	12	13
	R	71	92	7	12	6	11	104	154	26	-2
C	L	35	67	5	18	5	14	67	56	158	35
	S / R	80	64	5	11	5	9	143	77	13	40
D	S / L	81	92	28	34	19	24	56	80	12	-2
	R	97	45	26	8	16	5	122	50	-7	101
2028 assessment – WITH subject development in place											
A	S / L	78	62	17	8	14	7	78	85	16	45
	R	91	70	23	10	19	9	99	89	-1	28
B	S / L	89	87	33	27	22	20	70	73	1	4
	R	72	99	7	14	6	13	105	205	24	-9
C	L	36	71	5	20	5	15	66	58	152	26
	S / R	85	66	6	11	6	10	160	77	6	36
D	S / L	84	96	30	40	21	28	59	97	7	-7
	R	104	50	35	9	24	5	182	53	-13	82
2038 – design year assessment – WITH subject development in place											
A	S / L	83	65	18	8	15	7	86	88	9	38
	R	96	74	27	10	22	9	126	94	-7	21
B	S / L	96	92	41	31	29	23	94	83	-7	-2
	R	74	107	7	17	7	17	107	274	22	-16
C	L	36	77	6	23	5	17	64	61	147	18
	S / R	91	70	7	12	7	11	187	79	-1	28
D	S / L	87	99	33	45	22	32	61	112	4	-9
	R	110	54	46	10	34	6	246	55	-18	67

* S = straight ahead, L = left turn, R = right turn

TRANSYT 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Stress Test 20210616.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 12:05:21

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2023 WD With Dev				
Network	D5	852.34	57.65	97% (TS 1D/2)	1 (6%)

A1 -
D5 - 2023 WD With Dev, AM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	329	329
	2	395	395
1Ax	1	357	357
1B	1	581	581
	2	121	121
1Bx	1	717	717
1C	1	115	115
	2	80	80
1Cx	1	626	626
1D	1	596	596
	2	397	397
1Dx	1	914	914

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	277	52	395
	1-2	121	0	177	404
	1-3	17	63	0	115
	1-4	219	377	397	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	115
	2		1-3	1-1	1C/2, 1Ax/1	Normal	17
	3		1-3	1-2	1C/2, 1Bx/1	Normal	63
	4		1-4	1-1	1D/1, 1Ax/1	Normal	219
	5		1-4	1-2	1D/1, 1Bx/1	Normal	377
	6		1-4	1-3	1D/2, 1Cx/1	Normal	397
	7		1-1	1-2	1A/1, 1Bx/1	Normal	277
	8		1-1	1-3	1A/1, 1Cx/1	Normal	52
	9		1-1	1-4	1A/2, 1Dx/1	Normal	395
	10		1-2	1-4	1B/1, 1Dx/1	Normal	404
	11		1-2	1-3	1B/1, 1Cx/1	Normal	177
	12		1-2	1-1	1B/2, 1Ax/1	Normal	121

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	3, 58, 81, 95, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

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From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	3	16	1	1
	2	✓	2	C,G,H	8	58	50	1	1
	3	✓	3	E,G,H	63	81	18	1	1
	4	✓	4	E,F	86	95	9	1	1
	5	✓	5	A,B	100	143	43	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

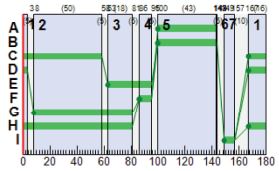
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	100	143	43
	B	1	✓	100	144	44
	C	1	✓	167	58	71
	D	1	✓	167	3	16
	E	1	✓	63	95	32
	F	1	✓	86	95	9
	G	1	✓	8	81	73
	H	1	✓	167	81	94
	I	1	✓	149	157	8

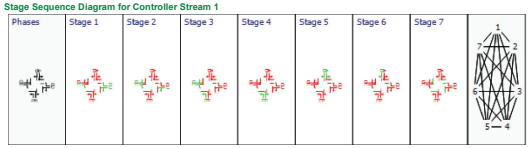
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	100	143	43
1A	2	1	1	B	100	144	44
1B	1	1	1	C	167	58	71
1B	2	1	1	D	167	3	16
1C	1	1	1	E	63	95	32
1C	2	1	1	F	86	95	9
1D	1	1	1	G	8	81	73
1D	2	1	1	H	167	81	94

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

				(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	329 <	1800	43	0.00	75	20	81.57	74.61	97.79	16.24 +	13.50	100	100	0.00	100.86
	2	R	1	1	B	395 <	1800	44	0.00	88	3	97.18	90.22	108.40	21.65 +	17.59	100	100	0.00	145.93
1Ax	1	Exit				357	Unrestricted	180	70.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	581 <	1800	71	0.00	81	12	63.94	57.94	92.81	27.29 +	19.06	100	100	0.00	139.54
	2	R	1	1	D	121	1800	16	0.00	71	26	109.73	103.73	109.22	6.68	6.31	100	100	0.00	51.17
1Bx	1	Exit				717	Unrestricted	180	22.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	115	1800	32	0.00	35	158	78.43	67.03	87.76	5.11	4.79	100	100	0.00	31.67
	2	S / R	1	1	F	80	1800	9	0.00	80	13	154.88	143.48	128.13	5.25	5.10	100	100	0.00	46.56
1Cx	1	Exit				626	Unrestricted	180	30.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	596 <	1800	73	0.00	81	12	68.40	56.40	92.04	27.77 +	19.16	100	100	0.00	139.48
	2	R	1	1	H	397 <	776	94	0.00	97	-7	133.77	121.77	129.59	26.46 +	16.21	100	100	0.00	197.13
1Dx	1	Exit				914	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	829.70	85.31	9.73	41.48	16.17	818.64	33.70	0.00	852.34
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	829.70	85.31	9.73	41.48	16.17	818.64	33.70	0.00	852.34

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Stress Test 20210616.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 12:06:36

Summary of network performance

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2023 WD With Dev				
Network	D6	755.04	51.04	92% (TS 1B/2)	2 (12%)

A1 -
D6 - 2023 WD With Dev, PM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	152	152
	2	181	181
1Ax	1	448	448
1B	1	486	486
	2	166	166
1Bx	1	668	668
1C	1	414	414
	2	218	218
1Cx	1	310	310
1D	1	617	617
	2	190	190
1Dx	1	998	998

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	115	37	181
	1-2	166	0	83	403
	1-3	72	146	0	414
	1-4	210	407	190	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	414
	2		1-3	1-1	1C/2, 1Ax/1	Normal	72
	3		1-3	1-2	1C/2, 1Bx/1	Normal	146
	4		1-4	1-1	1D/1, 1Ax/1	Normal	210
	5		1-4	1-2	1D/1, 1Bx/1	Normal	407
	6		1-4	1-3	1D/2, 1Cx/1	Normal	190
	7		1-1	1-2	1A/1, 1Bx/1	Normal	115
	8		1-1	1-3	1A/1, 1Cx/1	Normal	37
	9		1-1	1-4	1A/2, 1Dx/1	Normal	181
	10		1-2	1-4	1B/1, 1Dx/1	Normal	403
	11		1-2	1-3	1B/1, 1Cx/1	Normal	83
	12		1-2	1-1	1B/2, 1Ax/1	Normal	166

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	4, 47, 75, 113, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

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		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	4	17	1	1
	2	✓	2	C,G,H	9	47	38	1	1
	3	✓	3	E,G,H	52	75	23	1	1
	4	✓	4	E,F	80	113	33	1	1
	5	✓	5	A,B	118	143	25	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

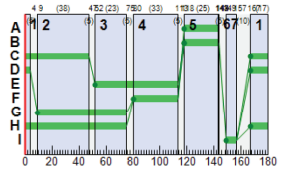
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	118	143	25
	B	1	✓	118	144	26
	C	1	✓	167	47	60
	D	1	✓	167	4	17
	E	1	✓	52	113	61
	F	1	✓	80	113	33
	G	1	✓	9	75	66
	H	1	✓	167	75	88
	I	1	✓	149	157	8

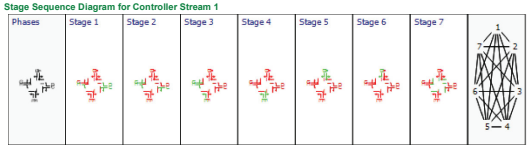
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	118	143	25
1A	2	1	1	B	118	144	26
1B	1	1	1	C	167	47	60
1B	2	1	1	D	167	4	17
1C	1	1	1	E	52	113	61
1C	2	1	1	F	80	113	33
1D	1	1	1	G	9	75	66
1D	2	1	1	H	167	75	88

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
15:30-16:30	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

					(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	152	1800	25	0.00	58	54	88.49	81.53	97.77	7.50	6.91	100	100	0.00	50.74
	2	R	1	1	B	181	1800	26	0.00	67	34	92.42	85.46	100.70	9.21	8.35	100	100	0.00	63.30
1Ax	1	Exit				448	Unrestricted	180	54.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	486 <	1800	60	0.00	80	13	71.04	65.04	95.30	23.38 +	17.57	100	100	0.00	130.48
	2	R	1	1	D	166 <	1800	17	0.00	92	-2	159.81	153.81	135.11	11.60 +	10.86	100	100	0.00	103.53
1Bx	1	Exit				668	Unrestricted	180	26.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	414 <	1800	61	0.00	67	35	67.39	55.99	87.15	18.26 +	14.23	100	100	0.00	95.96
	2	S / R	1	1	F	218	1800	33	0.00	64	40	88.05	76.65	96.36	10.61	9.40	100	100	0.00	68.54
1Cx	1	Exit				310	Unrestricted	180	62.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	617 <	1800	66	0.00	92	-2	91.97	79.97	107.99	33.76 +	23.82	100	100	0.00	202.99
	2	R	1	1	H	190	860	88	0.00	45	101	61.96	49.96	86.20	8.25	4.98	100	100	0.00	39.49
1Dx	1	Exit				998	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	819.23	78.34	10.46	39.21	11.82	724.71	30.33	0.00	755.04
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	819.23	78.34	10.46	39.21	11.82	724.71	30.33	0.00	755.04

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Stress Test 20210616.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 12:07:40

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2028 WD With Dev				
Network	D9	1065.66	72.35	104% (TS 1D/2)	2 (12%)

A1 -
D9 - 2028 WD With Dev, AM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	335	335
	2	400	400
1Ax	1	362	362
1B	1	633	633
	2	123	123
1Bx	1	759	759
1C	1	125	125
	2	85	85
1Cx	1	675	675
1D	1	631	631
	2	430	430
1Dx	1	966	966

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	282	53	400
	1-2	123	0	192	441
	1-3	17	68	0	125
	1-4	222	409	430	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	125
	2		1-3	1-1	1C/2, 1Ax/1	Normal	17
	3		1-3	1-2	1C/2, 1Bx/1	Normal	68
	4		1-4	1-1	1D/1, 1Ax/1	Normal	222
	5		1-4	1-2	1D/1, 1Bx/1	Normal	409
	6		1-4	1-3	1D/2, 1Cx/1	Normal	430
	7		1-1	1-2	1A/1, 1Bx/1	Normal	282
	8		1-1	1-3	1A/1, 1Cx/1	Normal	53
	9		1-1	1-4	1A/2, 1Dx/1	Normal	400
	10		1-2	1-4	1B/1, 1Dx/1	Normal	441
	11		1-2	1-3	1B/1, 1Cx/1	Normal	192
	12		1-2	1-1	1B/2, 1Ax/1	Normal	123

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	3, 57, 82, 96, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

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		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	3	16	1	1
	2	✓	2	C,G,H	8	57	49	1	1
	3	✓	3	E,G,H	62	82	20	1	1
	4	✓	4	E,F	87	96	9	1	1
	5	✓	5	A,B	101	143	42	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

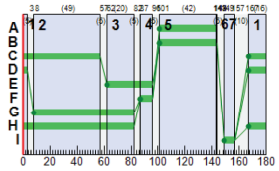
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	101	143	42
	B	1	✓	101	144	43
	C	1	✓	167	57	70
	D	1	✓	167	3	16
	E	1	✓	62	96	34
	F	1	✓	87	96	9
	G	1	✓	8	82	74
	H	1	✓	167	82	95
	I	1	✓	149	157	8

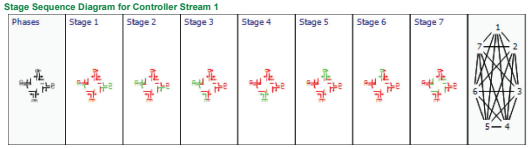
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	101	143	42
1A	2	1	1	B	101	144	43
1B	1	1	1	C	167	57	70
1B	2	1	1	D	167	3	16
1C	1	1	1	E	62	96	34
1C	2	1	1	F	87	96	9
1D	1	1	1	G	8	82	74
1D	2	1	1	H	167	82	95

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

					(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	335 <	1800	42	0.00	78	16	85.16	78.20	100.14	16.95 +	14.06	100	100	0.00	107.54
	2	R	1	1	B	400 <	1800	43	0.00	91	-1	106.28	99.32	113.54	23.03 +	18.81	100	100	0.00	162.40
1Ax	1	Exit				362	Unrestricted	180	68.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	633 <	1800	70	0.00	89	1	75.70	69.70	102.11	32.84 +	22.47	100	100	0.00	182.13
	2	R	1	1	D	123	1800	16	0.00	72	24	111.16	105.16	109.91	6.83	6.46	100	100	0.00	52.71
1Bx	1	Exit				759	Unrestricted	180	21.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	125	1800	34	0.00	36	152	77.01	65.61	87.03	5.48	5.13	100	100	0.00	33.71
	2	S / R	1	1	F	85	1800	9	0.00	85	6	171.28	159.88	136.12	5.99	5.80	100	100	0.00	55.06
1Cx	1	Exit				659	Unrestricted	180	28.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	631 <	1800	74	0.00	84	7	71.28	59.28	95.03	30.34 +	20.53	100	100	0.00	155.06
	2	R	1	1	H	430 <	776	95	0.00	104	-13	194.02	182.02	160.36	35.32 +	24.40	100	100	0.00	317.05
1Dx	1	Exit				966	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	876.43	101.56	8.63	44.38	27.96	1027.31	38.35	0.00	1065.66
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	876.43	101.56	8.63	44.38	27.96	1027.31	38.35	0.00	1065.66

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Stress Test 20210616.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 12:08:16

Summary of network performance

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2028 WD With Dev				
Network	D10	905.72	61.37	99% (TS 1B/2)	2 (12%)

A1 -
D10 - 2028 WD With Dev, PM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	155	155
	2	183	183
1Ax	1	455	455
1B	1	528	528
	2	169	169
1Bx	1	719	719
1C	1	449	449
	2	232	232
1Cx	1	334	334
1D	1	656	656
	2	206	206
1Dx	1	1070	1070

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	117	38	183
	1-2	169	0	90	438
	1-3	73	159	0	449
	1-4	213	443	206	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	449
	2		1-3	1-1	1C/2, 1Ax/1	Normal	73
	3		1-3	1-2	1C/2, 1Bx/1	Normal	159
	4		1-4	1-1	1D/1, 1Ax/1	Normal	213
	5		1-4	1-2	1D/1, 1Bx/1	Normal	443
	6		1-4	1-3	1D/2, 1Cx/1	Normal	206
	7		1-1	1-2	1A/1, 1Bx/1	Normal	117
	8		1-1	1-3	1A/1, 1Cx/1	Normal	38
	9		1-1	1-4	1A/2, 1Dx/1	Normal	183
	10		1-2	1-4	1B/1, 1Dx/1	Normal	438
	11		1-2	1-3	1B/1, 1Cx/1	Normal	90
	12		1-2	1-1	1B/2, 1Ax/1	Normal	169

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	3, 47, 75, 114, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

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From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	3	16	1	1
	2	✓	2	C,G,H	8	47	39	1	1
	3	✓	3	E,G,H	52	75	23	1	1
	4	✓	4	E,F	80	114	34	1	1
	5	✓	5	A,B	119	143	24	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

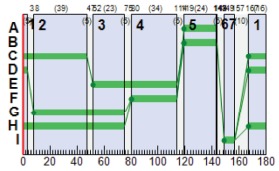
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	119	143	24
	B	1	✓	119	144	25
	C	1	✓	167	47	60
	D	1	✓	167	3	16
	E	1	✓	52	114	62
	F	1	✓	80	114	34
	G	1	✓	8	75	67
	H	1	✓	167	75	88
	I	1	✓	149	157	8

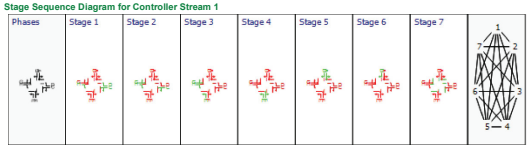
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	119	143	24
1A	2	1	1	B	119	144	25
1B	1	1	1	C	167	47	60
1B	2	1	1	D	167	3	16
1C	1	1	1	E	52	114	62
1C	2	1	1	F	80	114	34
1D	1	1	1	G	8	75	67
1D	2	1	1	H	167	75	88

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
15:30-16:30	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

					(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	155	1800	24	0.00	62	45	91.47	84.51	99.49	7.77	7.17	100	100	0.00	53.60
	2	R	1	1	B	183	1800	25	0.00	70	28	96.13	89.17	102.87	9.50	8.63	100	100	0.00	66.73
1Ax	1	Exit				455	Unrestricted	180	52.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	528 <	1800	60	0.00	87	4	79.20	73.20	101.80	27.21 +	20.02	100	100	0.00	159.19
	2	R	1	1	D	169 <	1800	16	0.00	99	-9	210.83	204.83	156.82	14.19 +	13.44	100	100	0.00	139.86
1Bx	1	Exit				719	Unrestricted	180	24.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	449 <	1800	62	0.00	71	26	69.03	57.63	89.13	20.20 +	15.46	100	100	0.00	107.08
	2	S / R	1	1	F	232	1800	34	0.00	66	36	88.34	76.94	96.89	11.34	9.98	100	100	0.00	73.23
1Cx	1	Exit				334	Unrestricted	180	62.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	656 <	1800	67	0.00	96	-7	108.92	96.92	118.50	39.74 +	28.08	100	100	0.00	260.54
	2	R	1	1	H	206	841	88	0.00	50	82	65.17	53.17	88.20	9.17	5.45	100	100	0.00	45.48
1Dx	1	Exit				1070	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	876.46	90.59	9.68	42.29	19.08	871.50	34.22	0.00	905.72
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	876.46	90.59	9.68	42.29	19.08	871.50	34.22	0.00	905.72

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Stress Test 20210616.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 12:08:45

Summary of network performance

	AM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2038 WD With Dev				
Network	D13	1379.26	94.02	110% (TS 1D/2)	4 (25%)

A1 - D13 - 2038 WD With Dev, AM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	340	340
	2	405	405
1Ax	1	368	368
1B	1	685	685
	2	125	125
1Bx	1	801	801
1C	1	135	135
	2	91	91
1Cx	1	724	724
1D	1	667	667
	2	463	463
1Dx	1	1018	1018

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	286	54	405
	1-2	125	0	207	478
	1-3	17	74	0	135
	1-4	226	441	463	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	135
	2		1-3	1-1	1C/2, 1Ax/1	Normal	17
	3		1-3	1-2	1C/2, 1Bx/1	Normal	74
	4		1-4	1-1	1D/1, 1Ax/1	Normal	226
	5		1-4	1-2	1D/1, 1Bx/1	Normal	441
	6		1-4	1-3	1D/2, 1Cx/1	Normal	463
	7		1-1	1-2	1A/1, 1Bx/1	Normal	286
	8		1-1	1-3	1A/1, 1Cx/1	Normal	54
	9		1-1	1-4	1A/2, 1Dx/1	Normal	405
	10		1-2	1-4	1B/1, 1Dx/1	Normal	478
	11		1-2	1-3	1B/1, 1Cx/1	Normal	207
	12		1-2	1-1	1B/2, 1Ax/1	Normal	125

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	3, 57, 84, 98, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

R090 Baldoyle GA03 TRANSYT Results - Stress Test

From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	3	16	1	1
	2	✓	2	C,G,H	8	57	49	1	1
	3	✓	3	E,G,H	62	84	22	1	1
	4	✓	4	E,F	89	98	9	1	1
	5	✓	5	A,B	103	143	40	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

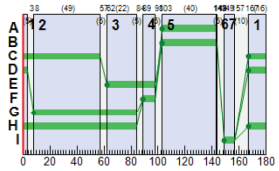
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	103	143	40
	B	1	✓	103	144	41
	C	1	✓	167	57	70
	D	1	✓	167	3	16
	E	1	✓	62	98	36
	F	1	✓	89	98	9
	G	1	✓	8	84	76
	H	1	✓	167	84	97
	I	1	✓	149	157	8

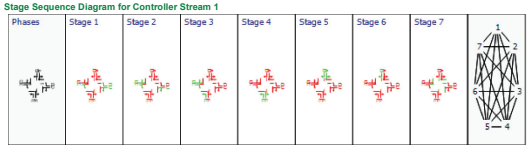
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	103	143	40
1A	2	1	1	B	103	144	41
1B	1	1	1	C	167	57	70
1B	2	1	1	D	167	3	16
1C	1	1	1	E	62	98	36
1C	2	1	1	F	89	98	9
1D	1	1	1	G	8	84	76
1D	2	1	1	H	167	84	97

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

				(PCU/hr)		cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	340 <	1800	40	0.00	83	9	92.93	85.97	104.82	18.02 +	15.00	100	100	0.00	119.76
	2	R	1	1	B	405 <	1800	41	0.00	96	-7	133.19	126.23	127.40	26.55 +	22.05	100	100	0.00	208.12
1Ax	1	Exit				368	Unrestricted	180	66.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	685 <	1800	70	0.00	96	-7	100.17	94.17	117.68	41.08 +	28.52	100	100	0.00	264.55
	2	R	1	1	D	125	1800	16	0.00	74	22	112.68	106.68	111.06	7.03	6.61	100	100	0.00	54.34
1Bx	1	Exit				801	Unrestricted	180	19.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	135	1800	36	0.00	36	147	75.60	64.20	86.43	5.88	5.47	100	100	0.00	35.65
	2	S / R	1	1	F	91	1800	9	0.00	91	-1	198.60	187.20	148.15	7.12	6.89	100	100	0.00	68.89
1Cx	1	Exit				683	Unrestricted	180	27.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	667 <	1800	76	0.00	87	4	73.00	61.00	97.18	32.83 +	21.71	100	100	0.00	168.61
	2	R	1	1	H	463 <	775	97	0.00	110	-18	258.00	246.00	190.29	45.55 +	34.17	100	100	0.00	459.34
1Dx	1	Exit				1018	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	922.53	124.77	7.39	47.02	47.01	1335.12	44.14	0.00	1379.26
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	922.53	124.77	7.39	47.02	47.01	1335.12	44.14	0.00	1379.26

- *P = link is a pedestrian link*
- *< = 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 16

Version: 16.0.1.8473

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

Filename: R090 Junction 1 TRANSYT Model Stress Test 20210616.t16
Path: J:\R_JOBS\Job-R090\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling
Report generation date: 07/07/2021 12:09:12

Summary of network performance

	PM				
	Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2038 WD With Dev				
Network	D14	1081.46	73.47	107% (TS 1B/2)	3 (19%)

A1 -
D14 - 2038 WD With Dev, PM

Links

Links

Link	Name	Description	Traffic node	Length (m)	Has Saturation Flow	Is signal controlled	Is give way	Traffic type	Is minor shared	Allow Nearside Turn On Red
(ALL)			1	100.00		✓		Pedestrian		

Modelling

Link	Stop weighting (%)	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	100	100	100		0.00		

Flows

Link	Total flow (PCU/hr)	PCU Factor
(ALL)	0	1.00

Flows - Advanced

Link	Detectors
(ALL)	

Signals

Link	Controller stream	Phase	Second phase enabled
(ALL)	1	I	

Entry Sources

Link	Cruise time (seconds)	Cruise speed (kph)
(ALL)	12.00	30.00

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1A	Longfield Road		1
1Ax	Longfield Road		
1B	Grange Road (E)		1
1Bx	Grange Road (E)		
1C	Grange Rise		1
1Cx	Grange Rise		
1D	Grange Road (W)		1
1Dx	Grange Road (W)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1A	1	L / S			58.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			58.00	✓	Sum of lanes	1800	✓		Normal	
1Ax	1	Exit			64.00						Normal	
1B	1	L / S			50.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			50.00	✓	Sum of lanes	1800	✓		Normal	
1Bx	1	Exit			280.00						Normal	
1C	1	L			95.00	✓	Sum of lanes	1800	✓		Normal	
	2	S / R			95.00	✓	Sum of lanes	1800	✓		Normal	
1Cx	1	Exit			102.00						Normal	
1D	1	L / S			100.00	✓	Sum of lanes	1800	✓		Normal	
	2	R			100.00	✓	Sum of lanes	1800	✓	✓	Normal	
1Dx	1	Exit			380.00						Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1A	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Ax	1	1	(untitled)			
		2	(untitled)			
1B	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Bx	1	1	(untitled)			
1C	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Cx	1	1	(untitled)			
1D	1	1	(untitled)			1800
	2	1	(untitled)			1800
1Dx	1	1	(untitled)			

Modelling

Arm	Traffic Stream	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	180

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	(ALL)	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1A	1	157	157
	2	186	186
1Ax	1	460	460
1B	1	569	569
	2	171	171
1Bx	1	769	769
1C	1	482	482
	2	246	246
1Cx	1	357	357
1D	1	693	693
	2	222	222
1Dx	1	1140	1140

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1A	1	1	A	
	2	1	B	
1B	1	1	C	
	2	1	D	
1C	1	1	E	
	2	1	F	
1D	1	1	G	
	2	1	H	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1A	1	6.96	30.00
	2	6.96	30.00
1B	1	6.00	30.00
	2	6.00	30.00
1C	1	11.40	30.00
	2	11.40	30.00
1D	1	12.00	30.00
	2	12.00	30.00

Sources

Arm	Traffic Stream	Source	Source type	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
1Ax	1	1	TrafficStream	1D/1	1Ax/1	7.68	30.00	✓	Nearside	37.51
1Bx	1	1	TrafficStream	1A/1	1Bx/1	33.60	30.00	✓	Nearside	37.48
1Cx	1	1	TrafficStream	1A/1	1Cx/1	12.24	30.00	✓	Straight	Straight Movement
1Dx	1	1	TrafficStream	1C/1	1Dx/1	45.60	30.00	✓	Nearside	37.50
1Ax	1	2	TrafficStream	1B/2	1Ax/1	7.68	30.00	✓	Offside	67.51
1Bx	1	2	TrafficStream	1D/1	1Bx/1	33.60	30.00	✓	Straight	Straight Movement
1Cx	1	2	TrafficStream	1B/1	1Cx/1	12.24	30.00	✓	Nearside	37.50
1Dx	1	2	TrafficStream	1B/1	1Dx/1	45.60	30.00	✓	Straight	Straight Movement
1Ax	1	3	TrafficStream	1C/2	1Ax/1	7.68	30.00	✓	Straight	Straight Movement
1Bx	1	3	TrafficStream	1C/2	1Bx/1	33.60	30.00	✓	Offside	80.00
1Cx	1	3	TrafficStream	1D/2	1Cx/1	12.24	30.00	✓	Offside	67.50
1Dx	1	3	TrafficStream	1A/2	1Dx/1	45.60	30.00	✓	Offside	74.45

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
1D	2	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
1D	2	1	1Cx/1	802	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible
1D	2	1	1Cx/1	T-junction opposing flow	TrafficStreamMovement		1B/1	1Cx/1	100	0.22	
				T-junction opposing flow	TrafficStreamMovement		1B/1	1Dx/1	100	0.22	
					TrafficStream	1B/2			100	0.13	

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Path Equalisation											

Normal Input Flows (PCU/hr)

		To			
		1-1	1-2	1-3	1-4
From	1-1	0	119	38	186
	1-2	171	0	97	472
	1-3	74	172	0	482
	1-4	215	478	222	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/1, 1A/2	1Ax/1	#00FF00
	1-2		1B/1, 1B/2	1Bx/1	#FFFF00
	1-3		1C/1, 1C/2	1Cx/1	#0000FF
	1-4		1D/1, 1D/2	1Dx/1	#FF0000

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-4	1C/1, 1Dx/1	Normal	482
	2		1-3	1-1	1C/2, 1Ax/1	Normal	74
	3		1-3	1-2	1C/2, 1Bx/1	Normal	172
	4		1-4	1-1	1D/1, 1Ax/1	Normal	215
	5		1-4	1-2	1D/1, 1Bx/1	Normal	478
	6		1-4	1-3	1D/2, 1Cx/1	Normal	222
	7		1-1	1-2	1A/1, 1Bx/1	Normal	119
	8		1-1	1-3	1A/1, 1Cx/1	Normal	38
	9		1-1	1-4	1A/2, 1Dx/1	Normal	186
	10		1-2	1-4	1B/1, 1Dx/1	Normal	472
	11		1-2	1-3	1B/1, 1Cx/1	Normal	97
	12		1-2	1-1	1B/2, 1Ax/1	Normal	171

Signal Timings

Network Default: 180s cycle time; 180 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			1	NetworkDefault	180	49

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	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	(untitled)	0	300	0	0	Unknown
	B	(untitled)	0	300	0	0	Unknown
	C	(untitled)	0	300	0	0	Unknown
	D	(untitled)	0	300	0	0	Unknown
	E	(untitled)	0	300	0	0	Unknown
	F	(untitled)	0	300	0	0	Unknown
	G	(untitled)	0	300	0	0	Unknown
	H	(untitled)	0	300	0	0	Unknown
	I	(untitled)	8	8	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	C, D, H	1	1	100
	2	C, G, H	1	1	100
	3	E, G, H	1	1	100
	4	E, F	1	1	100
	5	A, B	1	1	100
	6	B	1	1	100
	7	I	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 2, 3, 4, 5, 6, 7	2, 48, 76, 115, 143, 144, 157	49	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H	I
From	A			5	5		5	5	5	5
	B			5	5	5	5	5	5	5
	C	5	5			5	5			5
	D	5	5				5	5		5
	E		5	5						5
	F	5	5	5	5			5	5	5
	G	5	5		5		5			5
	H	5	5				5			5
	I	10	10	10	10	10	10	10	10	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7

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From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	5	5	5	5	5	5
	2	5	0	5	5	5	5	5
	3	5	5	0	5	5	5	5
	4	5	5	5	0	5	5	5
	5	5	5	5	5	0	0	5
	6	5	5	5	5	0	0	5
	7	10	10	10	10	10	10	0

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	C,D,H	167	2	15	1	1
	2	✓	2	C,G,H	7	48	41	1	1
	3	✓	3	E,G,H	53	76	23	1	1
	4	✓	4	E,F	81	115	34	1	1
	5	✓	5	A,B	120	143	23	1	1
	6	✓	6	B	143	144	1	1	1
	7	✓	7	I	149	157	8	1	8

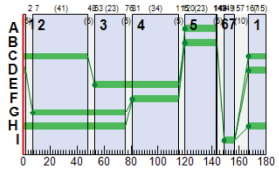
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	120	143	23
	B	1	✓	120	144	24
	C	1	✓	167	48	61
	D	1	✓	167	2	15
	E	1	✓	53	115	62
	F	1	✓	81	115	34
	G	1	✓	7	76	69
	H	1	✓	167	76	89
	I	1	✓	149	157	8

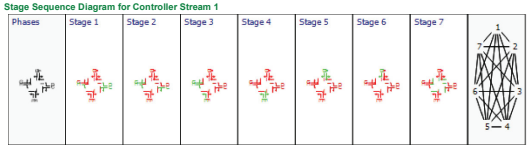
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	120	143	23
1A	2	1	1	B	120	144	24
1B	1	1	1	C	167	48	61
1B	2	1	1	D	167	2	15
1C	1	1	1	E	53	115	62
1C	2	1	1	F	81	115	34
1D	1	1	1	G	7	76	69
1D	2	1	1	H	167	76	89

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
15:30-16:30	1	0.00	0.00	0.00	0.00

Final Prediction Table

Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Link	Name	Traffic node	Controller stream	Phase	Calculated flow entering	Calculated sat flow (PCU/hr)	Actual green (s (per	Wasted time total (s (per	Degree of saturation (%)	Practical reserve capacity	JourneyTime (s)	Mean Delay per Veh	Mean stops per Veh	Mean max queue	Mean end of red queue	Delay weighting (%)	Stop weighting (%)	Cost of traffic penalties (£	P.I.

				(PCU/hr)			cycle))	cycle))				(s)	(%)	(PCU)	(PCU)			per hr)	
(ALL)		1	1	I	0	3.402823466385 29E+38	8	0.00	0	Unrestricted	0.00	0.00	0.00	0.00	0.00	100	100	0.00	0

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	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)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1A	1	L / S	1	1	A	157	1800	23	0.00	65	38	94.79	87.83	101.29	8.01	7.40	100	100	0.00	56.39
	2	R	1	1	B	186	1800	24	0.00	74	21	101.22	94.26	105.61	9.91	9.03	100	100	0.00	71.62
1Ax	1	Exit				449	Unrestricted	180	51.00	0	Unrestricted	7.68	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L / S	1	1	C	569 <	1800	61	0.00	92	-2	89.49	83.49	108.95	31.44 +	22.91	100	100	0.00	195.16
	2	R	1	1	D	171 <	1800	15	0.00	107	-16	279.93	273.93	190.15	17.32 +	16.66	100	100	0.00	188.58
1Bx	1	Exit				769	Unrestricted	180	22.00	0	Unrestricted	33.60	0.00	0.00	0.00		100	100	0.00	0.00
1C	1	L	1	1	E	482 <	1800	62	0.00	77	18	72.40	61.00	92.45	22.50 +	16.88	100	100	0.00	121.55
	2	S / R	1	1	F	246	1800	34	0.00	70	28	90.87	79.47	98.56	12.22	10.72	100	100	0.00	80.15
1Cx	1	Exit				357	Unrestricted	180	61.00	0	Unrestricted	12.24	0.00	0.00	0.00		100	100	0.00	0.00
1D	1	L / S	1	1	G	693 <	1800	69	0.00	99	-9	124.05	112.05	127.31	45.31 +	32.22	100	100	0.00	317.35
	2	R	1	1	H	222	825	89	0.00	54	67	66.99	54.99	89.73	10.05	5.86	100	100	0.00	50.65
1Dx	1	Exit				1140	Unrestricted	180	0.00	0	Unrestricted	45.60	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)	Uniform delay (PCU-hr/hr)	Random plus oversat 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	931.22	104.51	8.91	44.84	28.63	1043.22	38.23	0.00	1081.46
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	931.22	104.51	8.91	44.84	28.63	1043.22	38.23	0.00	1081.46

- *P = link is a pedestrian link*
- *< = 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*