12. TRAFFIC AND TRANSPORTATION

12.1 Introduction

This chapter of the EIAR comprises of quantifying the existing transport environment and details results of assessment work undertaken to identify the likely significant effects on the Traffic and Transportation environment arising from the proposal.

The scope of this assessment covers transport and sustainability issues including access, pedestrian, cyclist and public transport connections. Recommendations contained within this chapter are based on existing and proposed road layout plans, site visits, on site traffic observations and junction vehicle turning count data.

This assessment of traffic and transportation was carried out in accordance with the following guidance and established best practice, and was tailored accordingly based on professional judgement and local circumstance:

- Environmental Protection Agency (EPA) Guidelines on the Information to be contained in the Environmental Impact Assessment Reports (EPA, 2017) and will follow all future revisions or finalised EIA guidelines as appropriate; and
- Transport Infrastructure Ireland (TII) (formerly the National Roads Authority) Traffic and Transportation Assessment Guidelines.

Reference has been made to the "Clane Local Area Plan 2017-2023" and the "Kildare County Development Plan 2017-2023".

12.2 Methodology

The approach to the study accords with policy and guidance at EU, national and local level. Accordingly, the adopted methodology responds to best practices, current and emerging guidance, exemplified by a series of publications, all of which advocate this method of analysis. Key publications consulted include:

- 'Traffic and Transport Assessment Guidelines' (May 2014) National Road Authority;
- 'Traffic Management Guidelines' Dublin Transportation Office & Department of the Environment and Local Government (May 2003);
- 'Guidelines for Traffic Impact Assessments', The Institution of Highways and Transportation (1994);
- 'Clane Local Area Plan 2017-2023'; and
- 'Kildare County Council County Development Plan 2017-2023'.

Our methodology incorporated a number of key inter-related stages, including:

- **Site Audit:** A site audit was undertaken to quantify existing road network issues and identify local infrastructure characteristics, in addition to establishing the level of accessibility to the site in terms of walking, cycling and public transport. An inventory of the local road network was also developed during this stage of the assessment.
- **Traffic Counts:** Junction traffic counts were undertaken and analysed with the objective of establishing local traffic characteristics in the immediate area of the proposed residential development.
- **Trip Generation:** A trip generation exercise has been carried out to establish the potential level of vehicle trips generated by the proposed residential development.
- **Trip Distribution:** Based upon both the existing traffic characteristics and the network layout in addition to the spatial / land use configuration and density of the urban structure across the catchments area of the development, a distribution exercise has been undertaken to assign site generated vehicle trips across the local road network.
- **Network Analysis:** Further to quantifying the predicted impact of vehicle movements across the local road network for the adopted optimum site access strategy, more detailed computer simulations have been undertaken to assess the operational performance of key junctions in the post development 2020 and 2035 development scenarios.

12.3 Receiving Environment

12.3.1 Land Use

The subject site of this residential development is located in Clane between Kilcock and Naas in County Kildare with further connections to Celbridge and Dublin via the surrounding regional roads. The R407 runs along to the west of the subject site connecting to Kilcock and Naas, whilst the R403 runs to the east of the site connecting to Celbridge and Dublin.

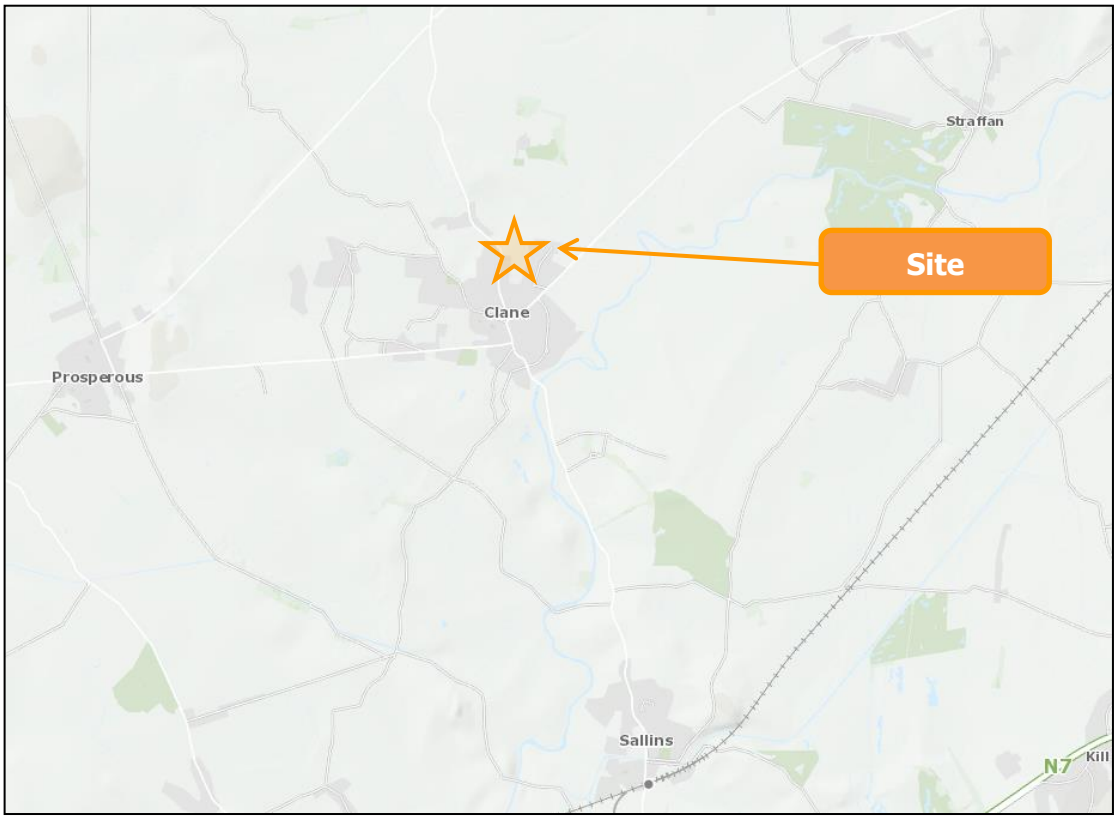
The areas surrounding the subject site are zoned as Existing Residential, with the site itself zoned as Key Development Area 2 New Residential/Infill, as identified within Kildare County Council's Clane Local Area Plan (2017) Map 12.1.

The site is predominantly a greenfield site.

12.3.2 Location

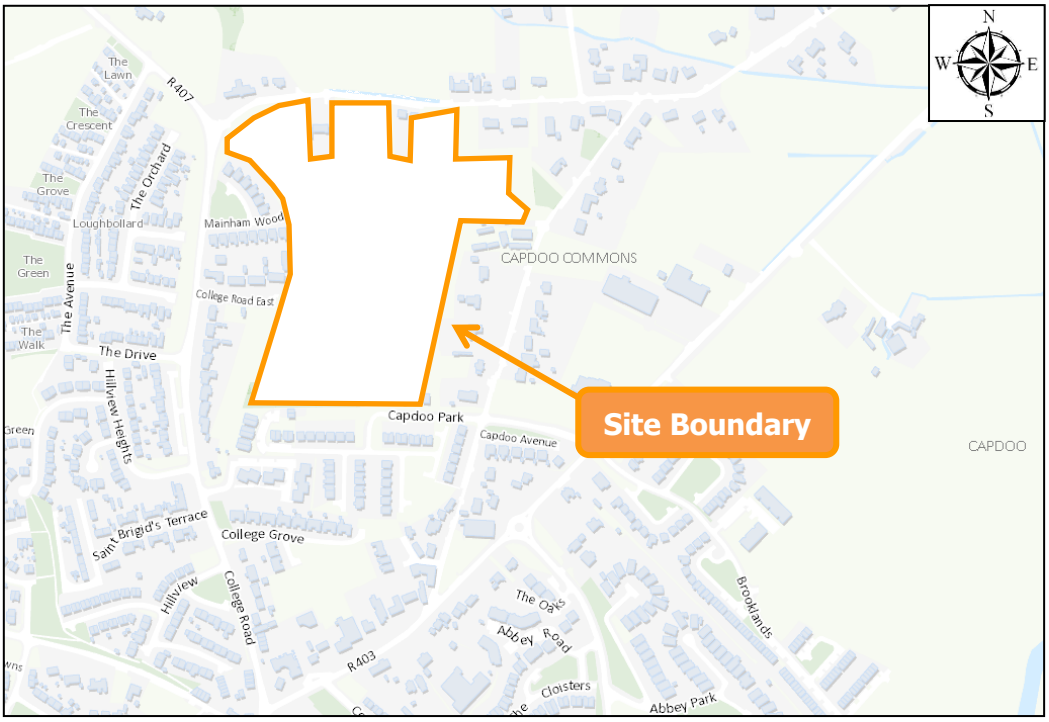
Clane is conveniently located between Celbridge (12km to the northeast) and Naas (9km to south). The general location of the subject site in relation to the surrounding road network is illustrated in Figure 12.1 below whilst Figure 12.2 indicatively shows the extent of the subject site boundary and neighbouring lands.

Figure 12.1 Site Location (Source: www.osi.ie)



The site is located in the Capdoo area of Clane, shown under the Clane Local Area Plan as Key Development Area 2, and can be accessed from the east via R403 and from the west via R407 College Road.

Figure 12.2 Site Boundary (Source: www.osi.ie)



12.3.3 Existing Transportation Infrastructure

Road Network

The subject development site lies between both the R403 and R407, providing accessibility to Naas, Kilcock, Celbridge and Dublin by motor vehicle. Travelling in a northerly direction along the R403, the road continues to Celbridge, eventually linking into the M4 which further links to Dublin. The R407 College Road travelling northbound links to Kilcock, whilst the R403 and R407 travelling southbound both link through Clane Village to Naas and the N7 National Road.

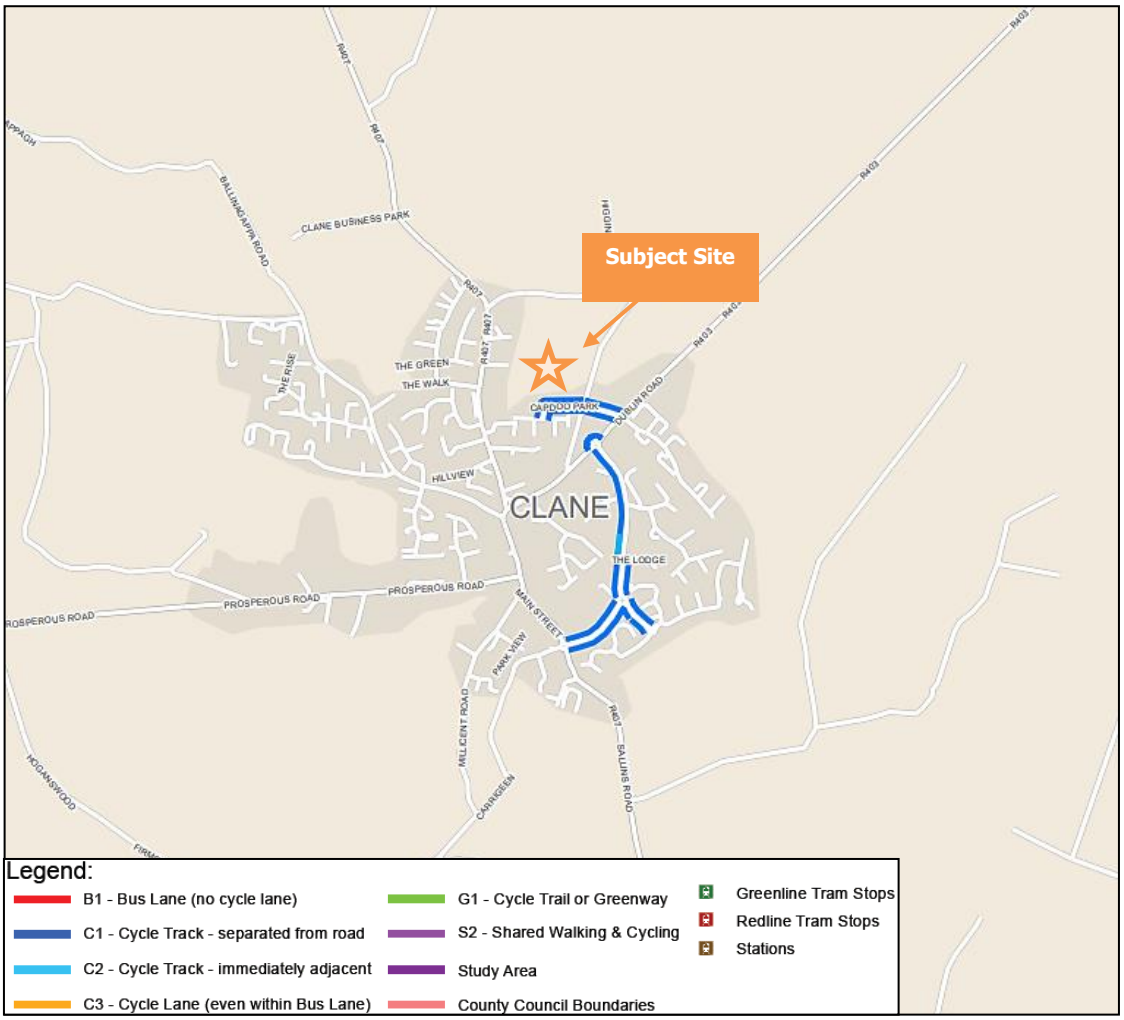
The R407 is subject to a speed limit of 50 kph in the vicinity of the subject site, with an increased speed limit when the road is clear of residential areas. The L5078 Capdoo local road forms the northern border of the site.

Existing Cycling and Pedestrian Facilities

In the immediate vicinity of the subject site pedestrians benefit from existing public lighting on both the R407 and R403 by the provided footpath facilities. There is an existing footpath provided along both sides of the R403 from the proposed Entrance by Capdoo Park southbound towards Clane Town, whilst the footpath facilities along the R403 are not continuously provided along both sides of the road, however there is a footpath provided on at least one side of the road into Clane Town, with uncontrolled crossings provided at dedicated crossing points. Existing facilities provided in the vicinity of the site may be seen in Figure 12.3 below. There are currently dedicated cycling facilities available along the R407 which are illustrated in Figure 12.4 below (extract from Sheet E19 GDA Cycle Network Plan), however this map has not been updated to reflect current facilities shown in Figure 12.3.

Figure 12.3 R407 Pedestrian and Cycle Facilities (Source: DBFL Site Visit Photograph)

Figure 12.4 Existing Cycle Facilities (Source: Sheet E17, NTA's GDA Cycle Network Plan 2014)



Public Transport – Bus

Bus Eireann service numbers 120 and 123 currently connect Clane with Celbridge, Naas, Kildare, Portlaoise and Dublin. Table 12.1 below summarises these services and Figure 12.5 illustrates bus services around Clane Town.

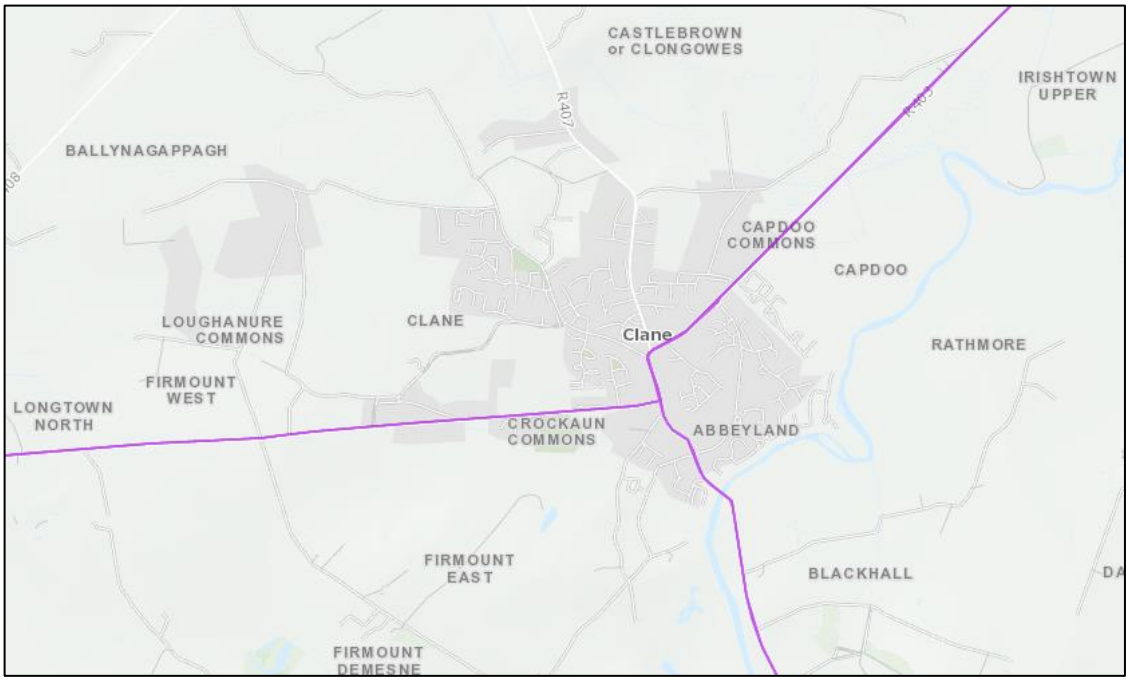
JJ Kavanagh also offers a number of privately operated services linking Clane to Maynooth, Naas and Blanchardstown. These routes are illustrated on Figure 12.5.

Table 12.1 Bus Services (No. of services per day)

Bus Operator	Route Number	Destination	Mon – Fri	Sat	Sun
Bus Eireann	120	Dublin – Edenderry – Tullamore	21	12	7
	123	Dublin – Celbridge – Clane – Sallins – Naas	4	-	-
JJ Kavanagh	N08	Portlaoise – Kildare – Newbridge – Naas – Clane - Maynooth	4*	-	-
	139	Naas - Clane - Maynooth - Blanchardstown	9	9	9
	8460	Clane – Sallins – Naas	10	7	-

* - College route: Term Time Only

Figure 12.5 Map of Bus Services – JJ Kavanagh not available (Source: GeoHive)



Public Transport – Railway

The Nearest Railway station is located in Sallins/Naas and is considered outside of a reasonable walking / cycling distance to serve the site as a public transport option. Accordingly, rail transport was not considered a viable option for public transport servicing this site going forward.

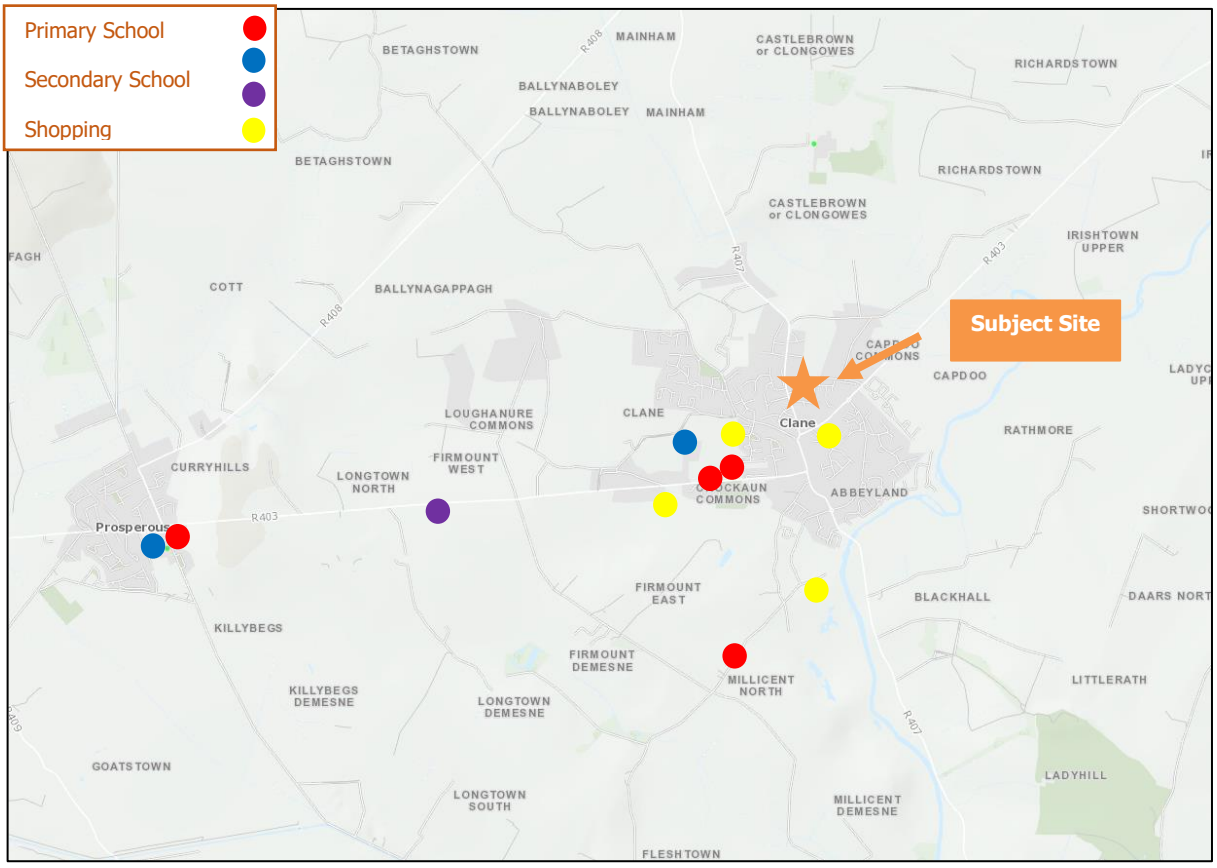
12.3.4 Local Amenities

The proposed development site is very well placed in terms of the availability of local amenities. There are a number of schools within 5km of the subject site including Scoil Mhuire Community School, Scoil

Naisiunta Bhride St Patrick's Boys NS, Hewetsons NS, Clongowes Wood College, Prosperous NS and St Farnan's Post Primary School.

Furthermore, the subject site benefits from good access to leisure facilities such as Rugby, Soccer, GAA Clubs and golf clubs. The subject site has good access to a number of supermarkets and shopping areas within Clane as well as good connections to Naas and Monread Shopping Centre. Figure 12.6 below shows indicatively the subject site's location in relation to the aforementioned local amenities.

Figure 12.6 Subject Site Local Amenities (Source: OSI, annotated by DBFL)



12.3.5 Proposed Transportation Infrastructure

Cycle Network Proposals

The subject site lies within the County Kildare Cycle Network under *"Mid-Kildare Sector"* as outlined within the Greater Dublin Area Cycle Network Plan (2013). The sector covers *"Clane/Prosperous, Sallins/Naas, Newbridge, Kildare"*.

In the vicinity of the subject site and Clane Town Centre the following routes are proposed in addition to those indicated on Figure 12.7: -

- Primary/Secondary route CP1 along R403 into Clane Town;

- Feeder route along R407 College Road;
- Feeder Route along Capdoo Park";
- Inter-Urban route K3 connecting to Celbridge; and
- A number of rural cycle routes connecting Clane to surrounding settlements.

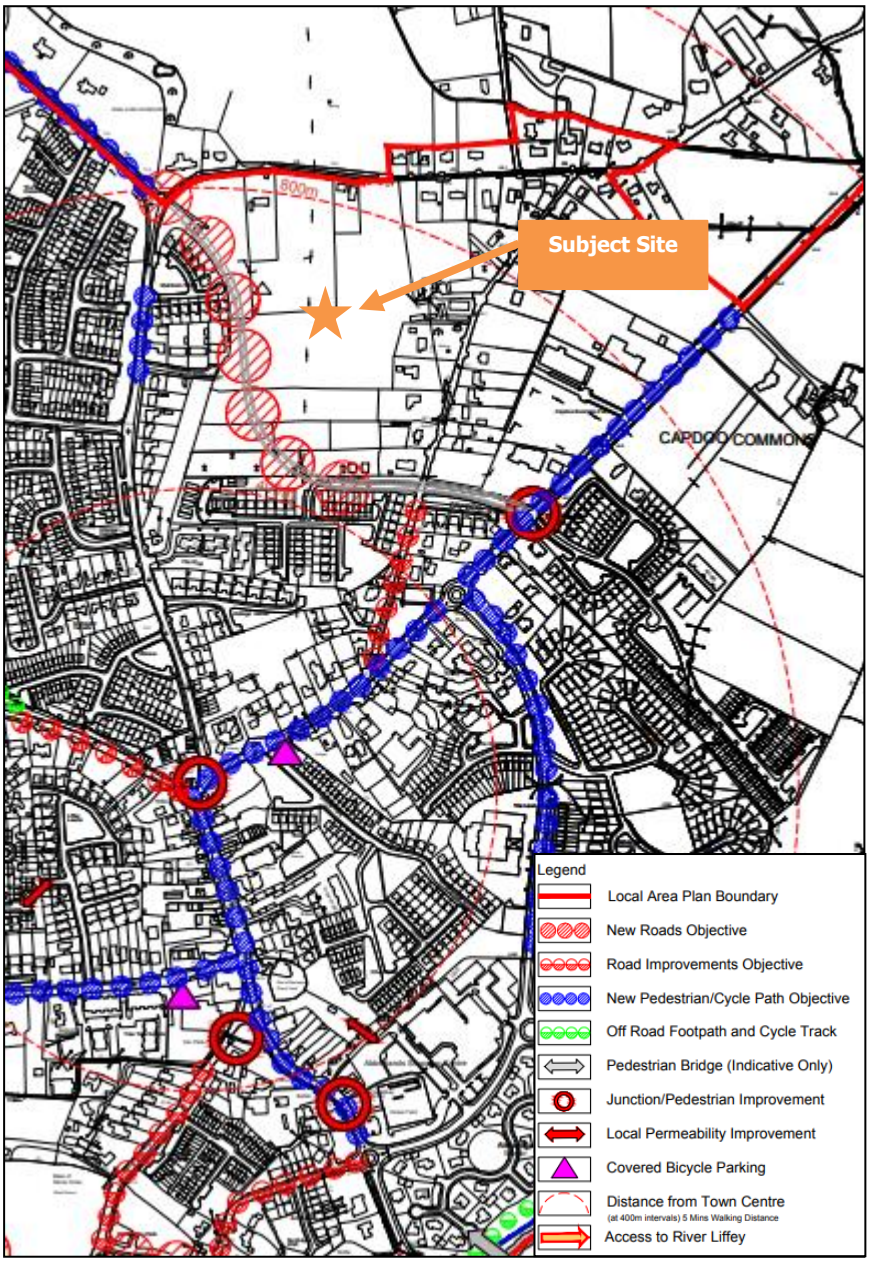
Figure 12.7 (Source: NTA's GDA Cycle Network Plan)

Proposed Roads Schemes

The Clane Local Area Plan (2013-2019) outlines road objectives for the town area. As illustrated on Figure 12.8 below the implementation of the following proposed objectives will be beneficial to the proposed residents of the subject site:

- "Capdoo Link Road – New Link Road including Off-road cycle track".

Figure 12.8 Roads Proposals (Extract from Clane LAP 2013-2019 Map 8.1)



12.4 Characteristics of the Proposed Development

The proposed development site comprises of approximately 11.4 hectares of land which is currently a greenfield site located to the north of Clane town centre.

In summary, the project comprises the development of 366 no. residential units as follows:

- 184 no. houses (terraced and semi-detached)
- 182 no. apartments and duplex units

The development schedule is summarised in Table 12.2 below:

Table 12.2 Development Schedule Summary (Source: John Fleming Architect)

Unit Type	Quantity
One Bedroom Apartment	28
Two Bedroom Apartment	118
Three Bedroom Duplex	36
Two Bedroom House	20
Three Bedroom House	75
Four Bedroom House	77
Five Bedroom House	12

The project also comprises the provision of a landscaped public open spaces throughout he development (c. 1.6 ha).

Road Infrastructure Proposals

The proposed development incorporates the delivery of the Capdoo Link Road which is a designated link road in Key Development Area 2 per the 'Clane Local Area Plan 2017-2023'. The proposed development also includes a provision for the upgrade of the existing R407 College Road / Capdoo local road three-armed priority controlled junction to a four-armed roundabout junction to integrate the new arm for the Capdoo Link Road.

The delivery of the Capdoo Link Road within the proposed development will include a 2.0m cycle track, 2.0m footpath and grass verge on both sides of the carriageway. Figure 12.9 illustrates the proposed Capdoo Link Road running through the proposed residential site.

Figure 12.9 Proposed Capdoo Link Road (Source: MCORM Architects drawing) Car Parking

Car Parking

Kildare County Council has published car parking guidelines contained with County Development Plan Written Statement 2017-2023. Table 17.9 within the development plan provides parking guidance for residential developments stating the following requirements: -

- Apartments – 1.5 space per dwelling unit + 1 visitors space per 4 dwelling units;
- House – 2 spaces per dwelling unit; and
- Crèche – 0.5 per staff member plus 1 per 4 children.

In reference to the above development standards and the proposed schedule Table 12.3 below establishes that 605 no. car parking spaces will be required on-site to serve the proposed development.

Table 12.3 Car Parking Requirements

Land Use	Development Standard	Proposed Development Provisions	Parking Requirement
Apartment & Duplex	1.2 spaces per unit	182 units	219
House	2 spaces per unit	184 units	368
Crèche	1 space per 4 children 0.5 space per staff member		18
		Total	**605**

In reference to the architect's scheme drawings the following level of car parking is to be provided on-site to serve the proposed development;

- Surface Parking: Apartments and Duplexes – 219 no. spaces
- Surface Parking: Crèche Parking – 18 no. spaces.
- Surface Parking: House Units (front driveways) - 368 no. spaces.

In total 605 no. on-site dedicated car parking spaces are to be provided as part of the subject development proposals. This level of parking provision has been determined with reference to and the Kildare County development plan standards outlined in Table 12.3 above.

Cycle Parking

Kildare County Council has also published cycle parking guidelines contained with County Development Plan Written Statement 2017-2023. Table 17.10 within the development plan provides the cycle parking guidance for residential developments stating the following requirements:

- Apartments: 1 space per unit + 1 visitor space per 2 units; and
- Crèche – 1 space per 5 staff members plus 1 per 10 children.

It is noted that each of the proposed 'housing' units benefit from being designed with a dedicated 'side access' to their rear gardens. Accordingly, the opportunity is available for residents of these 184 houses to store their bicycles in their own secure back garden.

The development proposes for a total of 704 no. dedicated cycle parking spaces for the apartments, duplexes and crèche which would exceed the minimum requirements outlined within the Kildare County Council development standards.

Vehicle / Pedestrian / Cycle Access

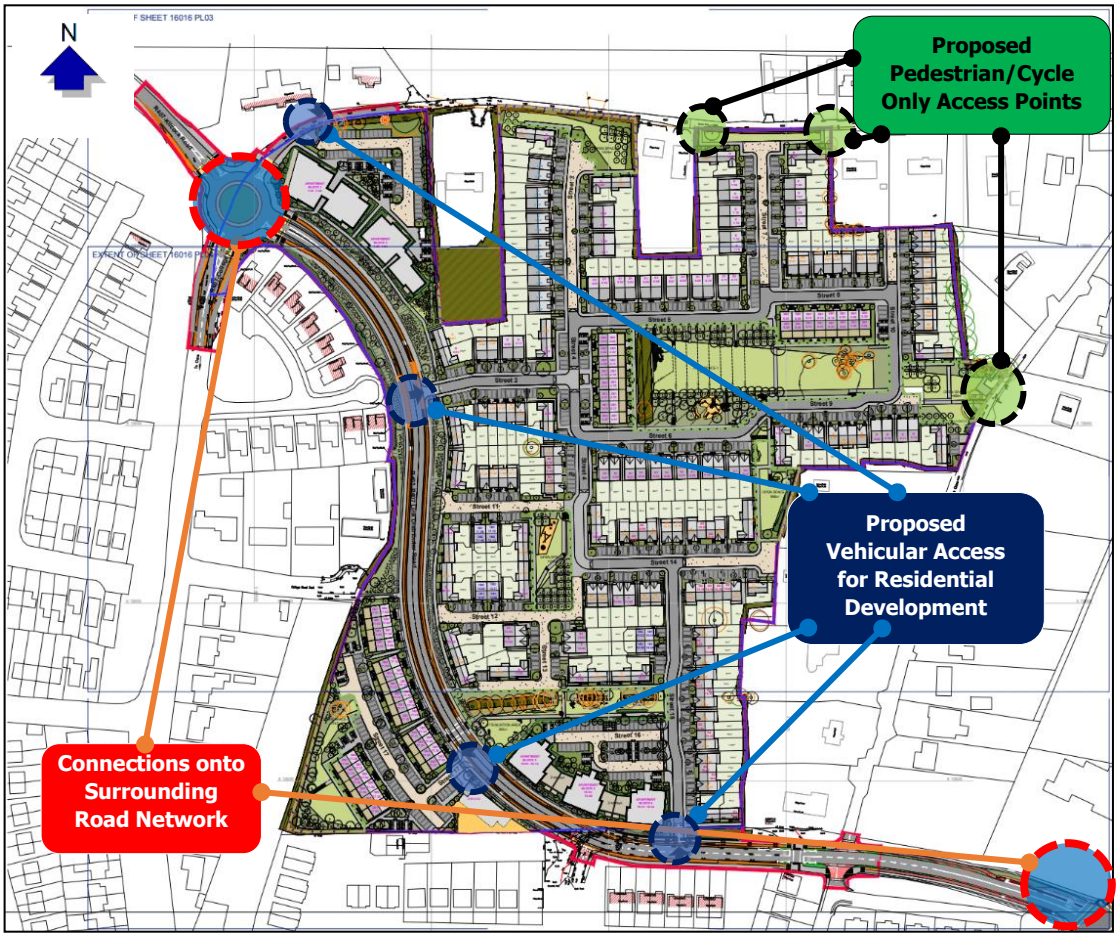
The subject site will benefit from 3 number vehicle access locations (Figure 12.10) which will be provided from the proposed Capdoo Link Road and 1 no. vehicle access location from the existing Capdoo Local Road and connect onto the surrounding road network.

Pedestrian and cycle site access will be provided via the proposed site access junctions along the proposed Capdoo Link Road, with dedicated off-road pedestrian and cycle facilities to be provided along the new road.

Accordingly, the subject site will be highly accessible to both pedestrian and cyclists with permeable connections provided to the neighbouring lands via the access / egress junctions to the east and west.

Cyclists and pedestrians travelling to/from the residential development will be able to access the site via access links off both R403 and R407. These routes should provide adequate links to local amenities and places of employment, whilst also providing the basis for links to Naas, Kilcock and Dublin, and the public transport systems connecting to these areas. There are also a number of Pedestrian and Cycle only access points proposed along the Northern and Eastern boundaries of the site.

Figure 12.10 Proposed Vehicle Access Locations (Source: MCORM Architects, annotated by DBFL)



12.5 Potential Impact of the Proposed Development

12.5.1 Construction Phase

All construction activities will be governed by a Construction Traffic Management Plan (CTMP) the details of which will be agreed with the local roads authority prior to the commencement of construction activities on-site. The principal objective of the CTMP is to ensure that the impacts of all building activities generated during the construction of the proposed residential development upon both the public (off-site) and internal (on-site) workers environments, are fully considered and proactively managed / programmed respecting key stakeholders requirements thereby ensuring that both the public's and construction workers safety is maintained at all times, disruptions minimised and undertaken within a controlled hazard free / minimised environment.

The likely impact of the construction works will be short-term in nature. The number of staff on site will fluctuate over the implementation of the subject scheme. Nevertheless, based upon the experience of similar projects, it would be expected that approx. 30 - 40 staff will be on site at any one time, subsequently generating low levels of two-way vehicle trips during the peak AM and PM periods over the period of the construction works (construction workers will use shared transport). On-site employees will generally arrive before 08:00, thus avoiding the morning peak hour traffic. These employees will generally depart after 16:00.

The potential impact during the construction phase with all the above considered would have a short-term slight effect on the surrounding network however, with the CTMP and deliveries managed accordingly, this will have imperceptible effect in Clane Town Centre and key traffic corridors into the town.

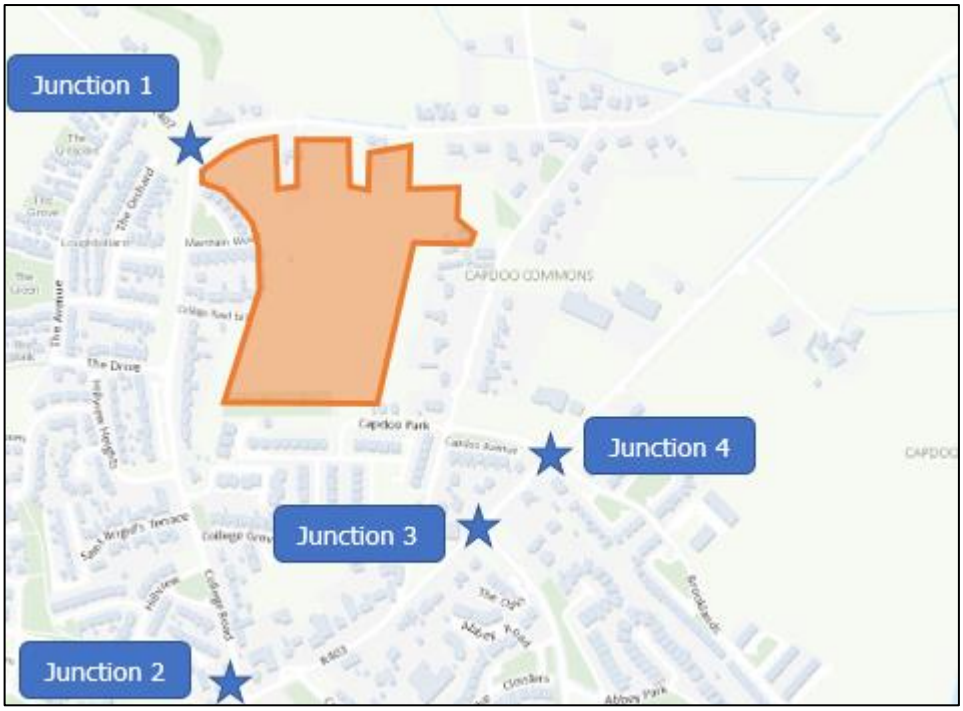
12.5.2 Operational Phase

Once the subject development is fully complete and occupied two distinct peak arrival / departure times are expected during a typical week day. Specifically, there is expected to be a morning peak between 07:30 to 08:30 when people are leaving for work or educational purposes. An evening peak is expected around 17:15 to 18:15 when residents would be returning to the subject site from work.

The development traffic will be accommodated by two purposed access junctions onto the neighbouring road network; a priority-controlled junction with R403 and a new roundabout junction with Capdoo L5078 local road and R407 College Road. In order to analyse and assess the impact of the proposed development on the surrounding road network, a traffic generation and distribution model (excel based) of the following key junctions was created (illustrated in Figure 12.11):

- Junction 1 – R407 College Road / Capdoo L5078 / (Proposed Capdoo Link Road);
- Junction 2 – R407 College Road / R403 / Main Street;
- Junction 3 – R403 / Clane Inner Relief Road;
- Junction 4 – R403 / Brooklands / Capdoo Park (Proposed Capdoo Link Road);

Figure 12.11 Junctions Included Within the Network Analysis (Source: Google Maps, annotated by DBFL)



Once in operation the proposed development is expected to establish permanent travel patterns and trip generation on the surround transport network which would be reflective of existing and forecasted conditions in Clane. Potential impacts would be predicted at immediate key junctions on the road network and would have a moderate effect but consistent with baseline trends.

12.5.3 Do Nothing Scenario

In the absence of the proposed development, the operational performance of the existing junctions on the surrounding road network will remain relatively unchanged with the exception of the impact caused by the forecast network traffic growth.

12.6 Ameliorative, Remedial or Reductive Measures

12.6.1 Construction Phase

A site-specific Construction & Environmental Management Plan will be developed and implemented during the construction phase. Implementation of the measures outlined in this plan will ensure that Construction traffic enters and leaves the site outside of peak hour times, preventing any potential increase in Peak Hour traffic that may be caused by the construction phase.

All construction related parking will be provided on-site. Construction traffic will consist of the following two principal categories:

- Private vehicles owned and driven by site construction staff and by full time supervisory staff.
- Excavation plant and dumper trucks involved in site development works and material delivery vehicles for the following: granular fill materials, concrete pipes, manholes, reinforcement steel, readymix concrete and mortar, concrete blocks, miscellaneous building materials, etc.

It is anticipated that the generation of HGV'S during the construction period will be evenly spread throughout the day and as such will not impact significantly during the peak traffic periods.

12.6.2 Operational Phase

Development traffic will be accommodated by two purposed access junctions onto the neighbouring road network; a priority-controlled junction with R403 and a new roundabout junction with Capdoo L5078 local road and R407 College Road.

In order to promote and maximise sustainable transportation modes for this site, cycle parking has been provided at a rate which exceeds Kildare County Development Plan (2017-2023) minimum standards which may act as a facilitator for the growth of cycle trips undertaken for short to medium distance trips to/from the site, whilst apartment vehicle parking spaces have been provided at a rate consistent with the *Department of Housing, Planning and Local Government's Sustainable Urban Housing: Design Standards for New Apartments Guidelines*, which is lower than those outlined in the Kildare County Development Plan.

The increase in cycle parking provisions, and simultaneous reduction in vehicle parking provisions for apartment and duplex units aims to increase the number of cycle trips taken and therefore encourage a modal split shift towards cycling for short to medium distance trips.

12.7 Predicted Impact of the Proposed Development

12.7.1 Construction Phase

At this initial stage it is assumed that whilst the first 100 units will be completed by the end of 2020, the full scheme is likely not to be fully completed until 2025, which is the assumed Interim design year for this proposed development.

All construction activities will be governed by a Construction Traffic Management Plan (CTMP) the details of which will be agreed with the local roads authority prior to the commencement of construction activities on-site. The number of staff on site will fluctuate over the implementation of the subject scheme. Nevertheless, based upon the experience of similar projects, a development of this type and scale would on average necessitate approximately 30 - 40 staff on site at any one time, subsequently generating no more than 10 - 15 two-way vehicle trips during the peak AM and PM periods over the period of the construction works, (construction workers will use shared transport). On-site employees will generally arrive before 08:00, thus avoiding the morning peak hour traffic. These employees will generally depart after 16:00. It should be noted that a large proportion of construction workers would arrive in shared transport.

Deliveries would arrive at a steady rate during the course of the day. An estimated 42,000m^3 of inert fill material will be brought onto the site over the entire duration of the construction stage of the development. Existing spoil material and spoil generated from earthworks, service trenching and excavation of foundations will be retained on-site, however the additional importation of 42,000m^3 fill material will be needed to ensure proposed dwellings are elevated above the adjacent 100-year flood extent. This stage of importation is anticipated to last 48 months in duration.

The estimated 42,000m^3 of fill material equates to between 4,828 and 5,385 truckloads upon vehicles characteristics. At 3 loads per hour and 10 hours per day this equates to 180 days of importation of fill material as part of the adopted worst-case assessment. Considering the programme for this importation is 48 months, the effect on the local road network is considered negligible.

In relation to the proposed haul routes for the fill material, it is proposed that vehicles will exit and enter the site from the R403/R407 regional roads to/from the respective licensed facility. This proposed haul route will bypass Clane Town.

For the above reasons we do not believe that construction traffic will generate any traffic concerns or impede upon the operational performance of the local road network and its surrounding junctions, and therefore conclude that there will be slight short-term impacts during construction phase. However, with the CTMP and deliveries managed accordingly, this will have imperceptible effect in Clane Town Centre and key traffic corridors into the town.

12.7.2 Operational Phase

Trip Generation

A review of trip generation factors contained within the TRICS database was carried out. TRICS data is primarily UK based, although a number of Irish sites have recently been included and the number of Irish sites continues to expand. Nevertheless, we consider that TRICS will provide a reasonable indication of traffic generation from the proposed development.

Notwithstanding the above, internal research undertaken by TRICS has shown that there is no direct evidence of trip rate variation by country or region. The use of English, Scottish or Welsh data can be equally applicable to Ireland if users take into account important site selection filtering factors such as levels of population, location type, local public transport provision, and development size and car ownership level, amongst others.

Data supplied for inclusion in TRICS undergoes a procedure of validation testing, and there is no evidence from this procedure suggesting that data from Ireland bears any significant fundamental differences to that from the other countries included. Consequently, we consider that TRICS will provide a reasonable indication of traffic generation from the proposed development.

Table 12.4 below includes the predicted trip generations and our estimate of the likely traffic flows in and out of the proposed development during the morning and evening peak hour periods using data from TRICS.

Table 12.4 Proposed Development Trip Rates (TRICS)

Land Use	Units	AM Peak Hour			PM Peak Hour		
		Arr	Dep	Total	Arr	Dep	Total
Apartments	Per Unit	0.062	0.123	0.205	0.219	0.130	0.349
Houses	Per Unit	0.120	0.348	0.468	0.415	0.274	0.689
Creche	Per Child						

Based on the above trip rates, potential peak hour traffic generation is calculated based on 182 apartments, 184 houses and a crèche. Table 12.5 summarises the predicted peak hour AM and PM traffic generated by the proposed development. The TRIC's output files are included in Appendix 12.B of this report.

Table 12.5 Proposed Development Vehicle Trips

Land Use	Units	AM Peak Hour			PM Peak Hour		
		Arr	Dep	Total	Arr	Dep	Total
Apartments	182	11	26	37	40	24	64
Houses	184	22	64	86	76	50	126
Creche							

Trip Generation – Construction Rate

For the purpose of this assessment and utilising typical house construction rates it is estimated that 100 of the proposed 366 dwellings and the crèche could be constructed by the year 2020, with the remaining 266 dwellings constructed prior to the adopted 2025 design. Table 12.6 summarises the predicted peak hour AM and PM traffic generated by the proposed residential development in each of the adopted design years.

Table 12.6 Proposed Development Traffic Generation

Design Year	Land Use	AM Peak Hour			PM Peak Hour		
		Arr	Dep	Total	Arr	Dep	Total
2020	100 units	9	25	34	32	20	52
2025	266 units	24	65	89	84	54	138
2035 Total		33	90	123	116	74	190

Trip Distribution & Assignment - Network Redistribution from 407 / R403 Junction

The proposed link road would reduce the total volume of traffic using the junction between the R403 and R407 regional roads, however, it should be noted that not all existing traffic turning between the regional roads was diverted, as some existing traffic was assumed to be local traffic travelling to the supermarkets, schools and other local amenities, and thus these local trips would still be made regardless of the development of the new Capdoo Link Road.

Accordingly, it has been assumed that traffic diverted from the priority-controlled junction by Clane Town will instead travel along the proposed link street between the R403 and R407.

Traffic distributions for the existing road have been derived and calculated using combinations of survey data for the existing road network, calculated trip rates for the site proposed, CSO SAPMAP data and a gravity model calculated based upon expected trip destinations, derived from census data.

This redistribution sees a proportion of the total traffic that would travel along either regional road towards Clane town centre and turn onto the other regional road redirected along the proposed link street between the two, effectively skipping the priority controlled junction by Clane town, reducing congestion and risk of collisions and hazards by Clane town, where greater levels of pedestrian and vulnerable road user activity is expected.

Trip Distribution & Assignment - *Proposed Development Trips*

The associated residential vehicle trips have been assigned to the surrounding road network based on the surveyed traffic movements passing the site based on the following assumptions.

In the Opening Year 2020, we have assumed that 100 of the 366 residential houses and the creche will be complete and occupied with the Capdoo Link Road being required to be completed. As a result, 67% of these new trips will travel to/from the R403 / Brooklands / Capdoo Park site access junction and 33% will travel along the R407 College Road via the new site access / egress roundabout junction. In this 2020 scenario we have assumed that:

- Traffic Flows and patterns will remain similar to surveyed traffic flow data.
- Trips from the development are to be consistent with the existing trends along either road; and
- % distribution of flows changes between AM and PM scenarios in accordance with survey data.

In 2035, the development will be fully completed with a total of 366 residential houses occupied. In this 2035 scenario we have assumed a similar distribution for the subject residential development is appropriate to that of the 2020 Opening Year Scenario.

Traffic Growth

The TTA adopts an Opening Design Year of 2020 and Future Horizon Year of 2035 (+15 years) as per TII guidelines. Although traffic growth may not increase at the rates once predicted, to ensure a robust analysis of the impact of traffic upon the local road network we have adopted growth rates using the Transport Infrastructure Ireland (TII) "Travel Demand Projections".

Table 5.3.2 within the TII Project Appraisal Guidelines Units 5.3 provides Link-Based Annual Traffic Growth Factors for the different regions within Ireland. The subject site lies within 'Mid-East' with the growth factors as outlined within Table 12.7 below:

Table 12.7 Link-Based Growth Rates: Annual Growth Factors (Extract from Table 5.3.2 PAG Unit 5.3)

Region	Name	Low Sensitivity Growth				Central Growth				High Sensitivity Growth			
		2013-2030		2030-2050		2013-2030		2030-2050		2013-2030		2030-2050	
		LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
2	Mid-East Wicklow Meath Kildare	1.0109	1.0221	1.0018	1.0135	1.0140	1.0237	1.0048	1.0176	1.0154	1.0242	1.0054	1.0195

Applying the annual factors (central growth) as outlined in Table 12.7 above for the adopted Opening Year of 2020 and Future Horizon Year of 2035 (+15 years), the following growth rates have been adopted to establish corresponding 2020 and 2035 baseline network flows: -

- 2017 to 2020 – 1.043 (or 4.3%); and
- 2017 to 2035 – 1.216 (or 22.7%).

Assessment Scope

A total of three different traffic scenarios have been investigated across the three different design years;

- 'Base' (Do-Nothing) traffic characteristics – baseline network conditions for 2020, 2025 and 2035
- 'Post development' (Do-Something Scenario 2020) traffic characteristics – includes 100 units, Link Road and crèche; and
- 'Post development' (Do-Something Scenario 2025 and 2035) traffic characteristics – includes entire 366 units and crèche and Link Road

The 'Base' traffic scenario takes into account the existing flows travelling across the network. The proposed development traffic is then added to the network's 'Base' traffic flows to establish the 'Post Development' traffic flows. In summary, the following network modelling scenarios are considered: -

Do Nothing

- 2020 Base Traffic Flows (No Link Road)
- 2025 Base Traffic Flows (No Link Road)
- 2035 Base Traffic Flows (No Link Road)

Do Something

- 2020 Do Nothing + Proposed Residential Development (100 units + crèche and Link Road)
- 2025 & 2035 Do Nothing + Proposed Residential Development (Full Development 366 units + crèche & Link Road)

Assessment Periods

The networks AM and PM peak hour flows have been identified as occurring between 08:30 to 09:30 and 17:15 to 18:15 respectively.

The following figures as included in Appendix 12.A present the vehicle flows across the local road network for each of the adopted development scenarios: -

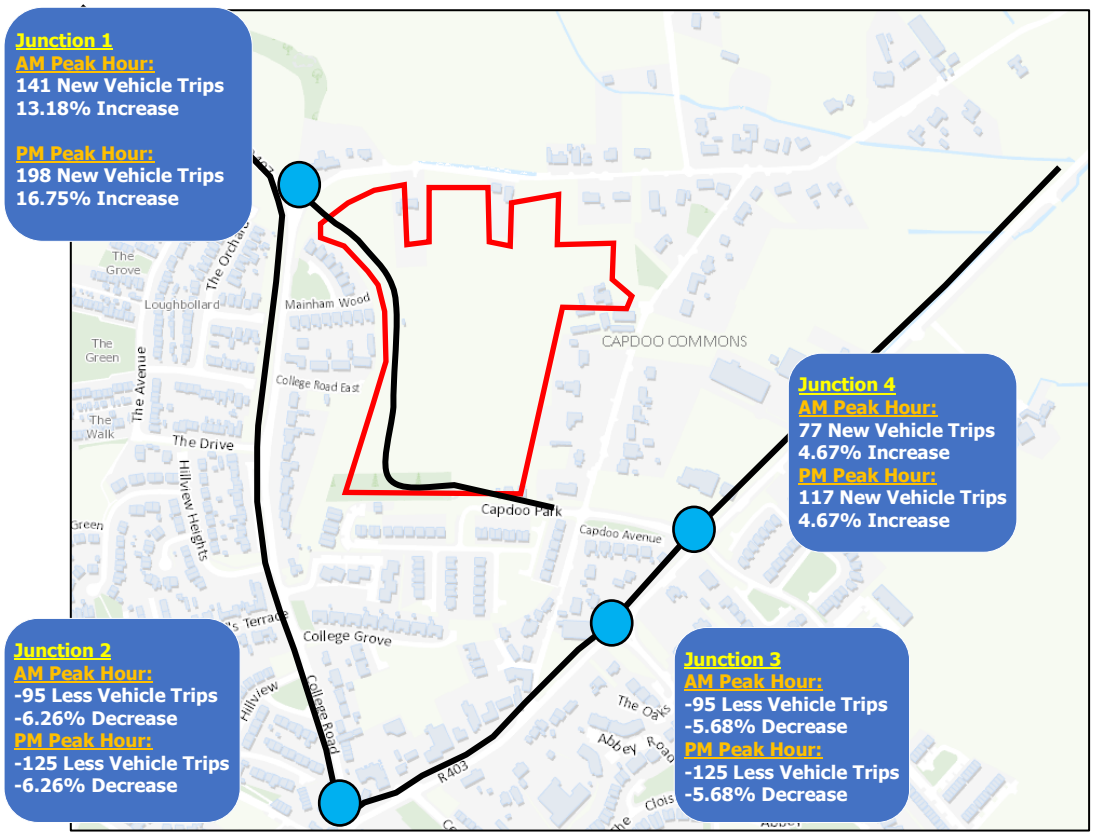
- Figure 3 – 2020 Do Nothing
- Figure 4 – 2025 Do Nothing
- Figure 10 – 2035 Do Nothing
- Figure 11 – 2020 Do Something (100 Units)
- Figure 12 – 2025 Do Something
- Figure 13 – 2035 Do Something

Impact of Proposals

The Institution of Highways and Transportation document 'Guidelines for Traffic Impact Assessments' (1994) states that the impact of a proposed development upon the local road network is considered material when the level of traffic it generates surpasses 10% and 5% on normal and congested networks respectively. When such levels of impact are generated a more detailed assessment should be undertaken to ascertain the specific impact upon the network's operational performance. These same thresholds are reproduced in the NRA document entitled Traffic and Transport Assessment Guidelines (2014).

Figure 12.12 and Table 12.8 below details the amount of two-way vehicle trips to/from the proposed development site that will travel through Junction 1, 2, 3 and 4 in the 2035 Horizon Design year scenario. This Scenario was considered as it would propose a scenario with the largest number of vehicles utilising the road network with all 366 units assigned to the 2035 traffic model with the base traffic flows growthed to those expected for the Horizon Design year, in accordance with TII Project Appraisal Guidelines.

Figure 12.12 Increase in Vehicle Trips Generated 2035 Do Something Scenario



The resulting percentage increase in traffic flows as a result of the traffic generated by the proposed development is established as being below the 10% threshold at all off-site junctions in both the AM and PM peak periods.

For the key junctions surveyed, it can be seen that the proposed development (366 units) in 2035 would result in the following:

- **Junction 1** (R407 College Road / L5078 Capdoo / Capdoo Link Road): an increase of 13.18% (141 New Two-Way Vehicle Trips) in the AM peak period and 16.75% (198 New Two-Way Vehicle Trips) in the PM peak period;
- **Junction 2** (R403 / R407 Priority Controlled Junction): a decrease of -4.82% (95 Less Two-Way Vehicle Trips) in the AM peak period and -6.26% (125 Less Two-Way Vehicle Trips) in the PM peak period;
- **Junction 3** (R403 / Clane Inner Relief Road Roundabout): a decrease of -5.68% (95 Less Two-Way Vehicle Trips) in the AM peak period and -5.68% (125 Less Two-Way Vehicle Trips) in the PM peak period; and
- **Junction 4** (R403/Capdoo Park/Brooklands Priority Controlled Junction): an increase of 4.67% (77 New Two-Way Vehicle Trips) in the AM peak period and 6.56% (117 New Two-Way Vehicle Trips) in the PM peak period.

Table 12.8 Network Impact through Key Junctions

Junction ID	Location	2035 % Impact	
		AM Peak	PM Peak
1	R407 College Road / L5078 Capdoo / Capdoo Link Road Roundabout	4.51%	3.21%
2	R403 / R407 Priority Controlled Junction	0.00%	0.00%
3	R403 / Clane Inner Relief Road Roundabout	3.01%	1.92%
4	R403/Capdoo Park/Brooklands Priority Controlled Junction	3.18%	2.15%

Junctions 2, and 3 were discounted from the operational assessment component of this TTA as it did not exceed the 10% threshold required under the Institution of Highways and Transportation document 'Guidelines for Traffic Impact Assessments'. As Junction 1 did exceed the 10% threshold, a junction performance analysis will be conducted as required by the guidance document.

Junction 4 even though it did not exceed the 10% threshold, the junction which is located on the western boundary of the proposed development would be considered a main site access/egress junction even with two separate site access future east along new link road. Hence, a junction analysis will be performed on this junction in conjuncture with the other three site accesses for the proposed development and Junction 1. These analyses will be assessed in the next section.

Network Analysis

The operational assessment of the local road network has been undertaken using the Transport Research Laboratory (TRL) computer package Junctions 9.0 using PICADY for priority-controlled junctions and ARCADY for roundabout junctions.

When considering both roundabout and priority-controlled junctions, a Ratio of Flow to Capacity (RFC) of greater than 85% (0.85) would indicate a junction to be approaching capacity, as operational performance above this RFC value begins to become poor and deteriorates quickly.

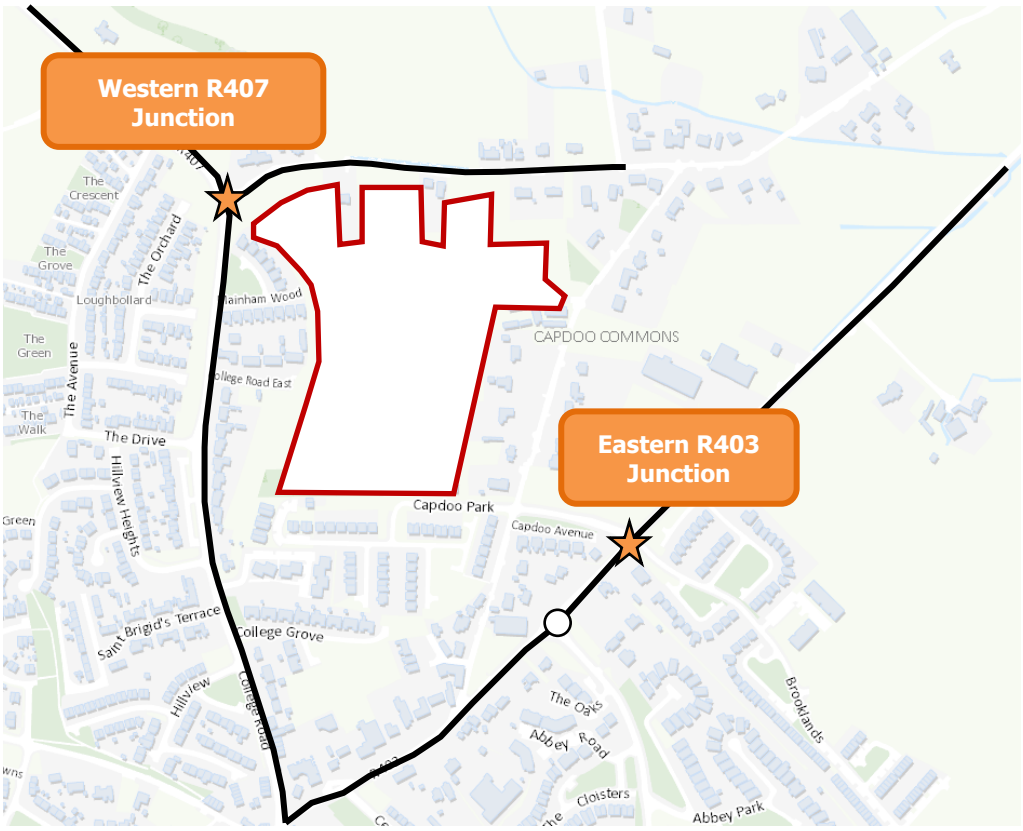
A 60-minute weekday AM and PM period has been simulated, namely from 07:30 to 08:30 and 17:15 to 18:15, as influenced by local traffic conditions. Traffic flows were entered using an Origin-Destination table for the peak hour periods.

In order to determine if the local road network can adequately cater for the predicted level of traffic as potentially generated by the proposed office development, an area wide traffic model incorporating the local key junctions has been analysed for the schemes adopted future design years. The assessment has adopted a 2020 Opening Year, with Full development being achieved by the 2025 Interim Year and a 2035 Horizon Design Year.

Network analysis is undertaken for junctions that are significantly impacted by the development. Impacts are determined based on the assumptions made for traffic flows, as outlined in the Network Redistribution section in Chapter 6, and from this, the level of impact is determined for the difference in traffic volumes experienced, which are compared for 'Do Nothing' and 'Do Something' Scenarios. The threshold for considering a road or junction to be significantly impacted by any works is often taken as a 10% increase in traffic flow volumes. Figure 12.13 indicates all of the junctions which experience an impact above that of the 10% threshold, and accordingly have been modelled for junction analysis going forward.

The flows for these scenarios are then input to traffic modelling packages ARCADY and PICADY to determine junction performance, Ratio of Flow to Capacity (RFC), Delays and Queue Lengths anticipated for each arm of a junction.

Figure 12.13 Map of Site and Junctions Analysed (Source: www.osi.ie)



The junctions which have been modelled for analysis were the locations where the Proposed Link Street meets the neighbouring R407 regional road and at the junction between the R403 College road, Brooklands and Capdoo Park. The Link Road proposed to travel through the site terminates to the west of the site at a proposed roundabout junction for the site's 'Do Something' Approach, and the east entrance to the site has been evaluated, despite being under the threshold for evaluation, to provide a complete analysis of the development.

The relevant ARCADY and PICADY results are observed in Table 12.12 - 12.14, where the 'Do Nothing' and 'Do Something' junction analysis results may be seen.

The Eastern R403 Junction has been modelled as a priority-controlled crossroads, with 4 arms. This junction provides access to the R403 regional road, and will provide access to a link street connecting to the R407 for the 'Do Something' approach.

The arms of the junction, which may be seen in Figure 12.14, are labelled as follows:

a) R403 North
b) Brooklands
c) R403 South
d) Proposed Link Street

Figure 12.14 Eastern R403 Junction layout

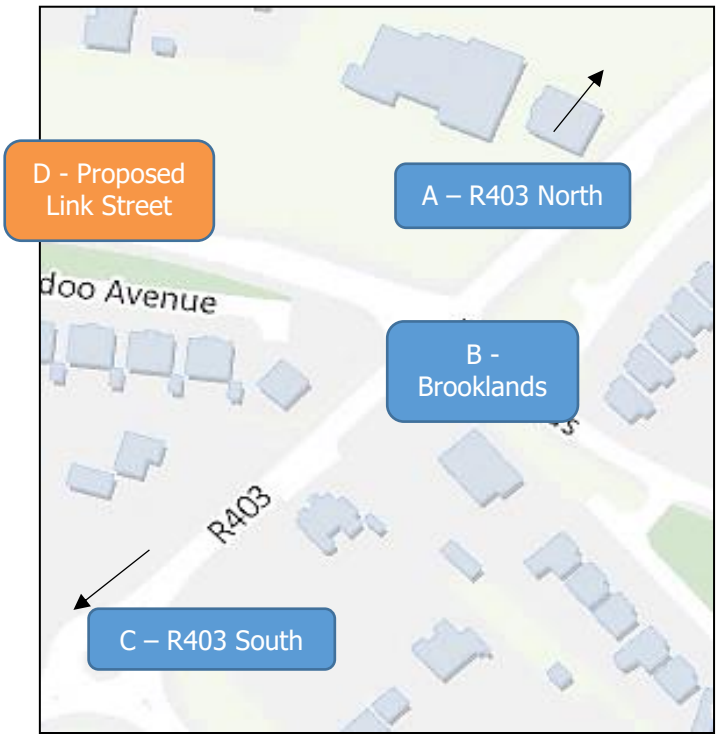


Table 12.9 Eastern R403 Junction PICADY Results

Year Scenario	Period	Arm	Description	Queue Lengths (PCUS)	Delay (s)	RFC
2017 Base Flows	AM PEAK	A	R403 North	0.1	6.45	0.04
		B	Brooklands	0.5	12.97	0.30
		C	R403 South	0.1	4.54	0.04
		D	Link Street	0.2	18.35	0.12
		A	R403 North	0.7	4.73	0.19

	PM PEAK	B	Brooklands	0.1	13.63	0.11
		C	R403 South	0.6	7.06	0.21
		D	Link Street	0.1	16.80	0.05
2020 DN	**AM PEAK**	A	R403 North	0.1	6.44	0.04
		B	Brooklands	0.5	13.52	0.31
		C	R403 South	0.1	4.48	0.04
		D	Link Street	0.1	19.52	0.08
	PM PEAK	A	R403 North	0.8	4.69	0.20
		B	Brooklands	0.2	14.19	0.12
		C	R403 South	0.7	7.13	0.22
		D	Link Street	0.1	17.63	0.04
2020 DS	**AM PEAK**	A	R403 North	0.4	7.14	0.15
		B	Brooklands	0.5	13.58	0.32
		C	R403 South	0.1	4.60	0.04
		D	Link Street	0.4	20.50	0.14
	PM PEAK	A	R403 North	2.2	6.68	0.46
		B	Brooklands	0.1	14.08	0.12
		C	R403 South	0.7	7.65	0.22
		D	Link Street	0.4	23.38	0.27
2025 DN	**AM PEAK**	A	R403 North	0.1	6.40	0.05
		B	Brooklands	0.6	14.67	0.35
		C	R403 South	0.1	4.39	0.05
		D	Link Street	0.2	21.85	0.15
	PM PEAK	A	R403 North	1.1	4.63	0.24
		B	Brooklands	0.2	15.82	0.14
		C	R403 South	0.9	7.32	0.26
		D	Link Street	0.1	19.45	0.06
	AM PEAK	A	R403 North	0.5	7.46	0.20
		B	Brooklands	0.6	15.22	0.36
		C	R403 South	0.1	4.51	0.05

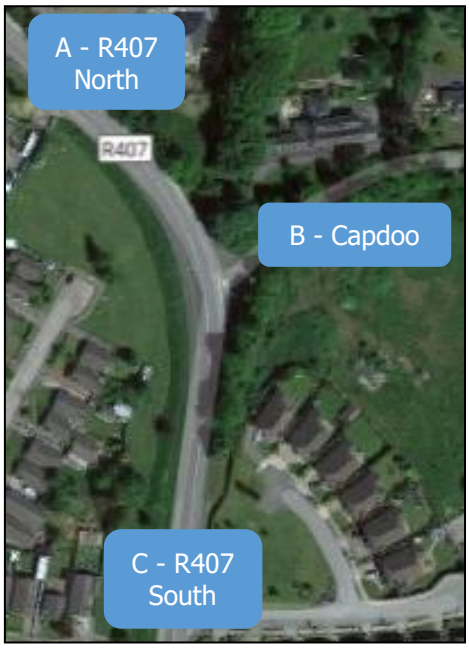
2025 DS		D	Link Street	0.7	24.90	0.39
	PM PEAK	A	R403 North	4.8	10.62	0.66
		B	Brooklands	0.2	16.72	0.15
		C	R403 South	0.9	7.91	0.27
		D	Link Street	0.7	33.17	0.41
2035 DN	**AM PEAK**	A	R403 North	0.1	6.35	0.06
		B	Brooklands	0.7	16.82	0.40
		C	R403 South	0.1	4.27	0.06
		D	Link Street	0.2	26.31	0.17
	PM PEAK	A	R403 North	1.6	4.65	0.31
		B	Brooklands	0.2	18.89	0.18
		C	R403 South	1.3	7.77	0.32
		D	Link Street	0.1	22.77	0.07
2035 DS	**AM PEAK**	A	R403 North	0.7	7.66	0.23
		B	Brooklands	0.8	17.75	0.41
		C	R403 South	0.1	4.39	0.06
		D	Link Street	0.9	31.40	0.45
	PM PEAK	A	R403 North	11.1	21.73	0.83
		B	Brooklands	0.3	21.23	0.20
		C	R403 South	1.4	8.54	0.33
		D	Link Street	1.1	46.11	0.51

From the above results it may be observed that none of the arms of the junction are at capacity for either the 'Do Something' or 'Do Nothing' approaches for this development despite the increase in vehicles using the road network as a result of the development.

This shows that the junction would operate adequately with the development traffic and diverted trips along the link street, with a highest RFC of 0.83 for 2035 "Do Something" PM period, and highest delays of 46.11s expected along the Capdoo Link street for 2035 "Do Something" AM period.

The Western R407 Junction has a proposed roundabout for the 'Do Something' approach, and remains as a priority controlled T-junction for the 'Do Nothing' approach. Therefore, results have been analysed with ARCADY software for the roundabout scenario, and PICADY for the priority controlled "Do Nothing" scenario, which can be viewed in further details in Appendices C and D. The "Do Something" scenario offers connectivity between the R403 and R407 routes, via a link road through the site.

Figure 12.15 Western R407 Junction Existing layout



The 3 arms for the PICADY analysis may be seen above in Figure 12.15 with the existing road layout and are labelled as follows:

a) R407 North
b) Capdoo - L5078
c) R407 South

Table 12.10 Western R407 Junction PICADY Results

Year Scenario	Period	Arm	Description	Queue Lengths (PCUS)	Delay (s)	RFC
2017 Base Flows	AM PEAK	A	R407 North			
		B	Capdoo	0.1	13.02	0.07
		C	R407 South	0.1	5.86	0.04
	PM PEAK	A	R407 North			
		B	Capdoo	0.2	14.77	0.15
		C	R407 South	0.1	5.94	0.06
	AM PEAK	A	R407 North			
		B	Capdoo	0.1	13.26	0.08
		C	R407 South	0.1	5.86	0.04

2020 DN		A	R407 North			
	PM	B	Capdoo	0.2	15.28	0.16
	PEAK	C	R407 South	0.1	5.91	0.07
		A	R407 North			
	AM	B	Capdoo	0.1	13.93	0.09
	PEAK	C	R407 South	0.1	5.77	0.05
2025 DN		A	R407 North			
	PM	B	Capdoo	0.2	16.13	0.18
	PEAK	C	R407 South	0.1	5.85	0.07
		A	R407 North			
	AM	B	Capdoo	0.1	14.61	0.10
	PEAK	C	R407 South	0.1	5.67	0.05
2035 DN		A	R407 North			
	PM	B	Capdoo	0.3	17.65	0.21
	PEAK	C	R407 South	0.2	5.79	0.08

The 4 arms for the ARCADY analysis can be seen in Figure 12.16 and are labelled as follows:

a) Proposed Link Street
b) R407 South
c) R407 North
d) Capdoo

Figure 12.16 Western R407 Junction Proposed Layout

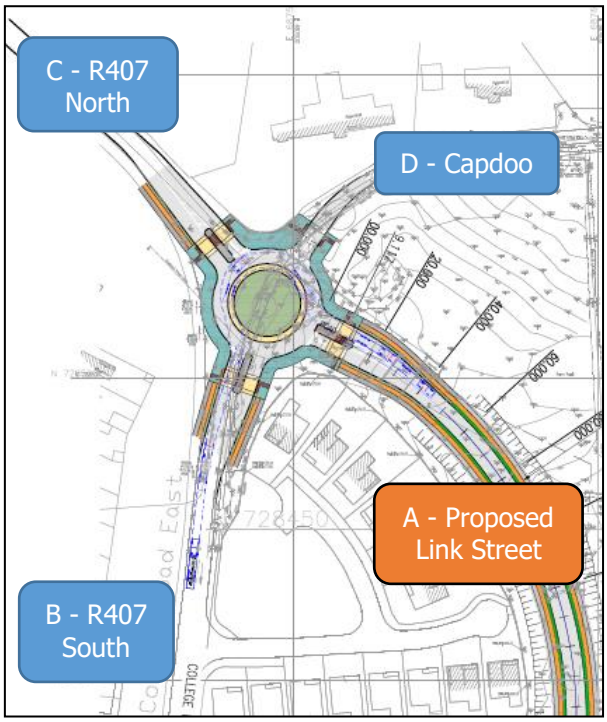


Table 12.11 Western R407 Junction ARCADY Results

Year Scenario	Period	Arm	Description	Queue Lengths (PCUS)	Delay (s)	RFC
2020 DS	AM PEAK	A	Proposed Link Street	0.0	4.21	0.04
		B	R407 South	0.6	4.86	0.34
		C	R407 North	0.8	5.73	0.41
		D	Capdoo	0.0	6.62	0.04
	PM PEAK	A	Proposed Link Street	0.1	4.42	0.06
		B	R407 South	0.6	4.98	0.35
		C	R407 North	0.8	5.94	0.43
		D	Capdoo	0.1	7.12	0.08
	AM PEAK	A	Proposed Link Street	0.1	4.41	0.07
		B	R407 South	0.7	5.15	0.38
		C	R407 North	0.9	6.14	0.45

2025 DS		D	Capdoo	0.1	6.88	0.04
	PM PEAK	A	Proposed Link Street	0.1	4.60	0.08
		B	R407 South	0.7	5.35	0.40
		C	R407 North	1.0	6.75	0.49
		D	Capdoo	0.1	7.73	0.10
2035 DS	**AM PEAK**	A	Proposed Link Street	0.1	4.54	0.07
		B	R407 South	0.8	5.48	0.41
		C	R407 North	1.0	6.67	0.49
		D	Capdoo	0.1	7.17	0.05
	PM PEAK	A	Proposed Link Street	0.1	4.76	0.09
		B	R407 South	0.9	5.74	0.44
		C	R407 North	1.3	7.44	0.54
		D	Capdoo	0.1	8.17	0.11

From the two datasets above, it may be observed that none of the arms are at or approaching capacity, for both the priority controlled junction and the roundabout, showing clearly that the 'Do Something' approach does not have a significantly negative impact upon the junction, with the roundabout junction even reducing delays and estimated queue lengths for the junction in the Horizon 2035 design year.

Considering all datasets analysed, there are no reasons to consider the traffic impacts upon the network to be a significant issue. All junctions analysed are shown to be operating within capacity.

A Maximum RFC value of 0.21 can be observed in the 2035 "Do Nothing" PM Peak period along the R407 south arm of the priority-controlled junction, with a Maximum Delay time of 18s being observed along the Capdoo Commons existing link road for the 2035 "Do Nothing" PM Peak.

A Maximum RFC value of 0.54 can be observed in the 2035 "Do Something" PM Peak period along the R407 north arm of the roundabout, with a Maximum Delay time of 8s being observed along the Capdoo Commons existing link road for the 2035 "Do Something" PM Peak.

The above results show an improvement to delays experienced along the road network at this proposed junction as a result of the roundabout junction, which will see the delays reduced across this junction's links.

12.8 Monitoring

Not applicable for this chapter.

12.9 Reinstatement

Not applicable for this chapter.

12.10 Interactions and Potential Cumulative Impacts

12.10.1 Interactions

Noise and Vibration

Development of the site will result in a short term increase of construction traffic related noise and vibration. Post construction development traffic will contribute to increased noise levels on the surrounding network.

Air Quality

Post construction development traffic will contribute to increased traffic volumes on the surrounding network which in turn will decrease air quality.

12.10.2 Potential Cumulative Impacts

Potential cumulative impacts have been assessed in relation to the existing and permitted transportation schemes. The site of the proposed residential development is positioned within the urban environment which will ideally position the site to maximise access to / from the site by sustainable forms of travel including walking, cycling and public transport.

Any other future development in the vicinity of the site would have to similarly undergo Traffic and transport assessments to assess the potential cumulative impacts to the transport network. A desktop study was conducted of planning application in the vicinity of the subject development in Kildare County Council planning database archive to assess any cumulative impacts from granted or committed applications to the subject scheme. No planning applications were found within the immediate vicinity of the transport network assessed that would have a cumulative impact to traffic or to this proposed development.

12.11 Human Health

12.11.1 Construction Phase

Temporary negative impacts to human health may be likely during the construction phase due to noise, dust, air quality and visual which are discussed in other chapters within this EIAR. The traffic impacts are detailed in Section 12.11. These impacts will be temporary in nature and are not considered to be significant.

12.11.2 Operational Phase

The increased traffic as a result of the proposed development has been shown to have a negligible impact in terms of traffic. The associated impact on Human Beings will be limited.

Impact on air and noise quality will be negligible, as outlined above and in the Noise and Vibration and Air Quality sections of this EIAR.

The potential for increased accidents is also considered low as a result of the improved road safety. Data obtained from the Road Safety Authority shows that since 2005, no serious or fatal accidents have occurred adjacent to the proposed development entrance. In addition, the proposed works will significantly improve pedestrian access/access to the Capdoo Site.

These works will also act as traffic calming measures to some degree and help reduce the likelihood of accidents in the local area.

12.12 Accidents & Disasters

12.12.1 Construction Phase

During the construction stage, the risk of accidents associated with the proposed development would not cause unusual, significant or adverse effects to the access of the existing public road network. The vast majority of the works are away from the public road. Measures will be put in place to assess the risk of road traffic accidents during the construction phase. It is expected that the risk of accidents would be low during the construction of the proposed development considering standard construction practises would be used and no unusual substance or technologies would be used nor predicted.

Table 12.12 Description of Effects – Construction Phase

Ref	Environment Character	Quality/ Scale of Impact	Impact Significance	Duration
1	Medium/ High Sensitivity	Neutral - Negligible	Not Significant	Temporary
2	Low Sensitivity	Negative - Low	Slight	Temporary

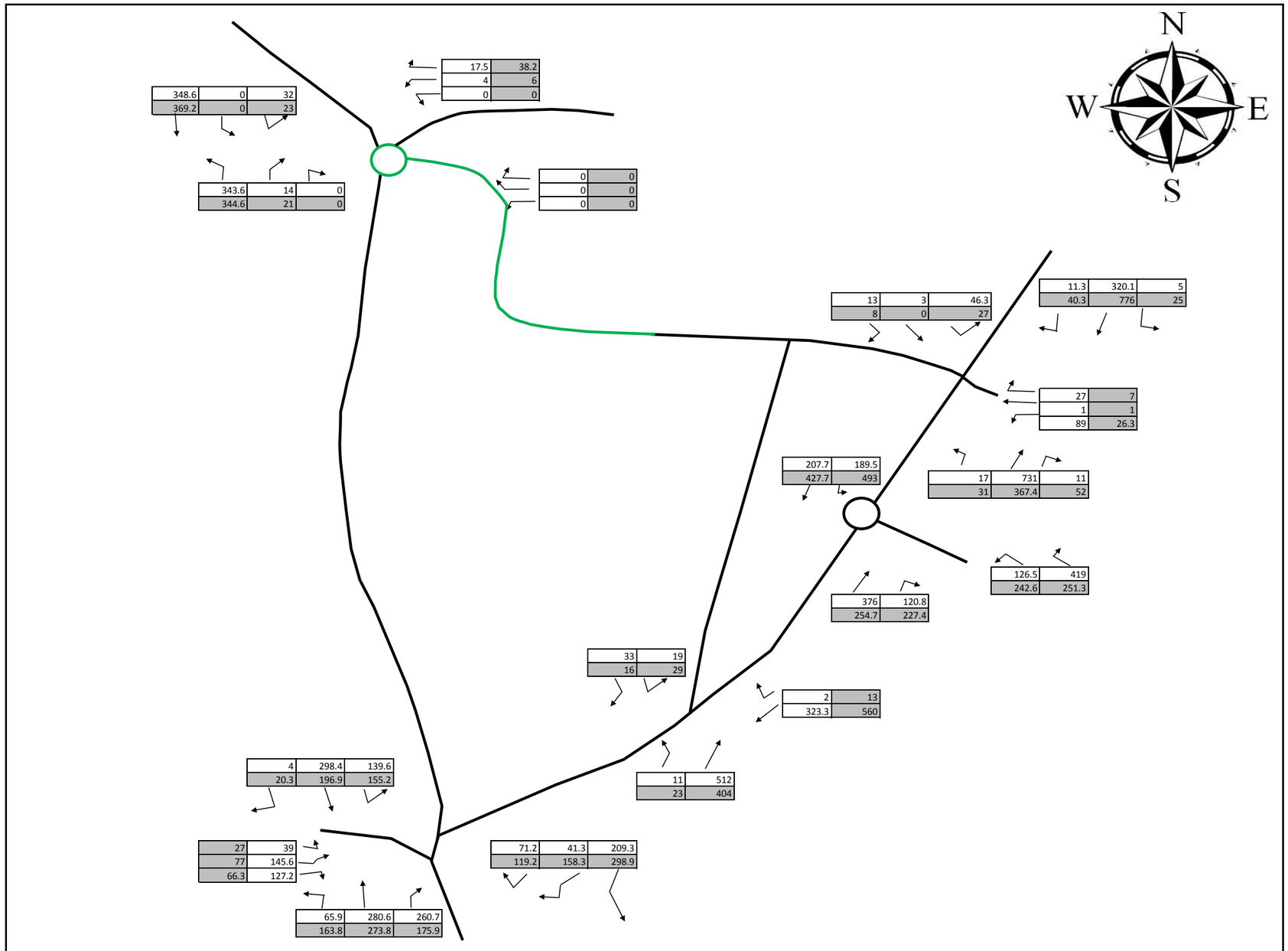
12.12.2 Operational Phase

During the operational phase, it is anticipated that the risk of accidents and the resulting pollution risks will be reduced due to improved road safety.

Table 12.13 Description of Effects – Operational Phase

Ref	Environment Character	Quality/ Scale of Impact	Impact Significance	Duration
1	Medium/ High Sensitivity	Negative - High	Not Significant	Long Term
2	Low Sensitivity	Positive - Low	Slight	Long Term

Appendix 12.A Traffic Flow Diagrams



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Project : Lands at Capdoo, Clane

DRG. Title : 2017 Base Traffic Flows

Key:

AM Peak Hour (0730-0830)
PM Peak Hour (1715-1815)

Proposed road
Existing road

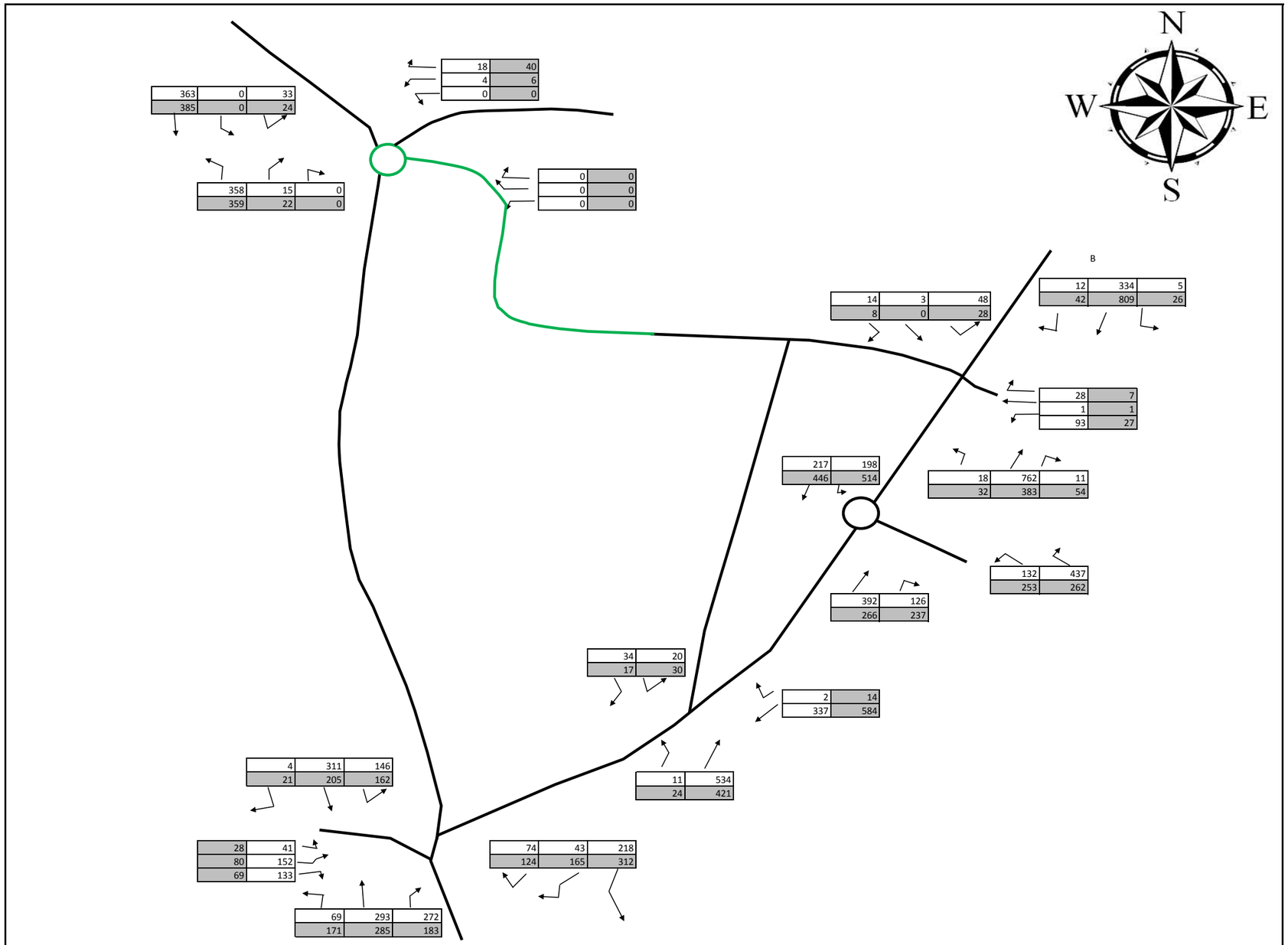
Flows relate to data recorded on Wednesday 20th September 2017

Dwn:	Ckd:	Date:
PMG		27/05/2019

Ref: p162074\calcs\excel\162074 Traffic Model 001

Figure: 1

Rev: -



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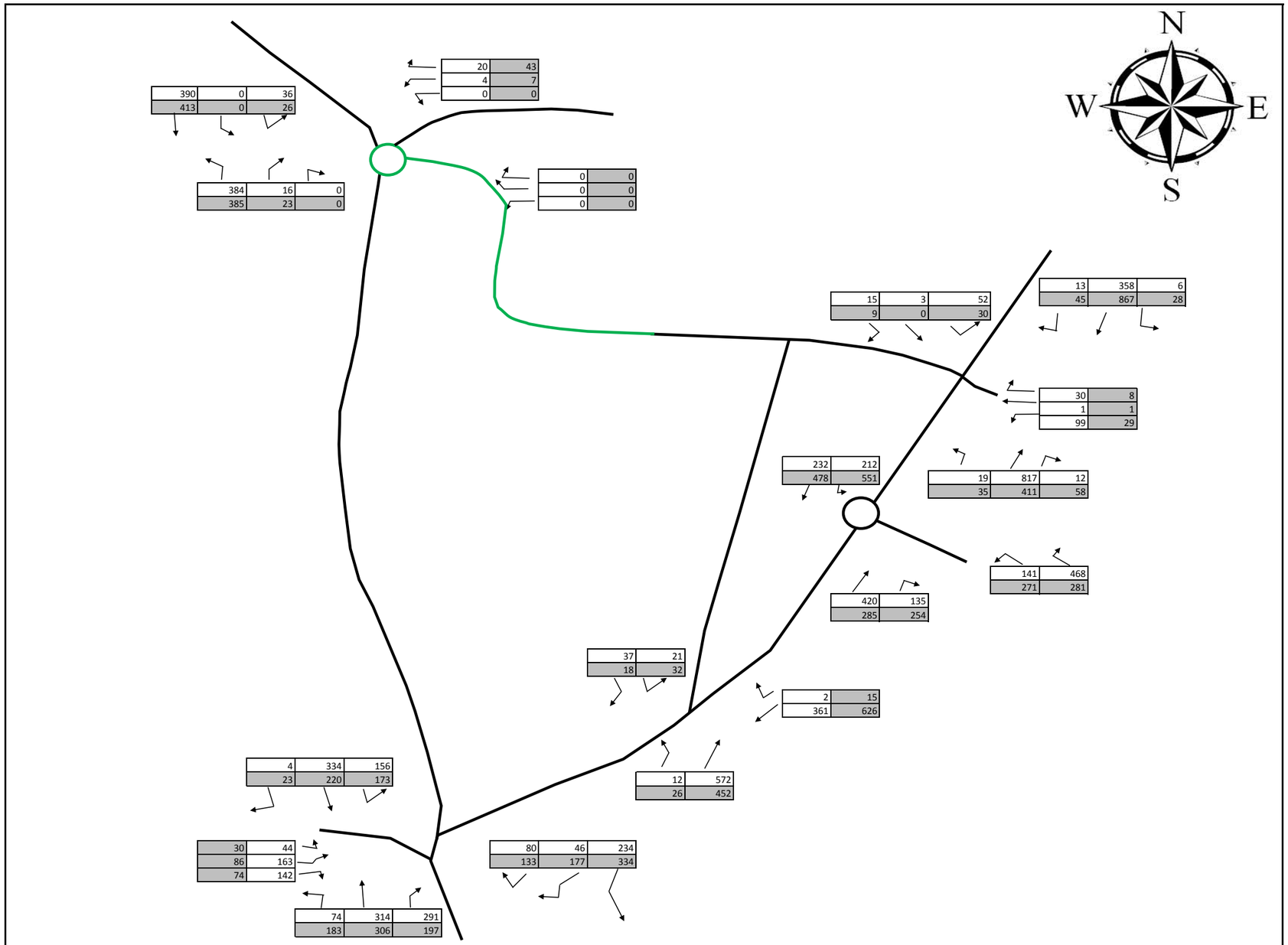

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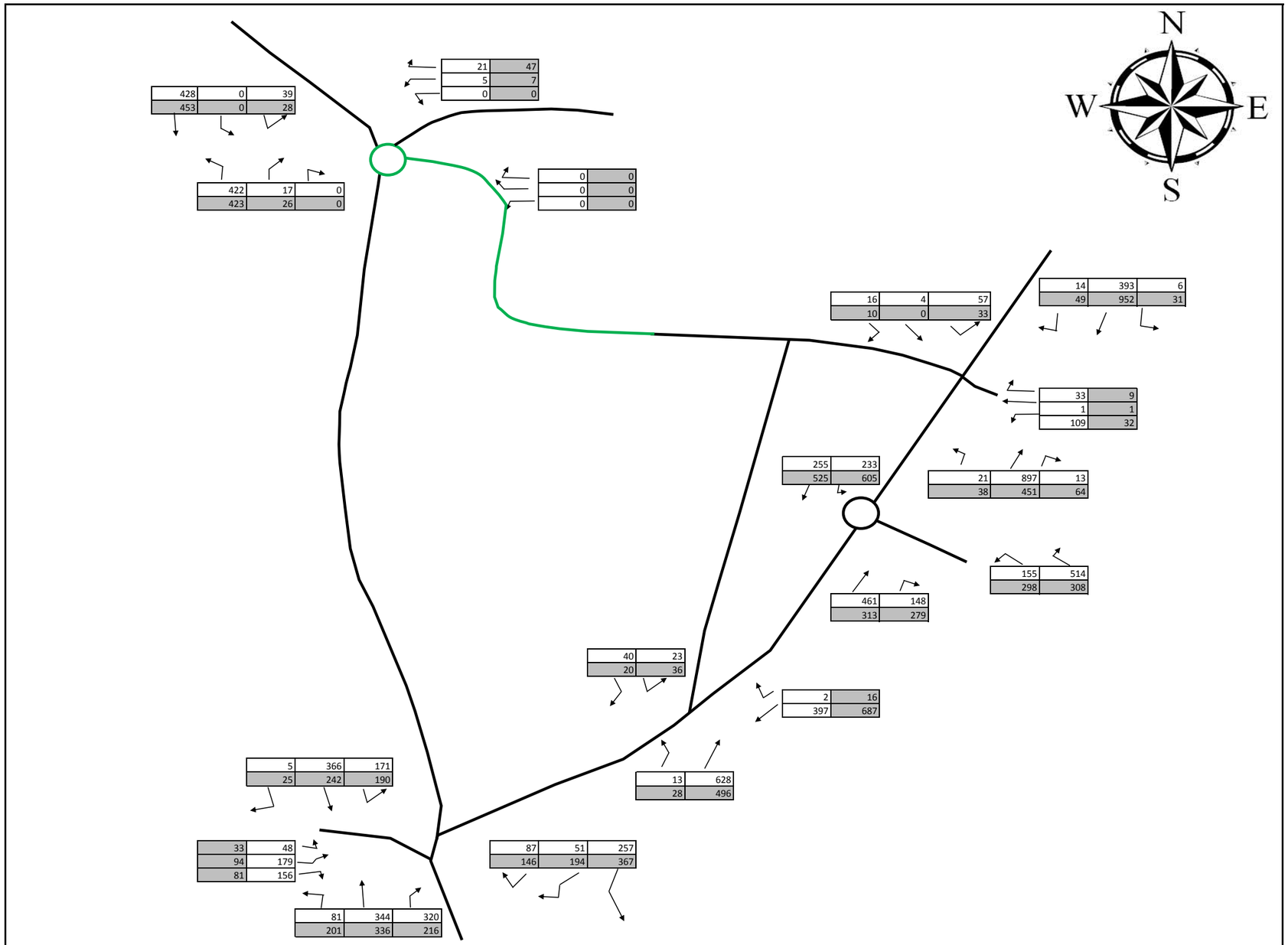

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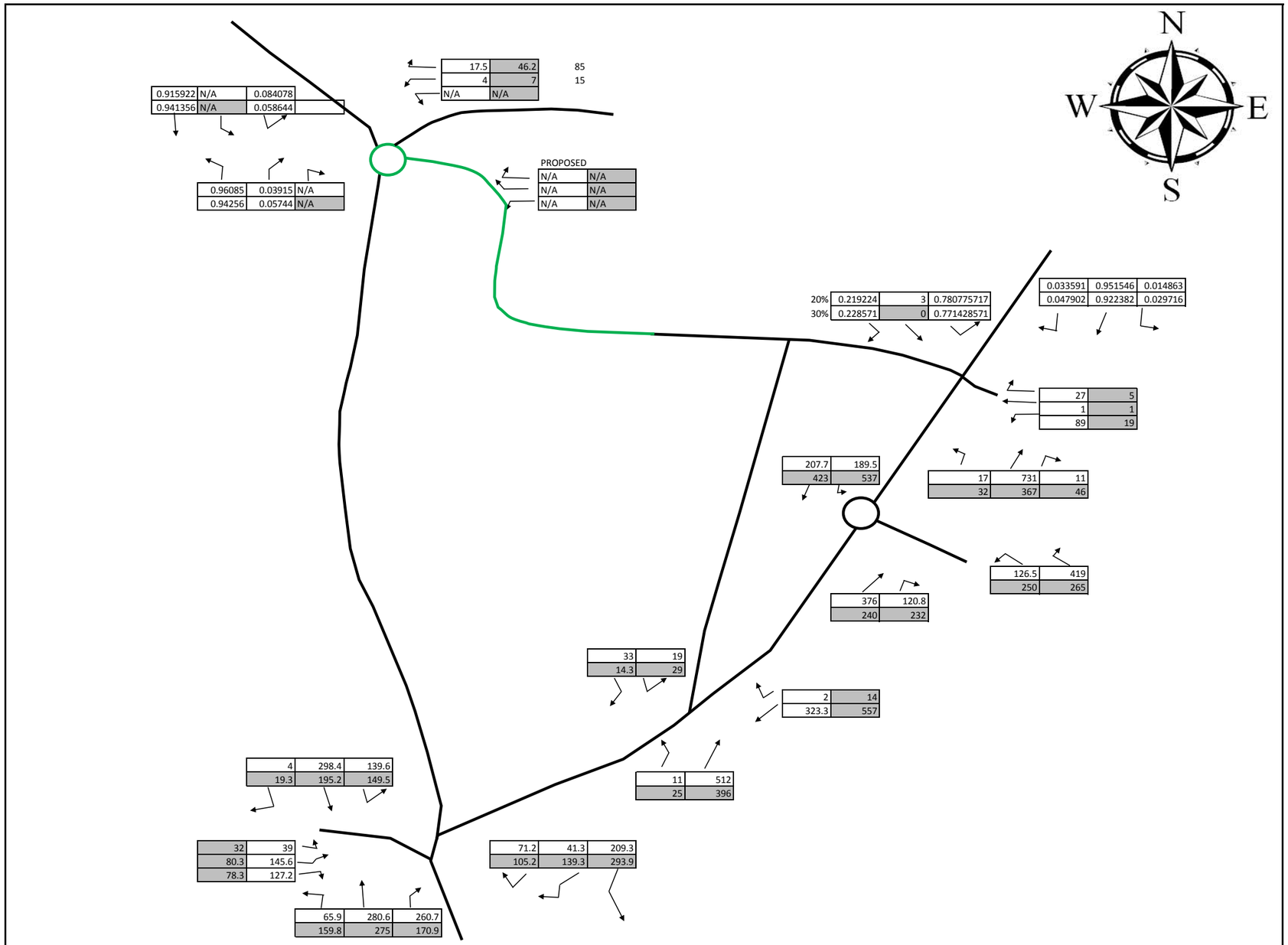

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email: info@dbfl.ie

website: www.dbfl.ie

Project :
Lands at Capdoo, Clane

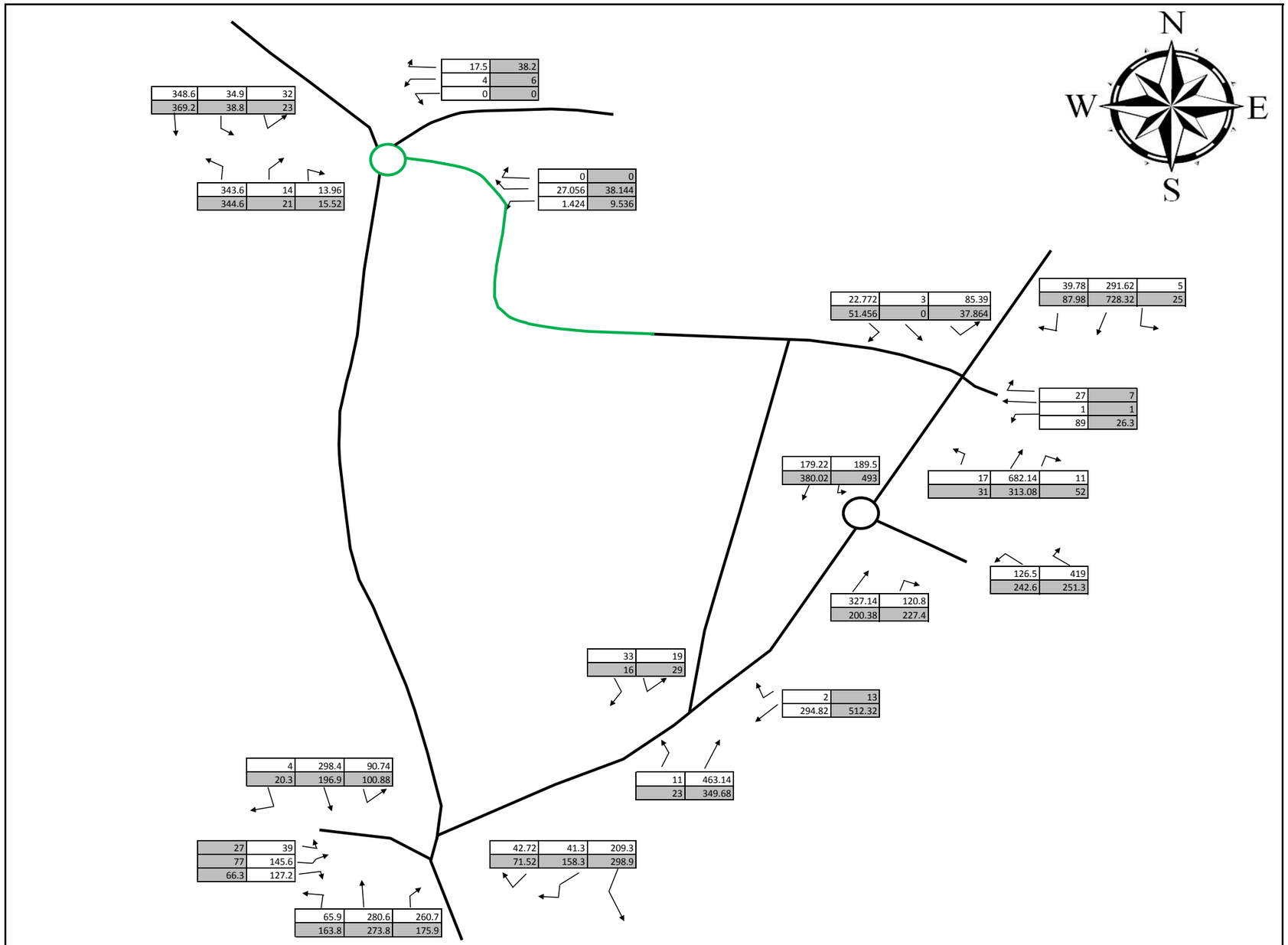
DRG. Title :
Existing Traffic Flows % Distribution

Key:
AM Peak Hour (0730-0830)
PM Peak Hour (1715-1815)
Proposed road
Existing road
Flows relate to data recorded on Wednesday 20th September 2017

Dwn:	Ckd:	Date:
PMG		27/05/2019

Ref: p162074\calcs\excel\162074 Traffic Model 001

Figure:	Rev:
6	-



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Project :
Lands at Capdoo, Clane

DRG. Title :
2017 Adjusted Base Flows

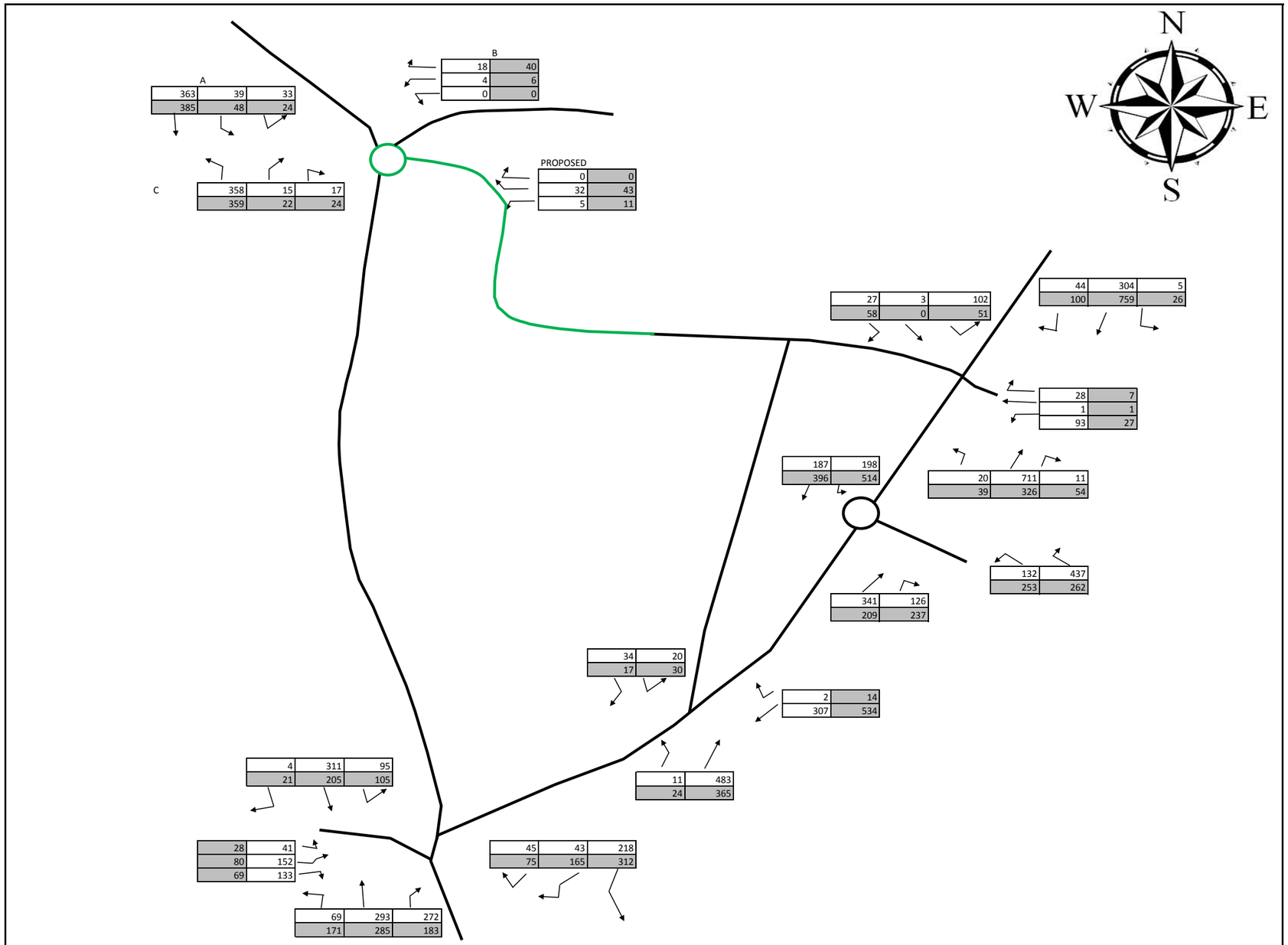
Key:
AM Peak Hour (0730-0830)
PM Peak Hour (1715-1815)
Proposed road
Existing road
Flows relate to data recorded on Wednesday 20th September 2017

Dwn:	Ckd:	Date:
PMG		27/05/2019

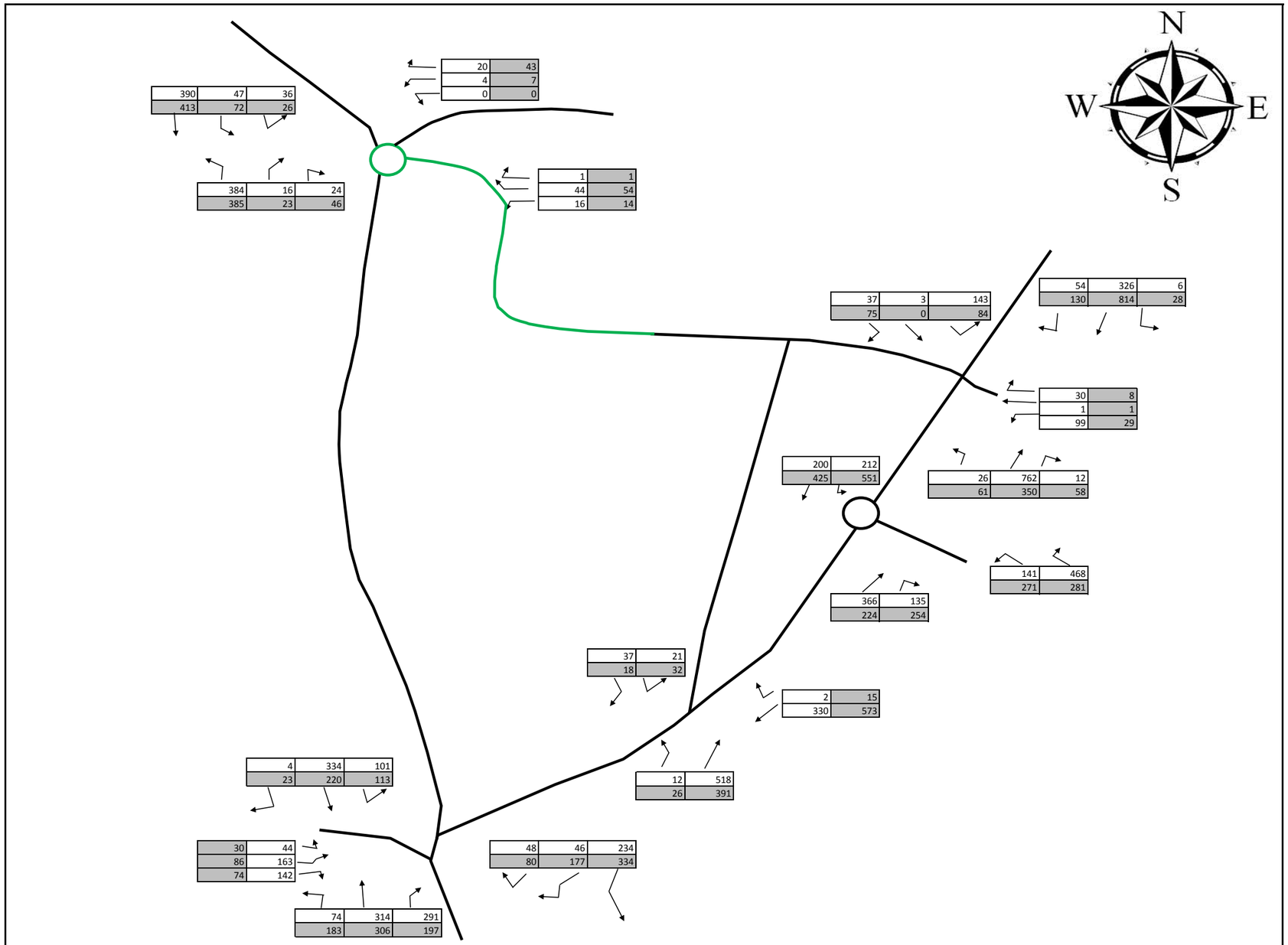
Ref:
p162074\calcs\excel\162074 Traffic Model 001

Figure: 8

Rev: -



DBFL Consulting Engineers	**Dublin Office:** Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 **phone:** +353 1 400 4000 **Waterford Office:** Unit 2, The Chandlery, 1-2 O'Connell Street, Waterford **phone:** +353 51 309 500 **email:** info@dbfl.ie **website:** www.dbfl.ie	**Project :** Lands at Capdoo, Clane **DRG. Title :** DS 2020 Opening Year	**Key:** AM Peak Hour (0730-0830); PM Peak Hour (1715-1815); Proposed road; Existing road Flows relate to data recorded on Wednesday 20th September 2017	**Dwn:** PMG; **Ckd:**; **Date:** 27/05/2019 **Ref:** p162074\calcs\excel\162074 Traffic Model 001 **Figure:** 9; **Rev:** -	



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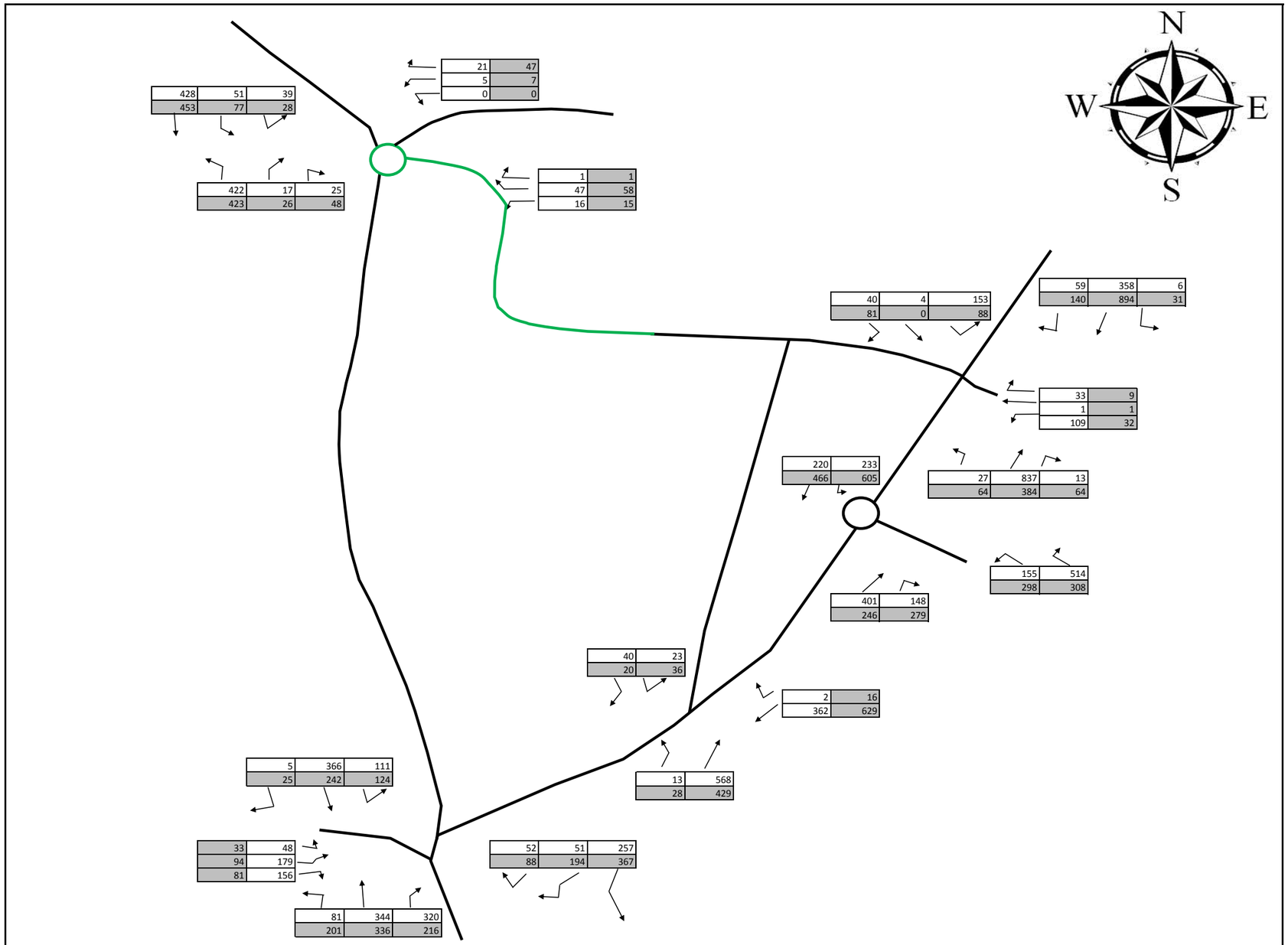

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Appendix 12.B TRICS Database Outputs

Calculation Reference: AUDIT-638801-180823-0811

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

04	EAST ANGLIA		
	SF	SUFFOLK	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	2 days
10	WALES		
	PS	POWYS	1 days
12	CONNAUGHT		
	CS	SLIGO	2 days
	GA	GALWAY	1 days
	RO	ROSCOMMON	1 days
16	ULSTER (REPUBLIC OF IRELAND)		
	CV	CAVAN	1 days
	DN	DONEGAL	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

Secondary Filtering selection:

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

Parameter: Number of dwellings
Actual Range: 7 to 180 (units:)
Range Selected by User: 4 to 792 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 22/11/17

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	4 days
Wednesday	2 days
Thursday	5 days
Friday	1 days

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

Selected survey types:

Manual count	13 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	3
Edge of Town	7
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	6
Village	3
No Sub Category	4

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	13 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:

1,000 or Less	3 days
1,001 to 5,000	8 days
5,001 to 10,000	2 days

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

Population within 5 miles:

5,000 or Less	4 days
5,001 to 25,000	7 days
25,001 to 50,000	2 days

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

Car ownership within 5 miles:

1.1 to 1.5	10 days
1.6 to 2.0	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:

No	13 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	13 days

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

LIST OF SITES relevant to selection parameters

1 AN-03-A-09 DETACHED & SEMI-DETACHED ANTRIM
SLOEFIELD DRIVE
CARRICKFERGUS

Edge of Town
No Sub Category
Total Number of dwellings: 151
Survey date: WEDNESDAY *12/10/16* *Survey Type: MANUAL*

2 CS-03-A-03 MIXED HOUSES SLIGO
TOP ROAD
STRANDHILL
STRANDHILL
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 30
Survey date: THURSDAY *27/10/16* *Survey Type: MANUAL*

3 CS-03-A-04 DETACHED & SEMI-DETACHED SLIGO
R292
STRANDHILL

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 63
Survey date: THURSDAY *27/10/16* *Survey Type: MANUAL*

4 CV-03-A-01 DETACHED HOUSES CAVAN
DUBLIN ROAD
CAVAN

Edge of Town
No Sub Category
Total Number of dwellings: 37
Survey date: TUESDAY *18/12/12* *Survey Type: MANUAL*

5 DN-03-A-02 DETACHED DONEGAL
GLENFIN ROAD
BALLYBOFEY

Edge of Town
Residential Zone
Total Number of dwellings: 7
Survey date: THURSDAY *05/09/13* *Survey Type: MANUAL*

6 GA-03-A-04 SEMi DET. & BUNGALOWS GALWAY
R347 CAHEROYN ROAD
ATHENRY

Edge of Town Centre
Residential Zone
Total Number of dwellings: 21
Survey date: TUESDAY *09/10/12* *Survey Type: MANUAL*

7 NE-03-A-03 PRIVATE HOUSES NORTH EAST LINCOLNSHIRE
STATION ROAD
SCUNTHORPE

Edge of Town Centre
Residential Zone
Total Number of dwellings: 180
Survey date: TUESDAY *20/05/14* *Survey Type: MANUAL*

8 NY-03-A-07 DETACHED & SEMI DET. NORTH YORKSHIRE
CRAVEN WAY
BOROUGHBRIDGE

Edge of Town
No Sub Category
Total Number of dwellings: 23
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

9 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Edge of Town
Residential Zone
Total Number of dwellings: 23
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

10 PS-03-A-01 MIXED HOUSES POWYS
BRYN GLAS
WELSHPOOL

Edge of Town Centre
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY *11/05/15* *Survey Type: MANUAL*

11 RO-03-A-03 DETACHED HOUSES ROSCOMMON
N61
BOYLE
GREATMEADOW
Edge of Town
No Sub Category
Total Number of dwellings: 23
Survey date: THURSDAY *25/09/14* *Survey Type: MANUAL*

12 SF-03-A-06 DETACHED & SEMI-DETACHED SUFFOLK
BURY ROAD
KENTFORD

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 38
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

13 SH-03-A-05 SEMI-DETACHED/TERRACED SHROPSHIRE
SANDCROFT
TELFORD
SUTTON HILL
Edge of Town
Residential Zone
Total Number of dwellings: 54
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	51	0.074	13	51	0.200	13	51	0.274
08:00 - 09:00	13	51	0.165	13	51	0.495	13	51	0.660
09:00 - 10:00	13	51	0.189	13	51	0.225	13	51	0.414
10:00 - 11:00	13	51	0.155	13	51	0.161	13	51	0.316
11:00 - 12:00	13	51	0.191	13	51	0.189	13	51	0.380
12:00 - 13:00	13	51	0.231	13	51	0.216	13	51	0.447
13:00 - 14:00	13	51	0.245	13	51	0.270	13	51	0.515
14:00 - 15:00	13	51	0.261	13	51	0.269	13	51	0.530
15:00 - 16:00	13	51	0.252	13	51	0.227	13	51	0.479
16:00 - 17:00	13	51	0.363	13	51	0.254	13	51	0.617
17:00 - 18:00	13	51	0.437	13	51	0.276	13	51	0.713
18:00 - 19:00	13	51	0.347	13	51	0.267	13	51	0.614
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.910			3.049			5.959

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:	7 - 180 (units:)
Survey date date range:	01/01/10 - 22/11/17
Number of weekdays (Monday-Friday):	13
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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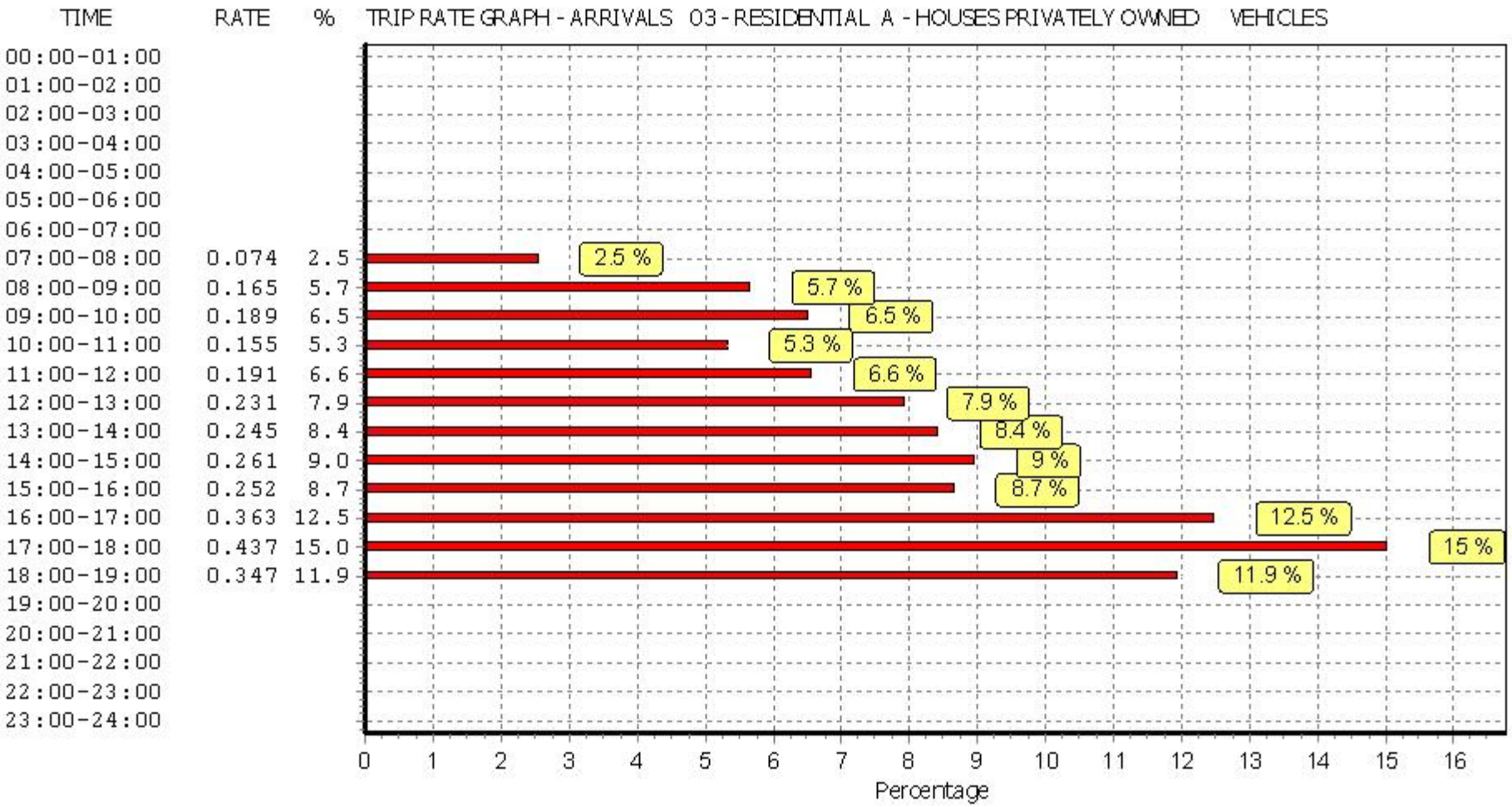

This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

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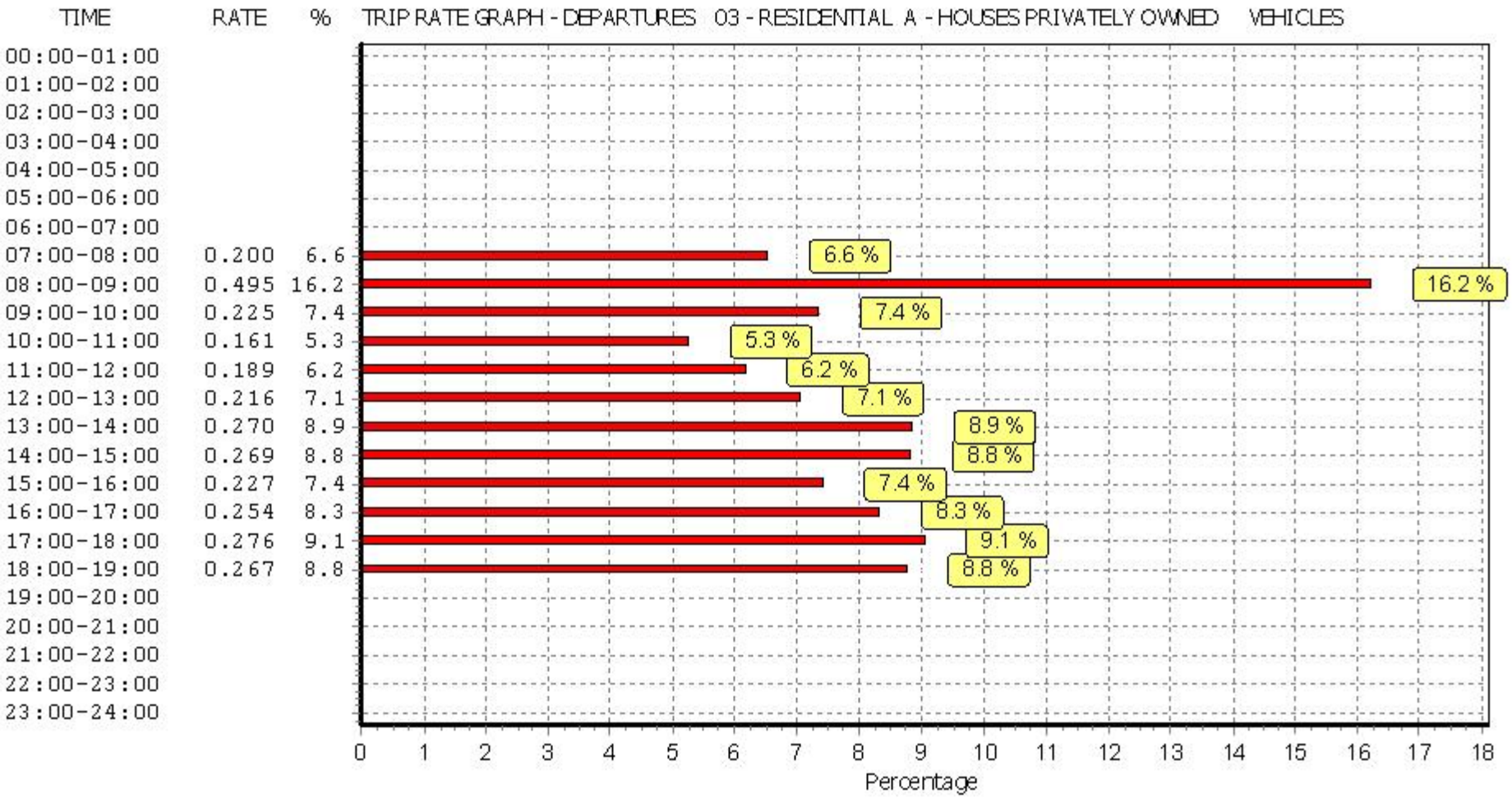

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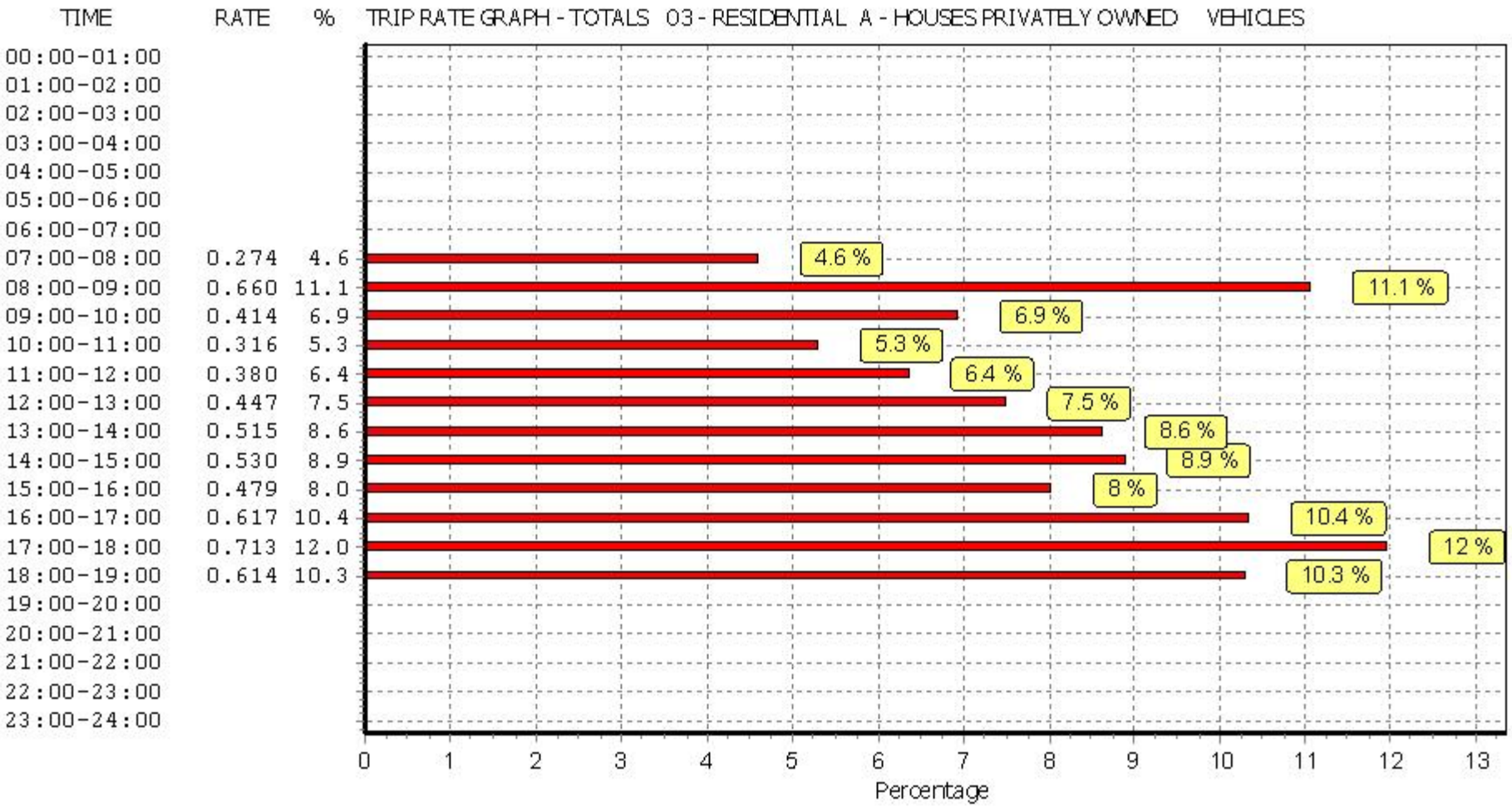

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	13	51	0.011	13	51	0.009	13	51	0.020
08:00 - 09:00	13	51	0.003	13	51	0.005	13	51	0.008
09:00 - 10:00	13	51	0.002	13	51	0.002	13	51	0.004
10:00 - 11:00	13	51	0.000	13	51	0.000	13	51	0.000
11:00 - 12:00	13	51	0.008	13	51	0.006	13	51	0.014
12:00 - 13:00	13	51	0.003	13	51	0.005	13	51	0.008
13:00 - 14:00	13	51	0.005	13	51	0.003	13	51	0.008
14:00 - 15:00	13	51	0.005	13	51	0.006	13	51	0.011
15:00 - 16:00	13	51	0.005	13	51	0.003	13	51	0.008
16:00 - 17:00	13	51	0.006	13	51	0.008	13	51	0.014
17:00 - 18:00	13	51	0.003	13	51	0.003	13	51	0.006
18:00 - 19:00	13	51	0.003	13	51	0.003	13	51	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.054			0.053			0.107

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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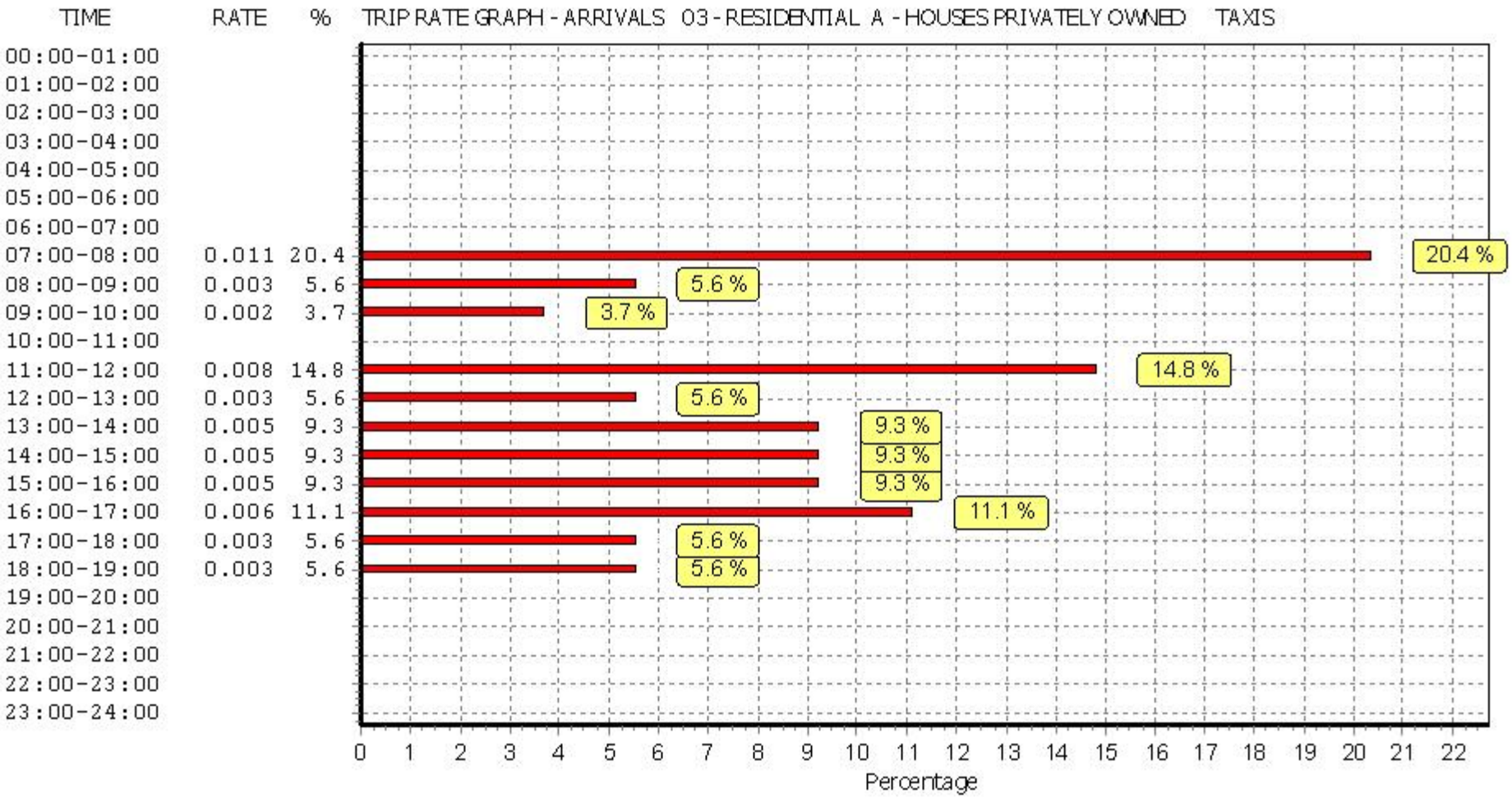

This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

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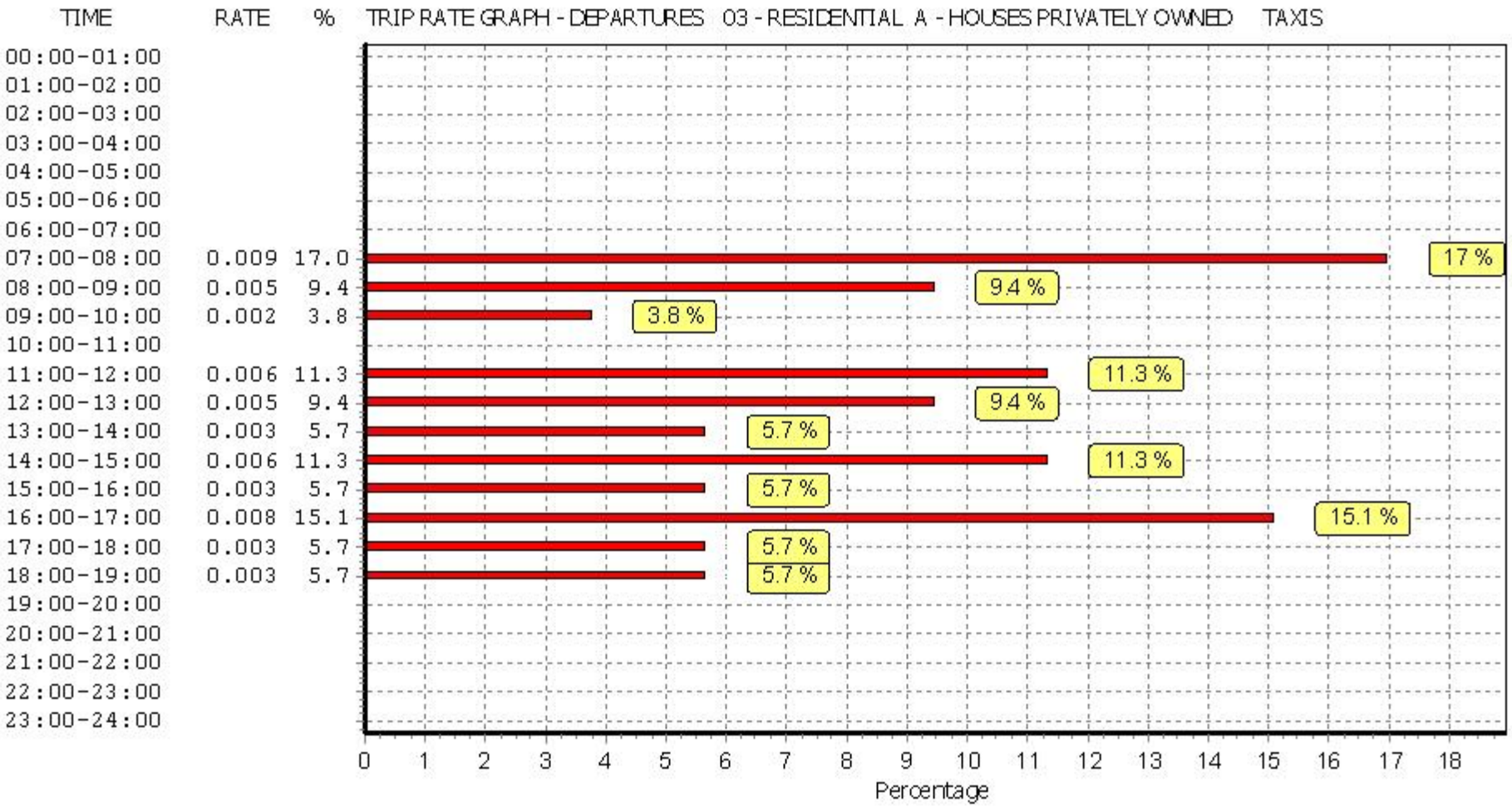

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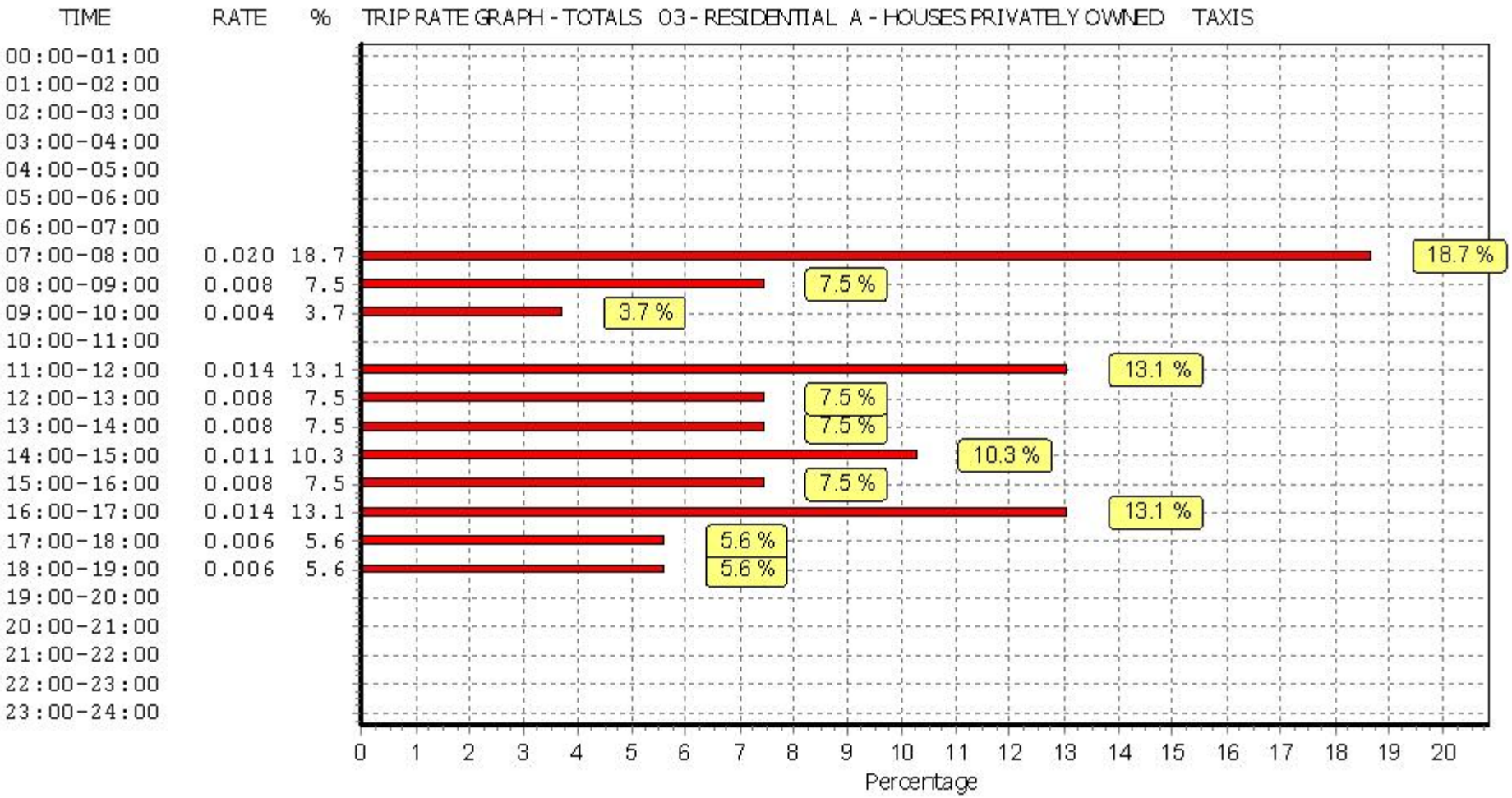

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

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	13	51	0.002	13	51	0.005	13	51	0.007
08:00 - 09:00	13	51	0.003	13	51	0.005	13	51	0.008
09:00 - 10:00	13	51	0.002	13	51	0.000	13	51	0.002
10:00 - 11:00	13	51	0.005	13	51	0.002	13	51	0.007
11:00 - 12:00	13	51	0.005	13	51	0.008	13	51	0.013
12:00 - 13:00	13	51	0.003	13	51	0.005	13	51	0.008
13:00 - 14:00	13	51	0.003	13	51	0.003	13	51	0.006
14:00 - 15:00	13	51	0.003	13	51	0.003	13	51	0.006
15:00 - 16:00	13	51	0.000	13	51	0.000	13	51	0.000
16:00 - 17:00	13	51	0.003	13	51	0.003	13	51	0.006
17:00 - 18:00	13	51	0.000	13	51	0.000	13	51	0.000
18:00 - 19:00	13	51	0.003	13	51	0.000	13	51	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.034			0.066

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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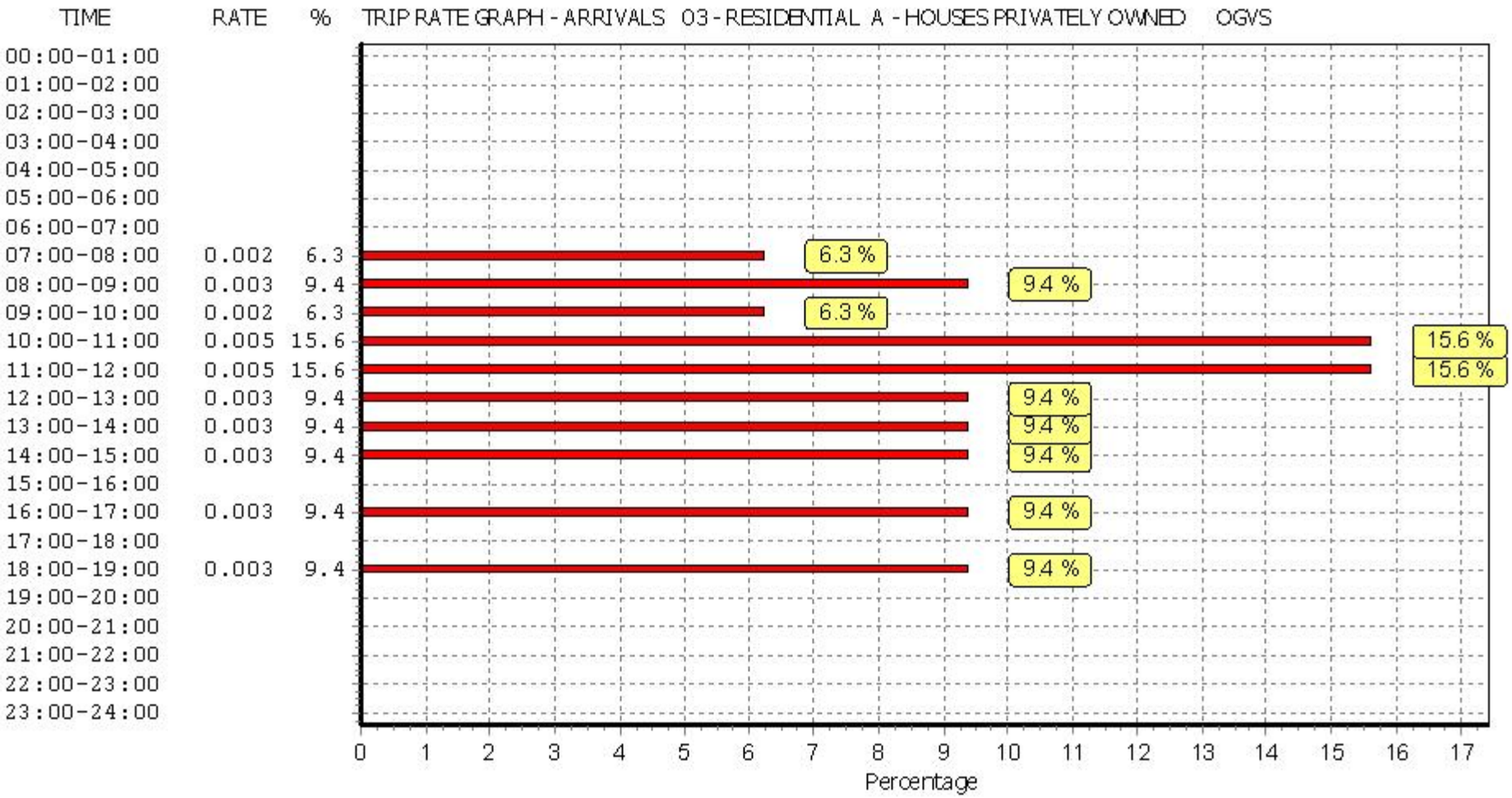
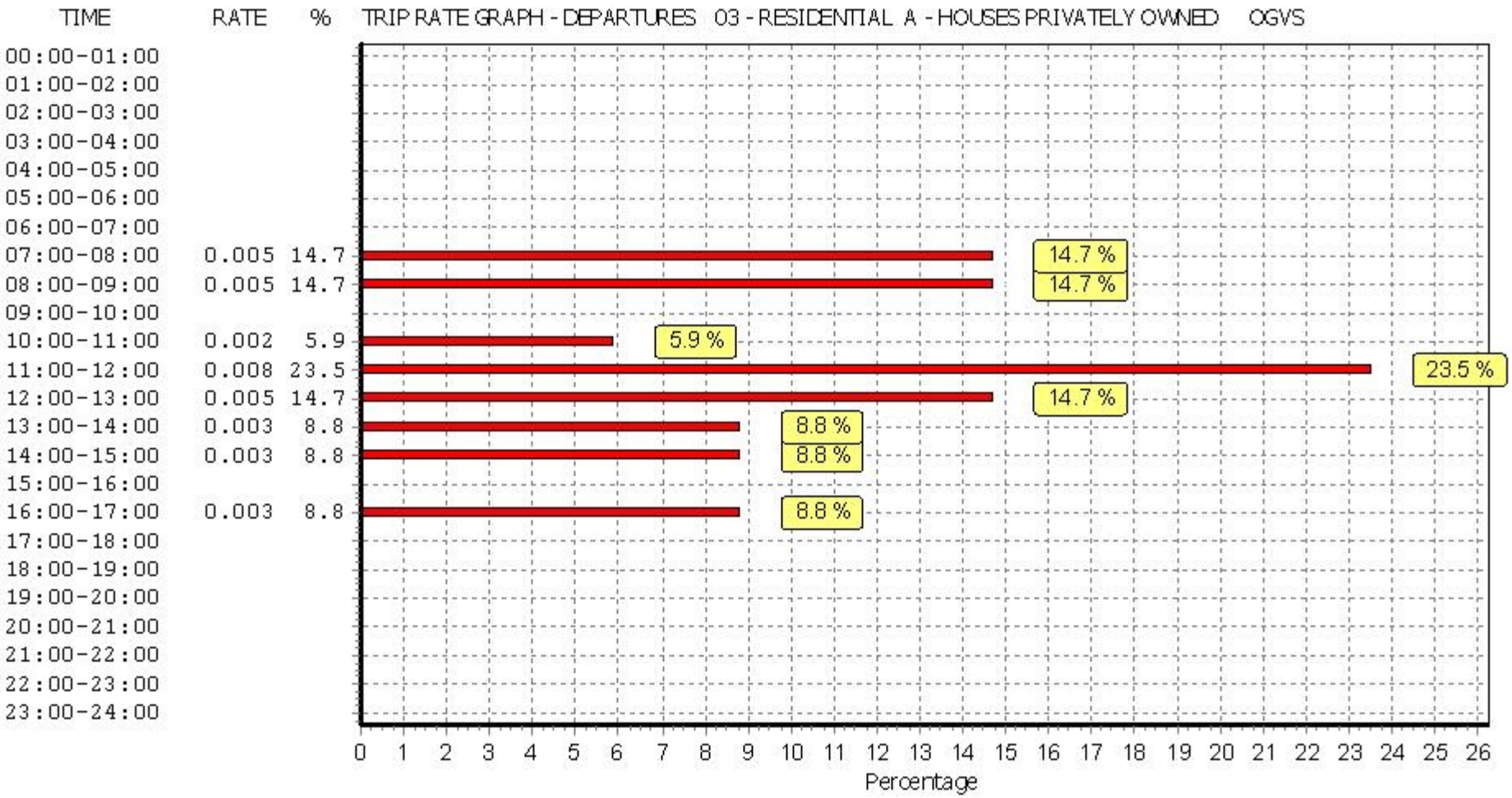


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

DBFL Ormond House Dublin Licence No: 638801



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

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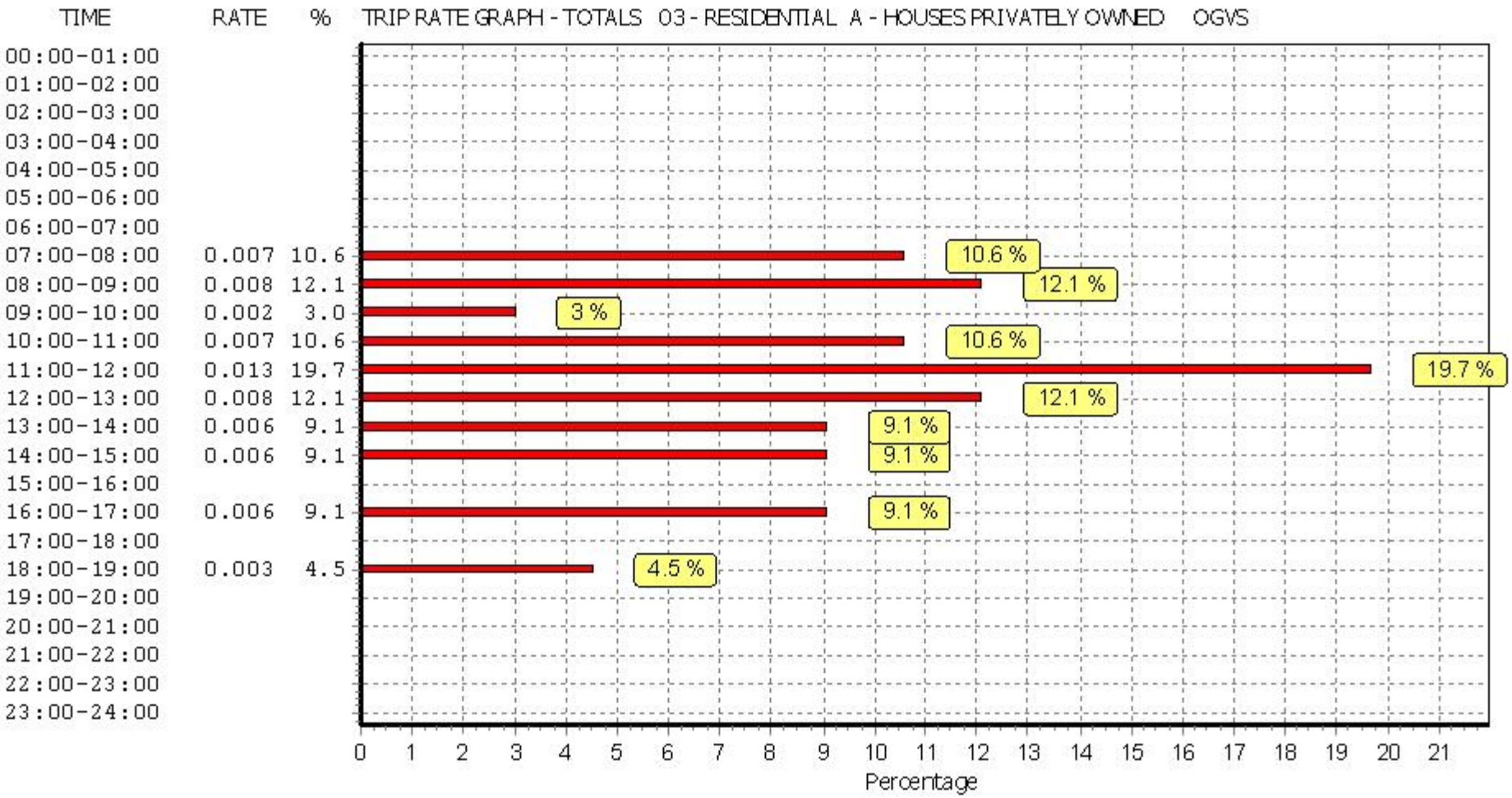

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	13	51	0.000	13	51	0.000	13	51	0.000
08:00 - 09:00	13	51	0.006	13	51	0.006	13	51	0.012
09:00 - 10:00	13	51	0.000	13	51	0.000	13	51	0.000
10:00 - 11:00	13	51	0.000	13	51	0.000	13	51	0.000
11:00 - 12:00	13	51	0.003	13	51	0.003	13	51	0.006
12:00 - 13:00	13	51	0.000	13	51	0.000	13	51	0.000
13:00 - 14:00	13	51	0.000	13	51	0.000	13	51	0.000
14:00 - 15:00	13	51	0.000	13	51	0.000	13	51	0.000
15:00 - 16:00	13	51	0.000	13	51	0.000	13	51	0.000
16:00 - 17:00	13	51	0.002	13	51	0.002	13	51	0.004
17:00 - 18:00	13	51	0.003	13	51	0.002	13	51	0.005
18:00 - 19:00	13	51	0.000	13	51	0.000	13	51	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.014			0.013			0.027

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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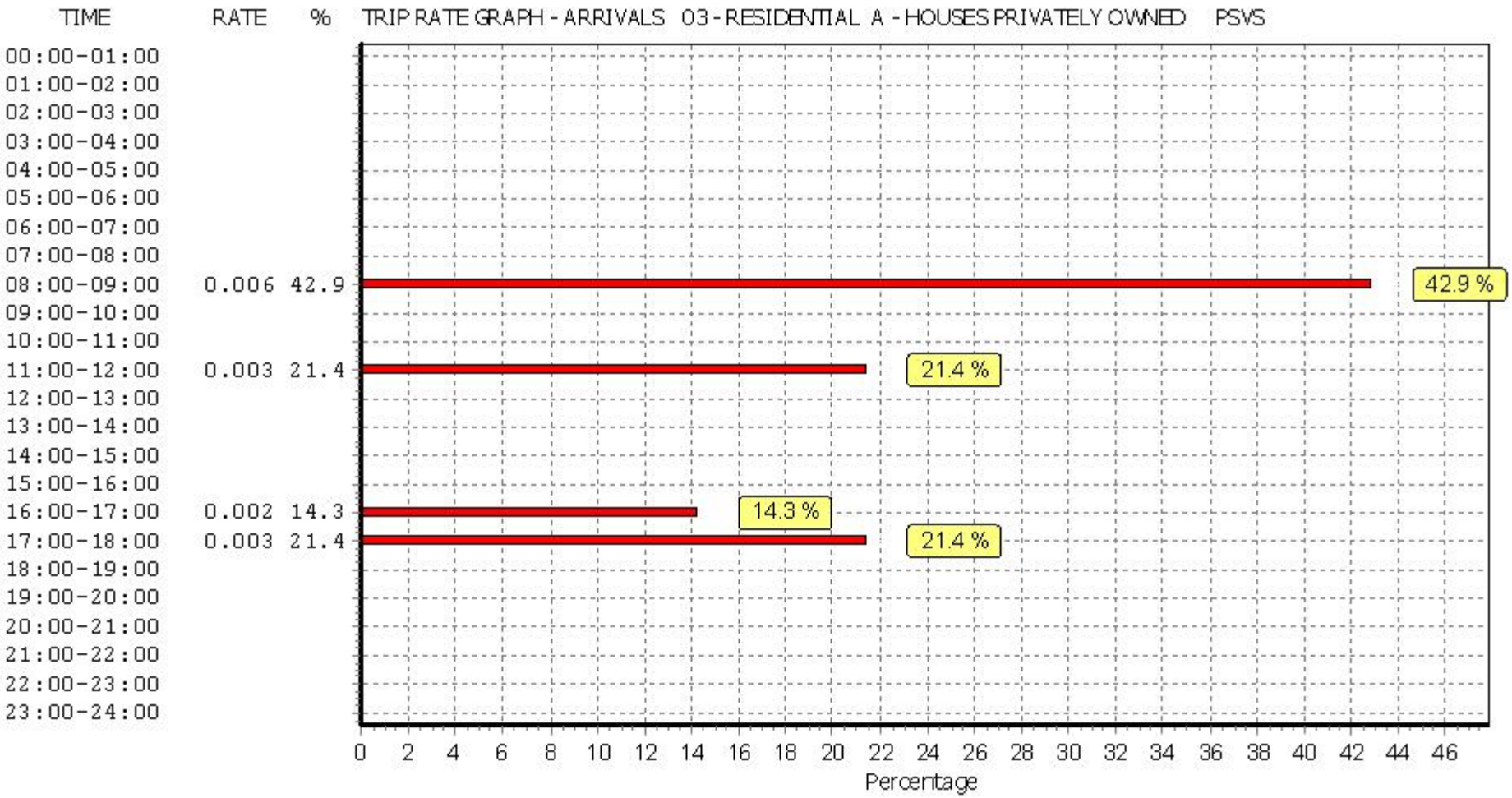

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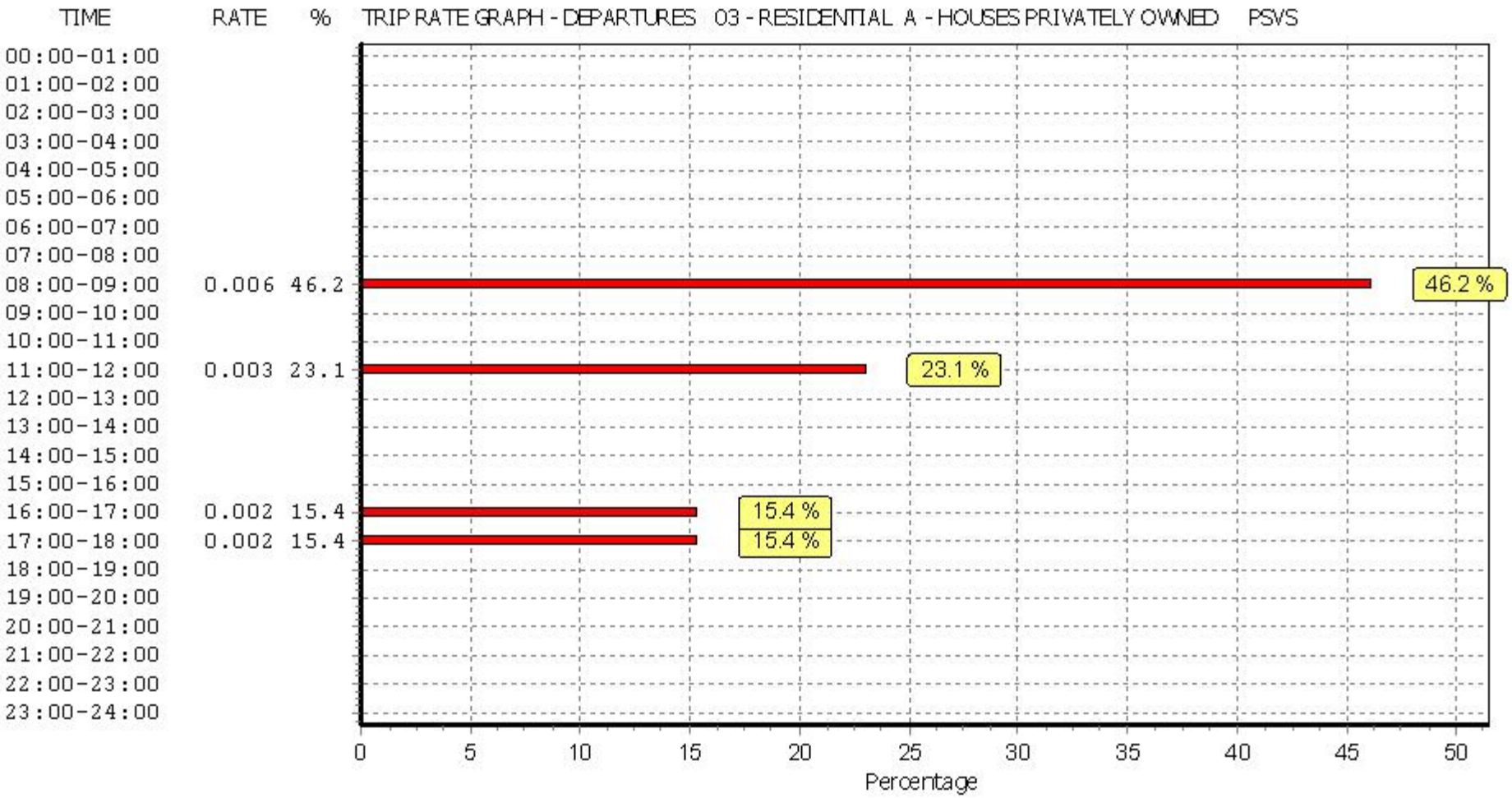
DBFL Ormond House Dublin Licence No: 638801



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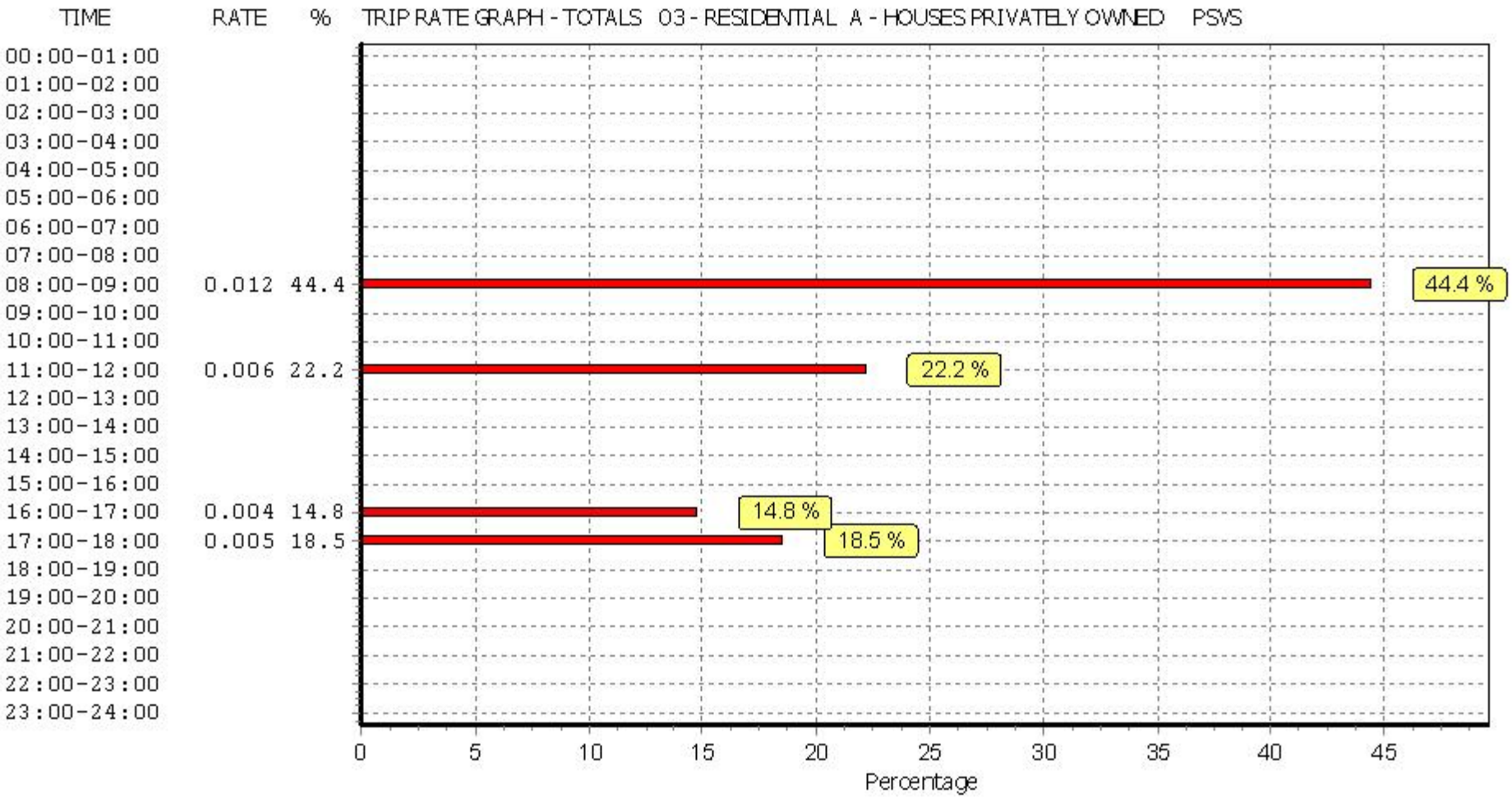

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	13	51	0.000	13	51	0.015	13	51	0.015
08:00 - 09:00	13	51	0.005	13	51	0.012	13	51	0.017
09:00 - 10:00	13	51	0.002	13	51	0.008	13	51	0.010
10:00 - 11:00	13	51	0.008	13	51	0.005	13	51	0.013
11:00 - 12:00	13	51	0.005	13	51	0.006	13	51	0.011
12:00 - 13:00	13	51	0.006	13	51	0.003	13	51	0.009
13:00 - 14:00	13	51	0.005	13	51	0.005	13	51	0.010
14:00 - 15:00	13	51	0.005	13	51	0.006	13	51	0.011
15:00 - 16:00	13	51	0.018	13	51	0.009	13	51	0.027
16:00 - 17:00	13	51	0.008	13	51	0.000	13	51	0.008
17:00 - 18:00	13	51	0.009	13	51	0.008	13	51	0.017
18:00 - 19:00	13	51	0.009	13	51	0.005	13	51	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.080			0.082			0.162

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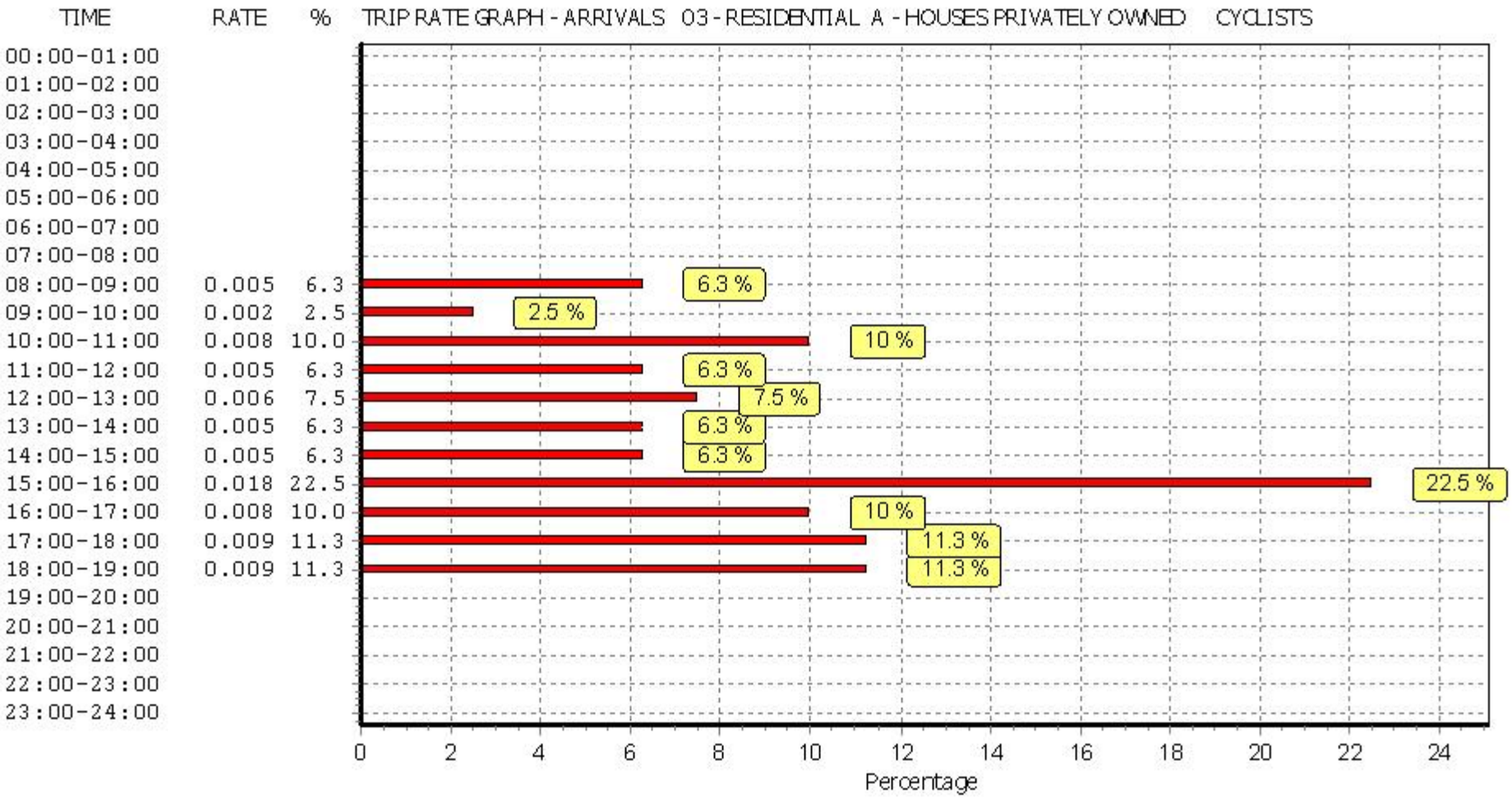
DBFL Ormond House Dublin Licence No: 638801



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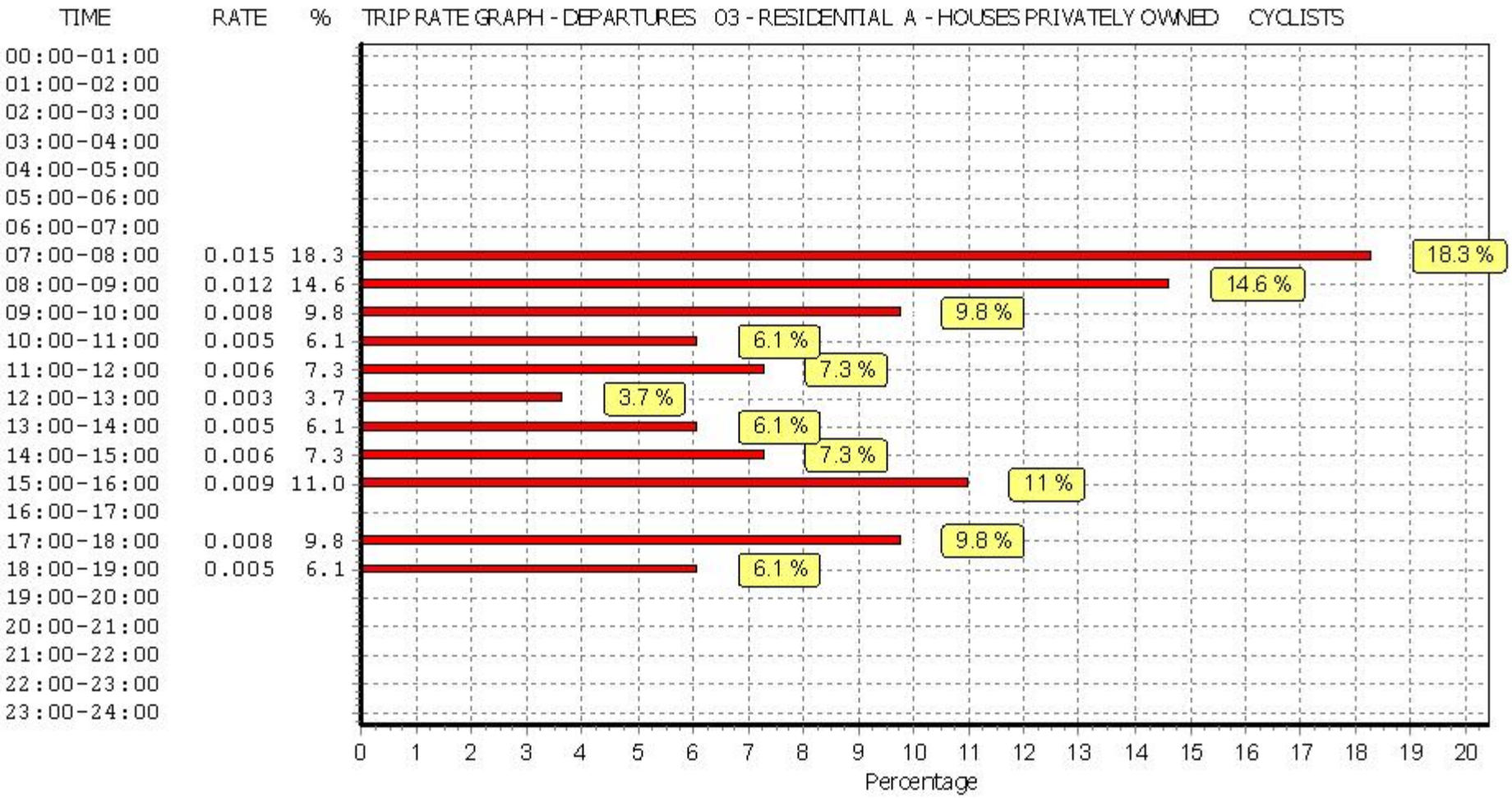

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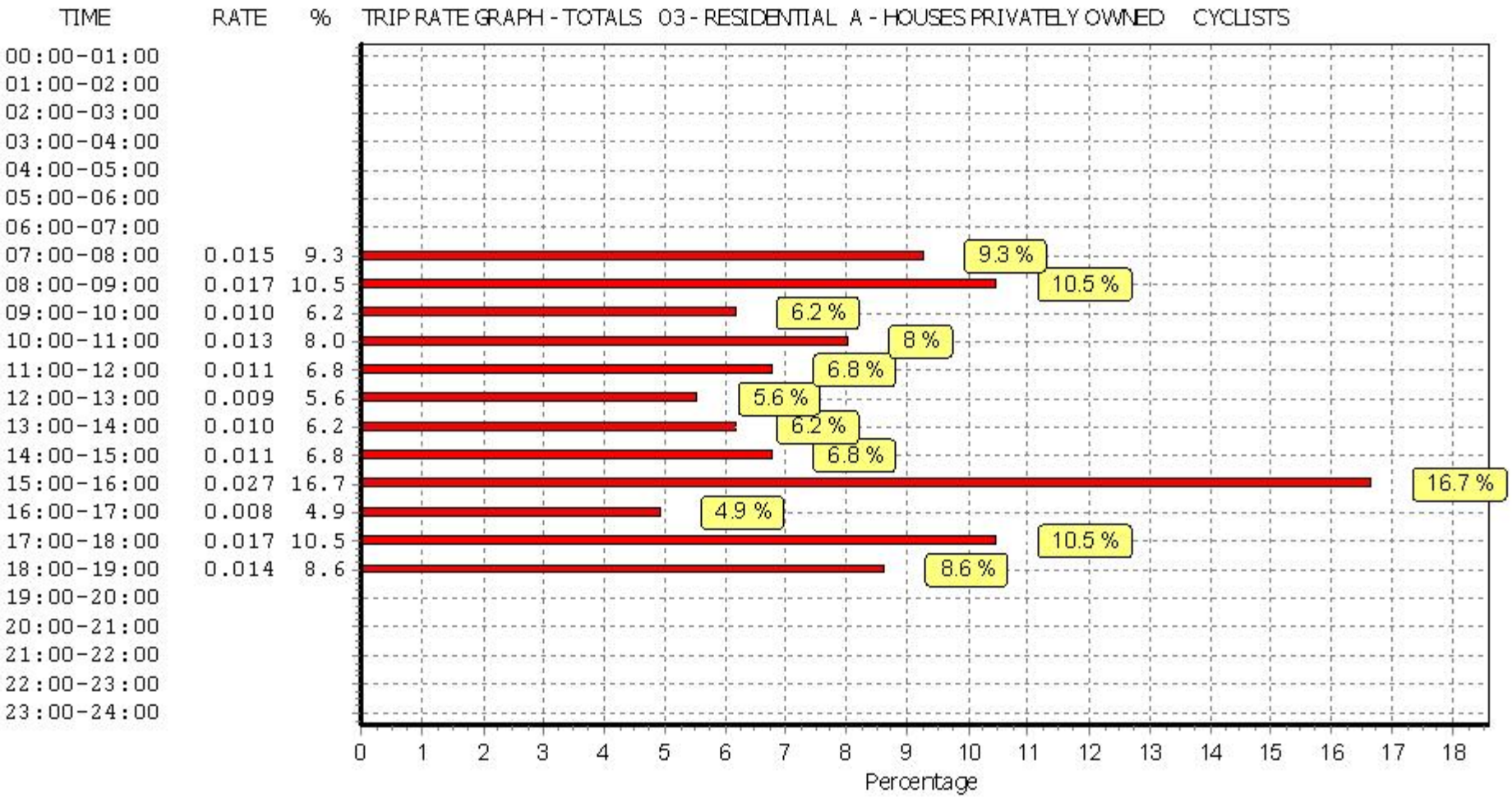

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Calculation Reference: AUDIT-638801-180823-0800

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST		
	DC	DORSET	1 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
	SF	SUFFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	RI	EAST RIDING OF YORKSHIRE	1 days
09	NORTH		
	CB	CUMBRIA	1 days
10	WALES		
	DB	DENBIGHSHIRE	1 days
11	SCOTLAND		
	SA	SOUTH AYRSHIRE	1 days
13	MUNSTER		
	WA	WATERFORD	1 days
14	LEINSTER		
	LU	LOUTH	2 days
16	ULSTER (REPUBLIC OF IRELAND)		
	MG	MONAGHAN	1 days

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

Secondary Filtering selection:

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

Parameter: Number of dwellings
Actual Range: 14 to 51 (units:)
Range Selected by User: 8 to 372 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 18/09/17

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

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

Selected survey types:

Manual count	11 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	5
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:

Residential Zone	8
Built-Up Zone	1
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village,

Secondary Filtering selection:

Use Class:

C3	11 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:

1,001 to 5,000	2 days
5,001 to 10,000	3 days
10,001 to 15,000	6 days

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

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	2 days
50,001 to 75,000	7 days

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

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	7 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	11 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	11 days

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

LIST OF SITES relevant to selection parameters

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

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

2 DB-03-C-01 FLATS IN HOUSES DENBIGHSHIRE
RHYL ROAD
RHUDDLAN

Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: FRIDAY *07/10/11* *Survey Type: MANUAL*

3 DC-03-C-02 FLATS IN BLOCKS DORSET
PALM COURT
WEYMOUTH
SPA ROAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: FRIDAY *28/03/14* *Survey Type: MANUAL*

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

Edge of Town Centre
Residential Zone
Total Number of dwellings: 33
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

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

Edge of Town Centre
Residential Zone
Total Number of dwellings: 20
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

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

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

7 NF-03-C-01 BLOCKS OF FLATS NORFOLK
PAGE STAIR LANE
KING'S LYNN

Edge of Town Centre
Built-Up Zone
Total Number of dwellings: 51
Survey date: THURSDAY *11/12/14* *Survey Type: MANUAL*

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

Edge of Town
Residential Zone
Total Number of dwellings: 20
Survey date: TUESDAY *13/05/14* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9	SA-03-C-01 RACECOURSE ROAD AYR	BLOCK OF FLATS		SOUTH AYRSHIRE
	Edge of Town Centre Residential Zone Total Number of dwellings:		51	
	Survey date: TUESDAY		*16/09/14*	*Survey Type: MANUAL*
10	SF-03-C-03 TOLLGATE LANE BURY ST EDMUNDS	BLOCKS OF FLATS		SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		30	
	Survey date: WEDNESDAY		*03/12/14*	*Survey Type: MANUAL*
11	WA-03-C-01 UPPER YELLOW ROAD WATERFORD	BLOCKS OF FLATS		WATERFORD
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:		51	
	Survey date: TUESDAY		*12/05/15*	*Survey Type: MANUAL*

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	32	0.057	11	32	0.117	11	32	0.174
08:00 - 09:00	11	32	0.066	11	32	0.169	11	32	0.235
09:00 - 10:00	11	32	0.112	11	32	0.115	11	32	0.227
10:00 - 11:00	11	32	0.080	11	32	0.089	11	32	0.169
11:00 - 12:00	11	32	0.106	11	32	0.106	11	32	0.212
12:00 - 13:00	11	32	0.097	11	32	0.100	11	32	0.197
13:00 - 14:00	11	32	0.109	11	32	0.120	11	32	0.229
14:00 - 15:00	11	32	0.112	11	32	0.103	11	32	0.215
15:00 - 16:00	11	32	0.120	11	32	0.126	11	32	0.246
16:00 - 17:00	11	32	0.129	11	32	0.109	11	32	0.238
17:00 - 18:00	11	32	0.235	11	32	0.126	11	32	0.361
18:00 - 19:00	11	32	0.169	11	32	0.140	11	32	0.309
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.392			1.420			2.812

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:	14 - 51 (units:)
Survey date date range:	01/01/10 - 18/09/17
Number of weekdays (Monday-Friday):	11
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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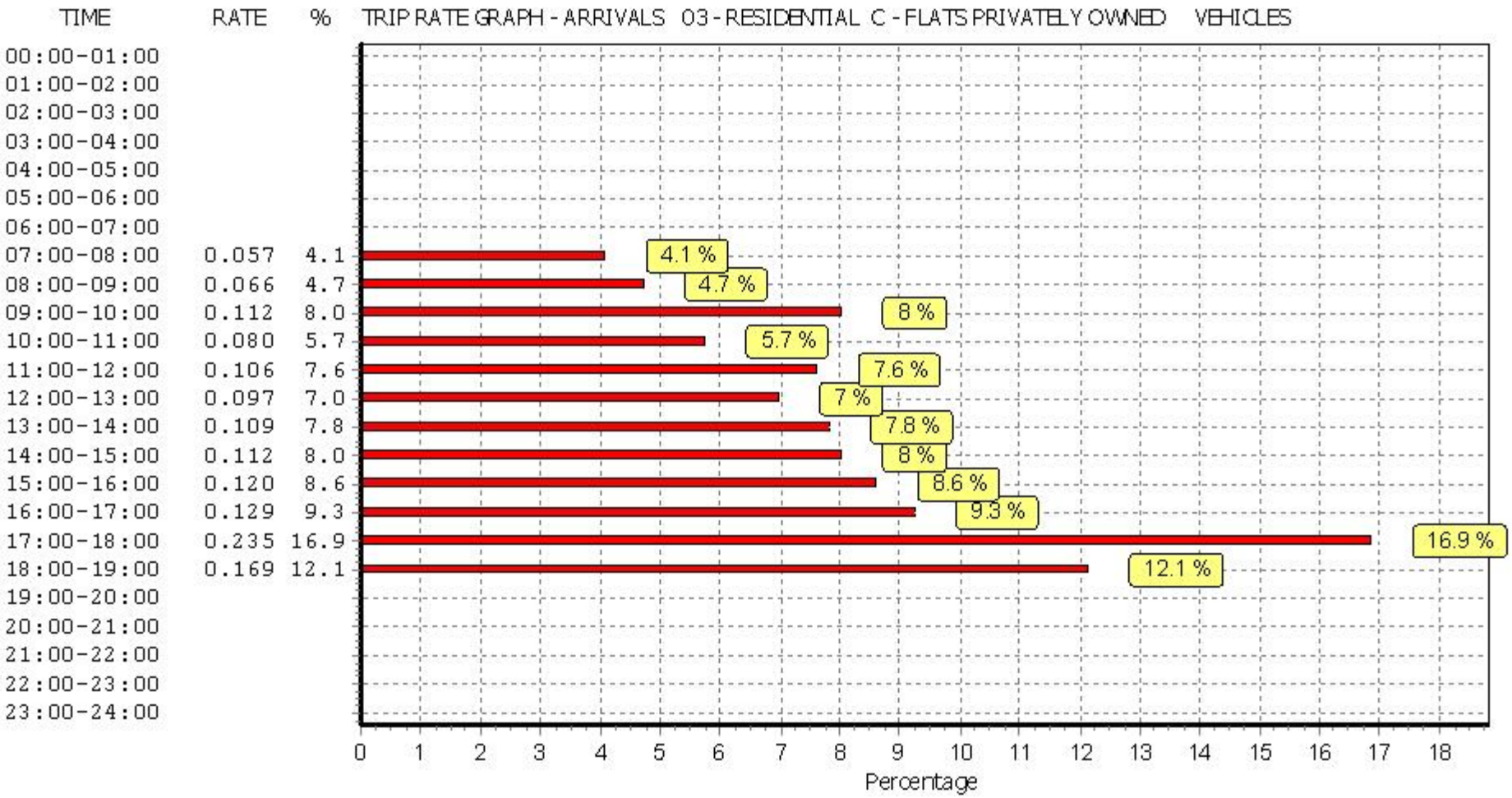

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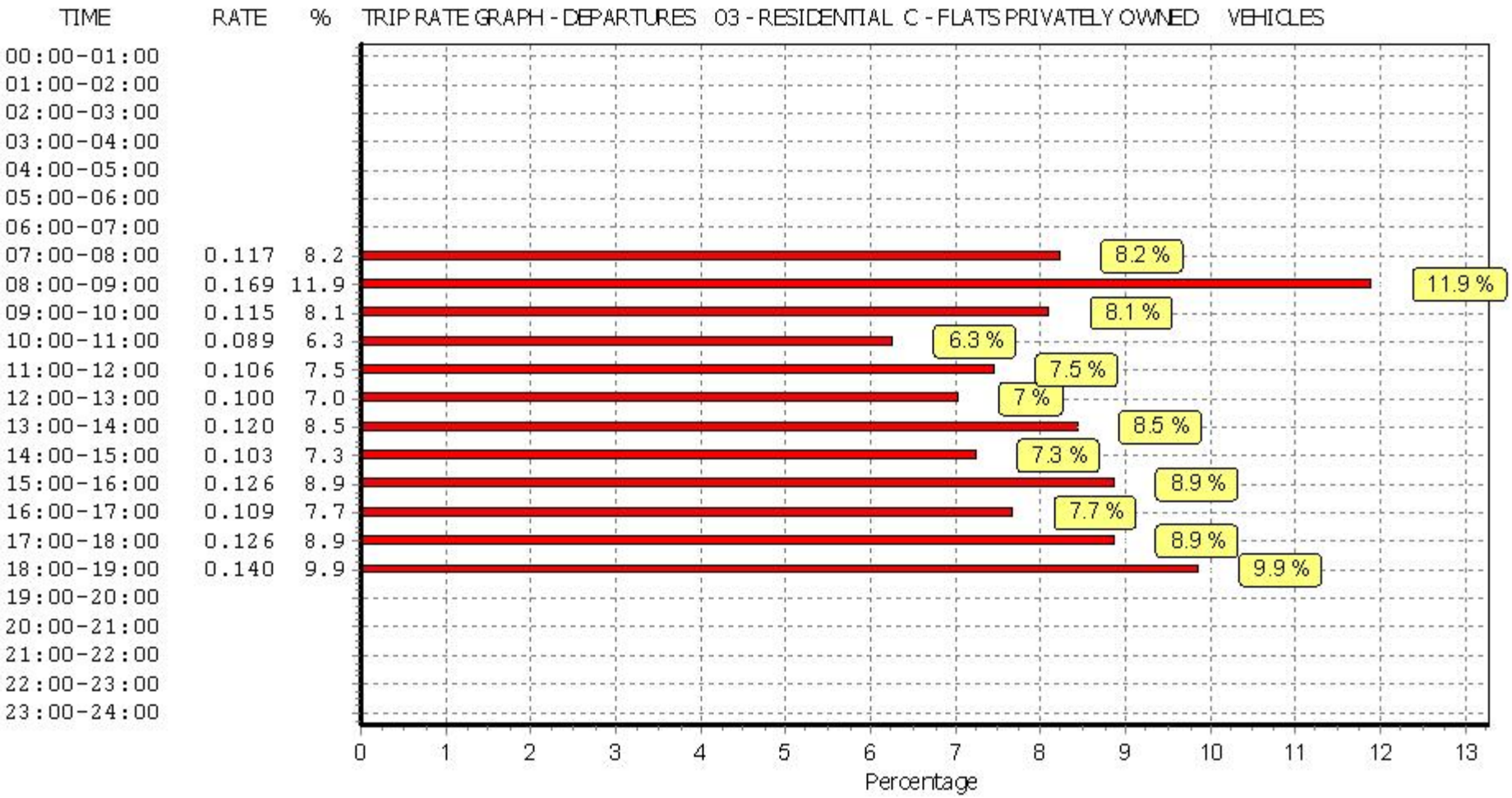

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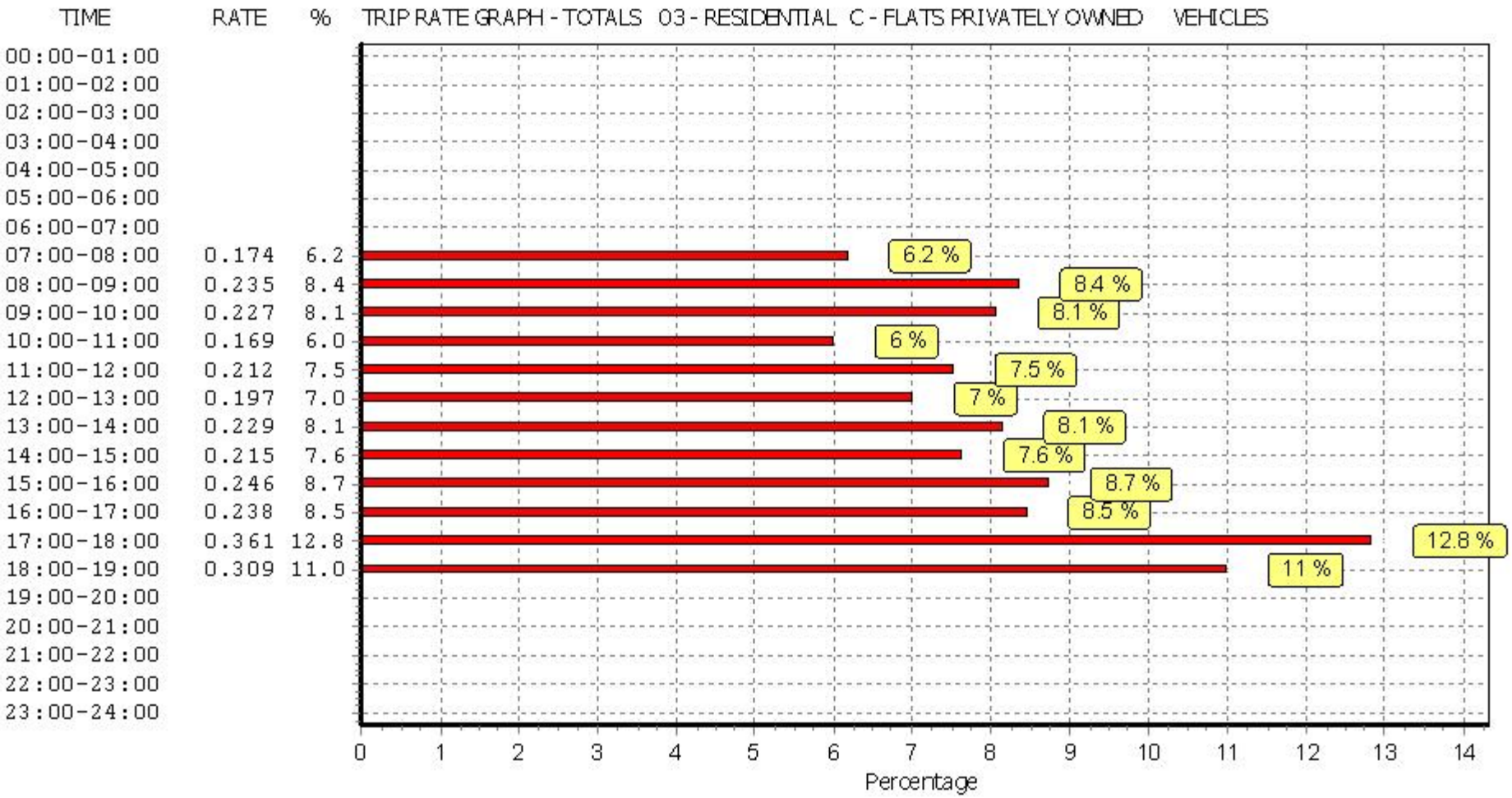

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	11	32	0.003	11	32	0.003	11	32	0.006
08:00 - 09:00	11	32	0.003	11	32	0.003	11	32	0.006
09:00 - 10:00	11	32	0.006	11	32	0.006	11	32	0.012
10:00 - 11:00	11	32	0.000	11	32	0.000	11	32	0.000
11:00 - 12:00	11	32	0.003	11	32	0.003	11	32	0.006
12:00 - 13:00	11	32	0.000	11	32	0.000	11	32	0.000
13:00 - 14:00	11	32	0.006	11	32	0.006	11	32	0.012
14:00 - 15:00	11	32	0.003	11	32	0.003	11	32	0.006
15:00 - 16:00	11	32	0.006	11	32	0.006	11	32	0.012
16:00 - 17:00	11	32	0.003	11	32	0.003	11	32	0.006
17:00 - 18:00	11	32	0.003	11	32	0.003	11	32	0.006
18:00 - 19:00	11	32	0.003	11	32	0.003	11	32	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.039			0.039			0.078

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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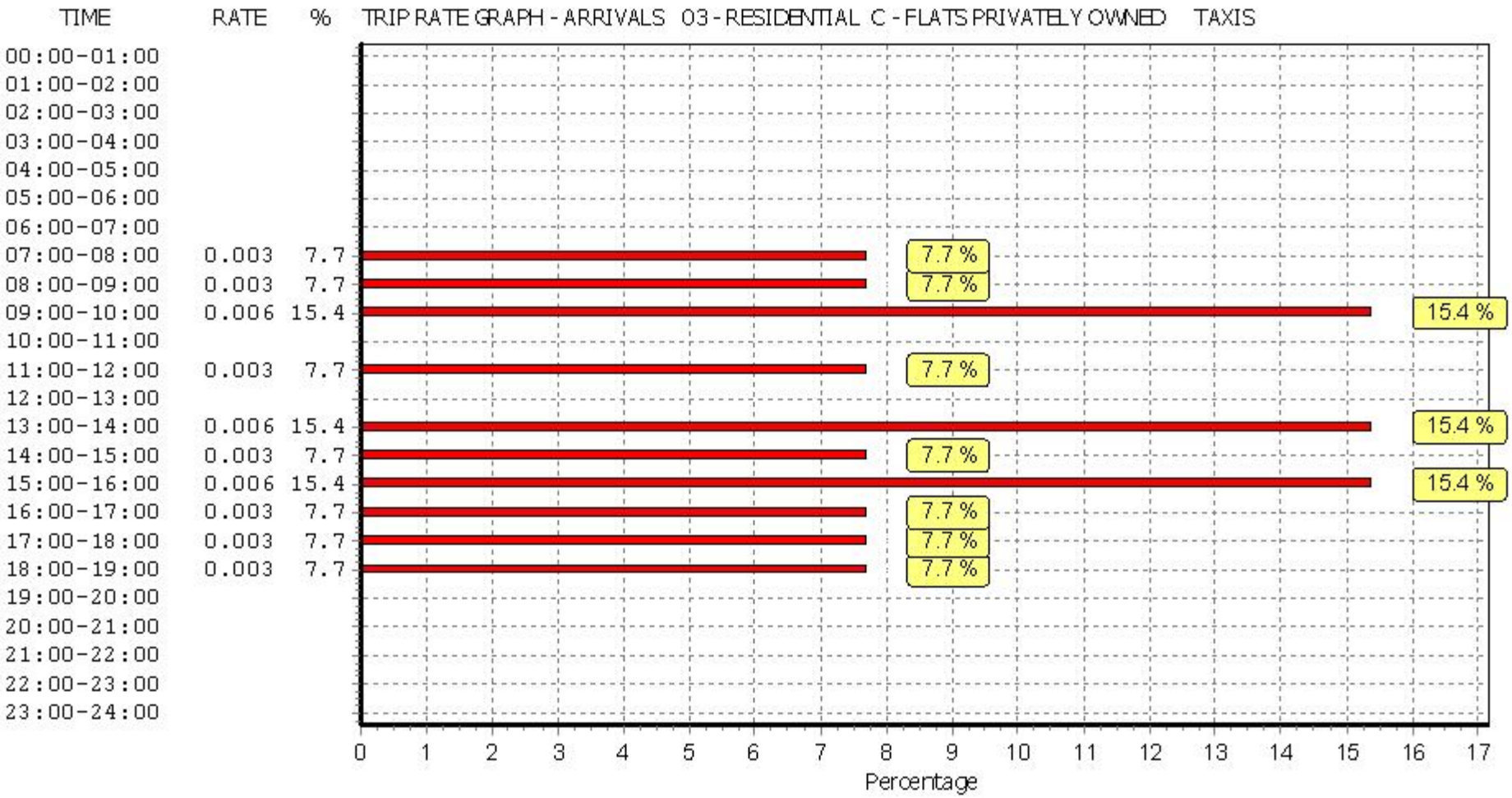
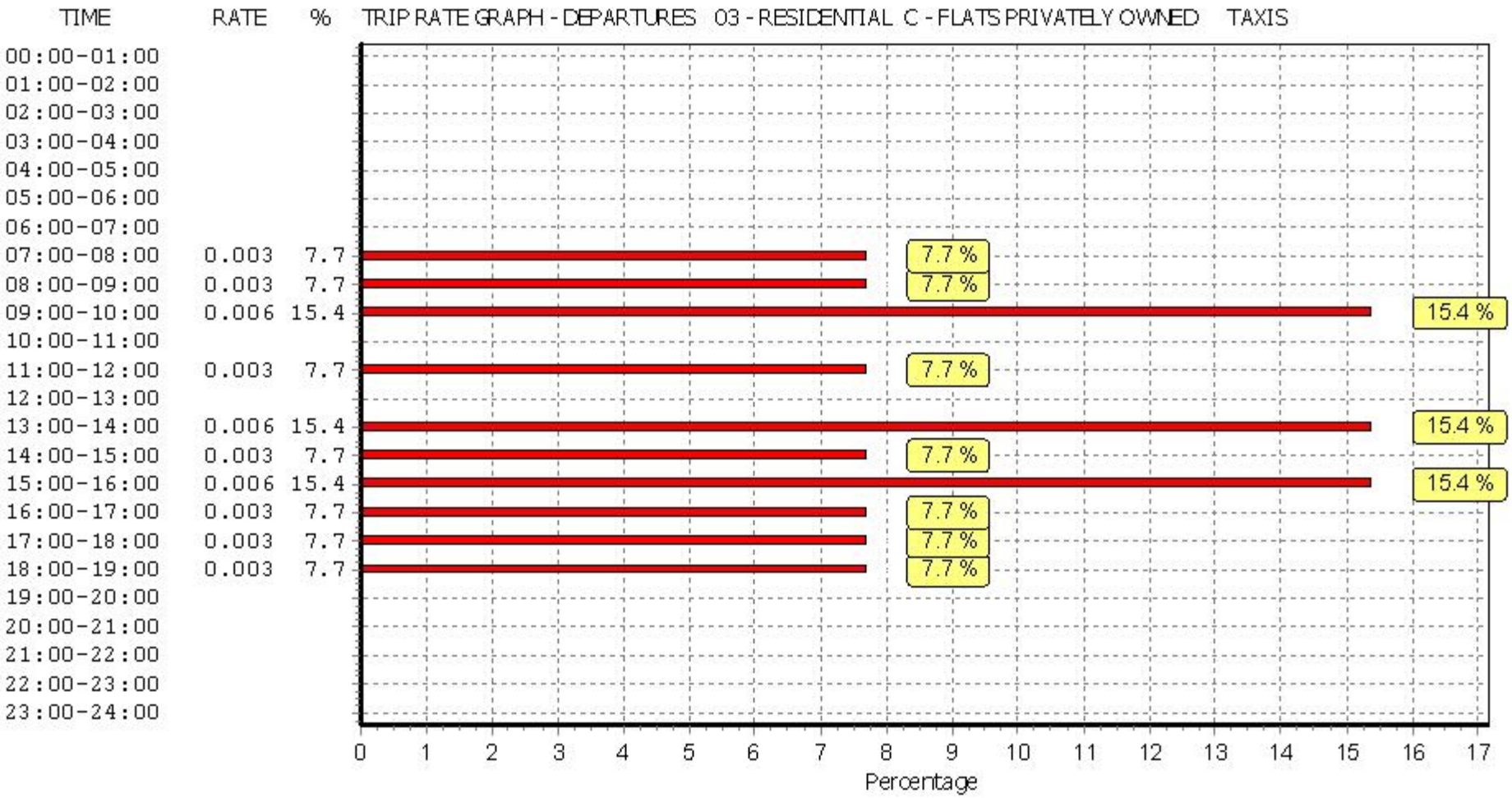


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



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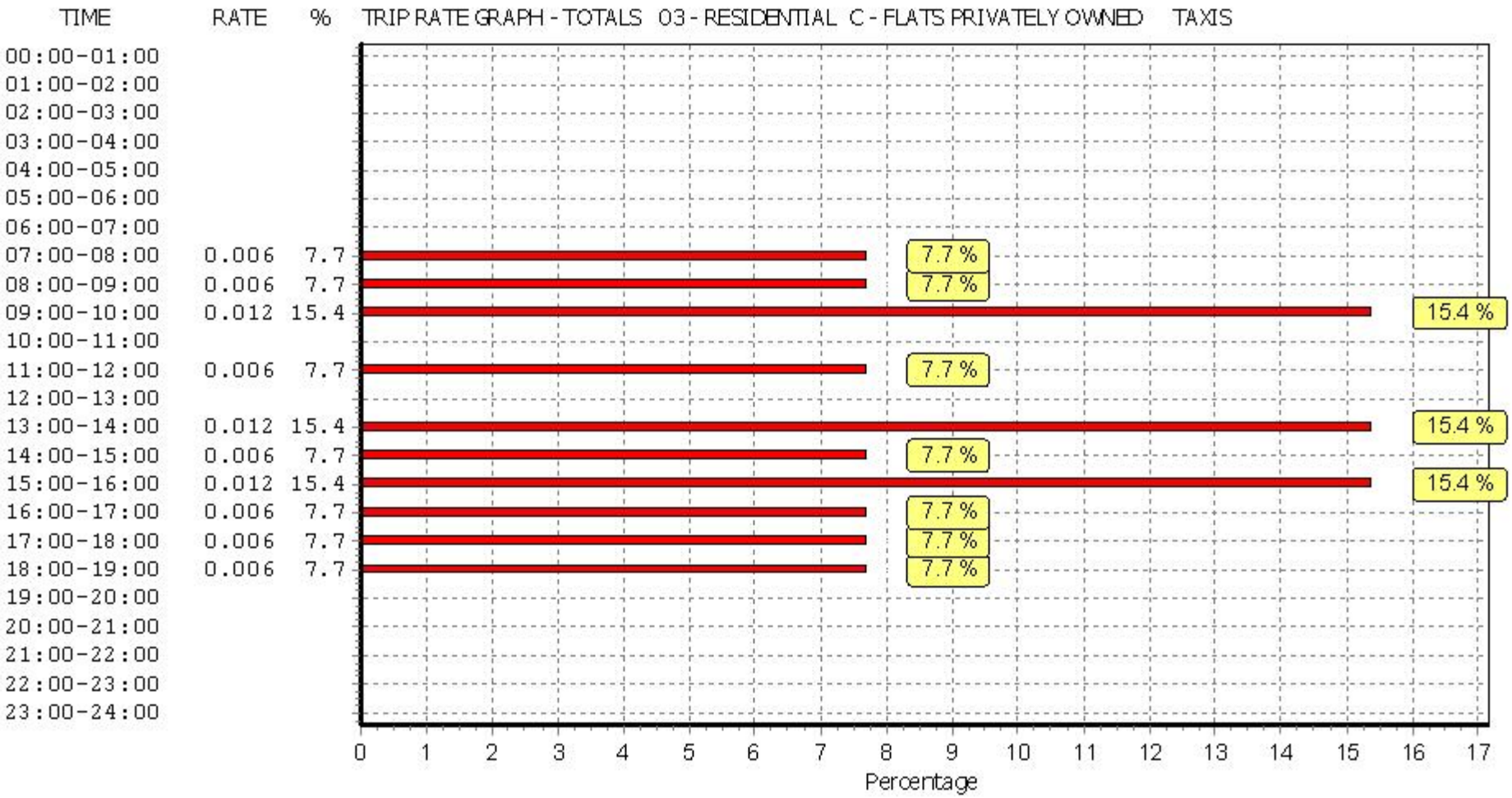

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	11	32	0.009	11	32	0.011	11	32	0.020
08:00 - 09:00	11	32	0.000	11	32	0.000	11	32	0.000
09:00 - 10:00	11	32	0.006	11	32	0.003	11	32	0.009
10:00 - 11:00	11	32	0.000	11	32	0.003	11	32	0.003
11:00 - 12:00	11	32	0.000	11	32	0.000	11	32	0.000
12:00 - 13:00	11	32	0.006	11	32	0.003	11	32	0.009
13:00 - 14:00	11	32	0.003	11	32	0.006	11	32	0.009
14:00 - 15:00	11	32	0.003	11	32	0.003	11	32	0.006
15:00 - 16:00	11	32	0.003	11	32	0.000	11	32	0.003
16:00 - 17:00	11	32	0.000	11	32	0.003	11	32	0.003
17:00 - 18:00	11	32	0.000	11	32	0.000	11	32	0.000
18:00 - 19:00	11	32	0.000	11	32	0.000	11	32	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.030			0.032			0.062

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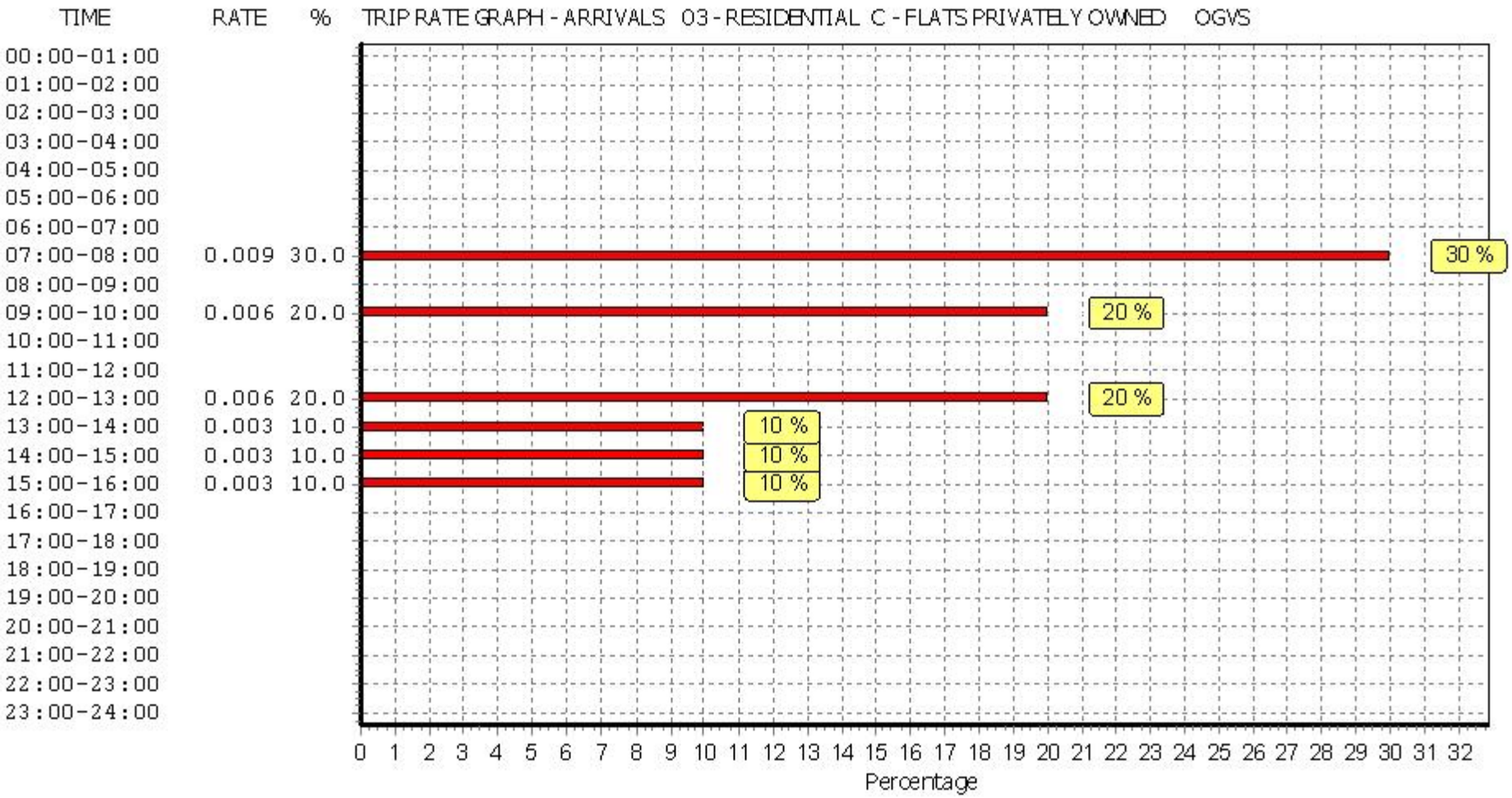
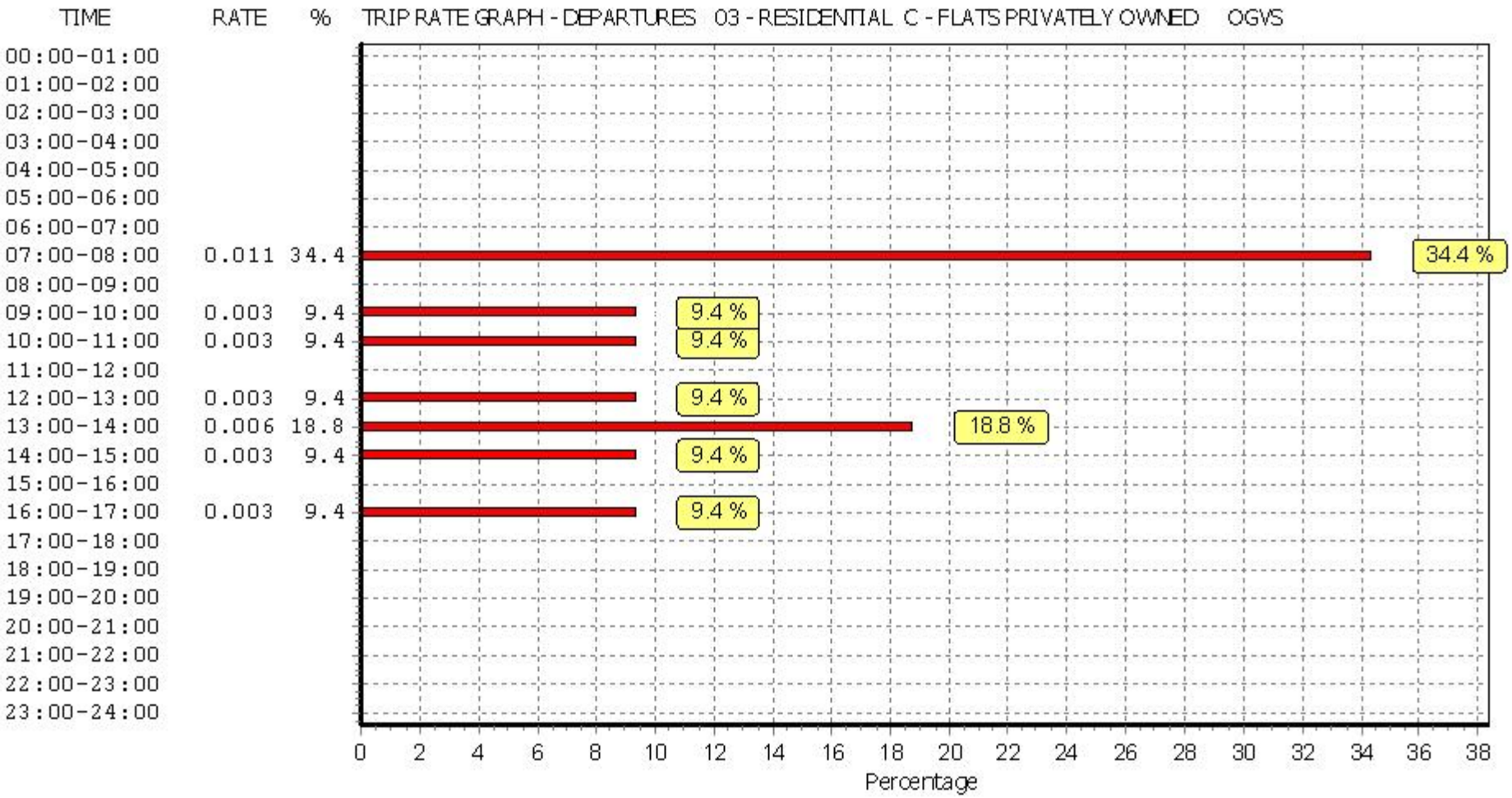


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

DBFL Ormond House Dublin Licence No: 638801



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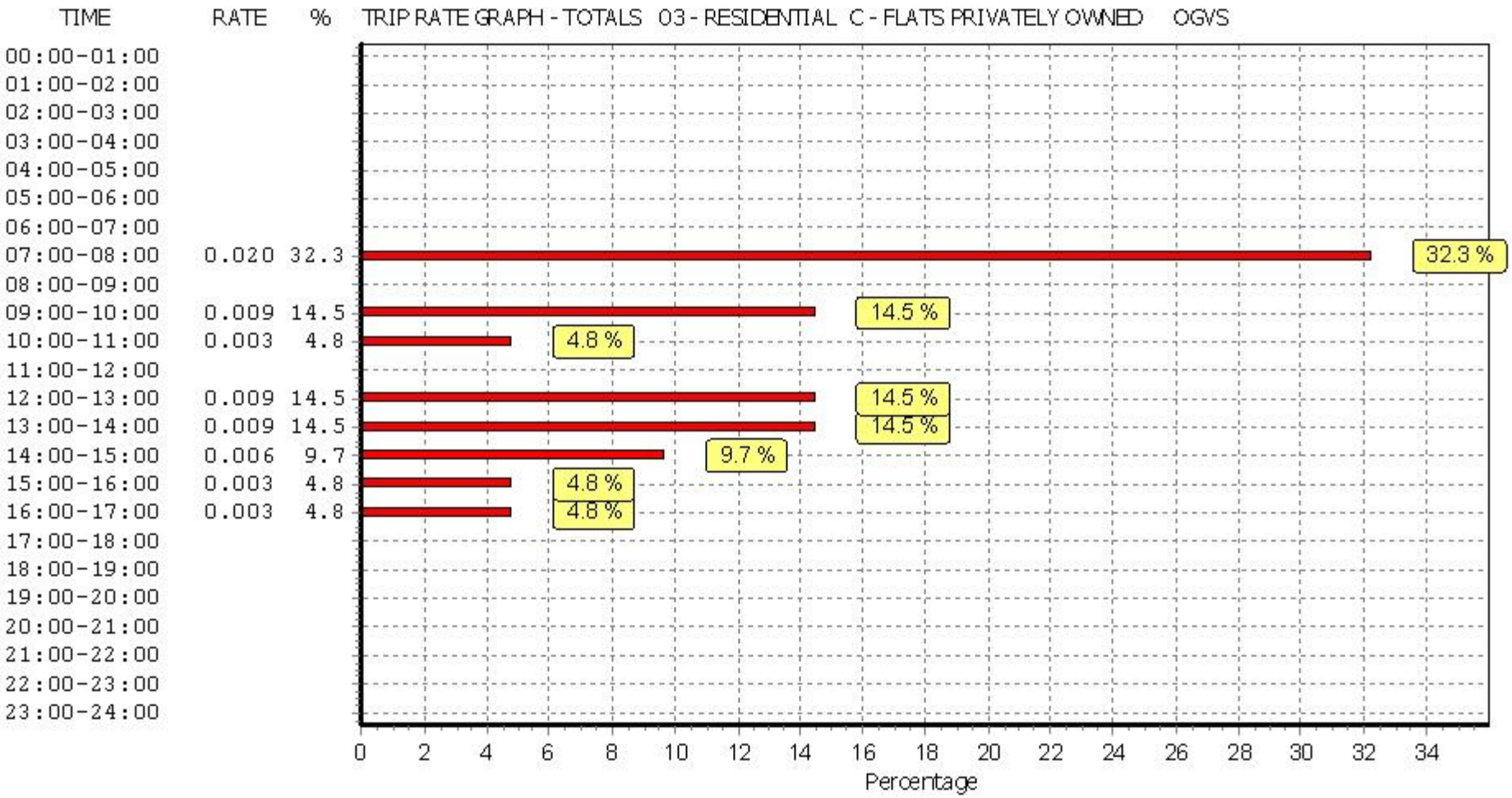
DBFL Ormond House Dublin Licence No: 638801



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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
PSVS
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	11	32	0.000	11	32	0.000	11	32	0.000
08:00 - 09:00	11	32	0.000	11	32	0.000	11	32	0.000
09:00 - 10:00	11	32	0.000	11	32	0.000	11	32	0.000
10:00 - 11:00	11	32	0.003	11	32	0.003	11	32	0.006
11:00 - 12:00	11	32	0.000	11	32	0.000	11	32	0.000
12:00 - 13:00	11	32	0.000	11	32	0.000	11	32	0.000
13:00 - 14:00	11	32	0.000	11	32	0.000	11	32	0.000
14:00 - 15:00	11	32	0.000	11	32	0.000	11	32	0.000
15:00 - 16:00	11	32	0.003	11	32	0.000	11	32	0.003
16:00 - 17:00	11	32	0.000	11	32	0.003	11	32	0.003
17:00 - 18:00	11	32	0.000	11	32	0.000	11	32	0.000
18:00 - 19:00	11	32	0.000	11	32	0.000	11	32	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			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.

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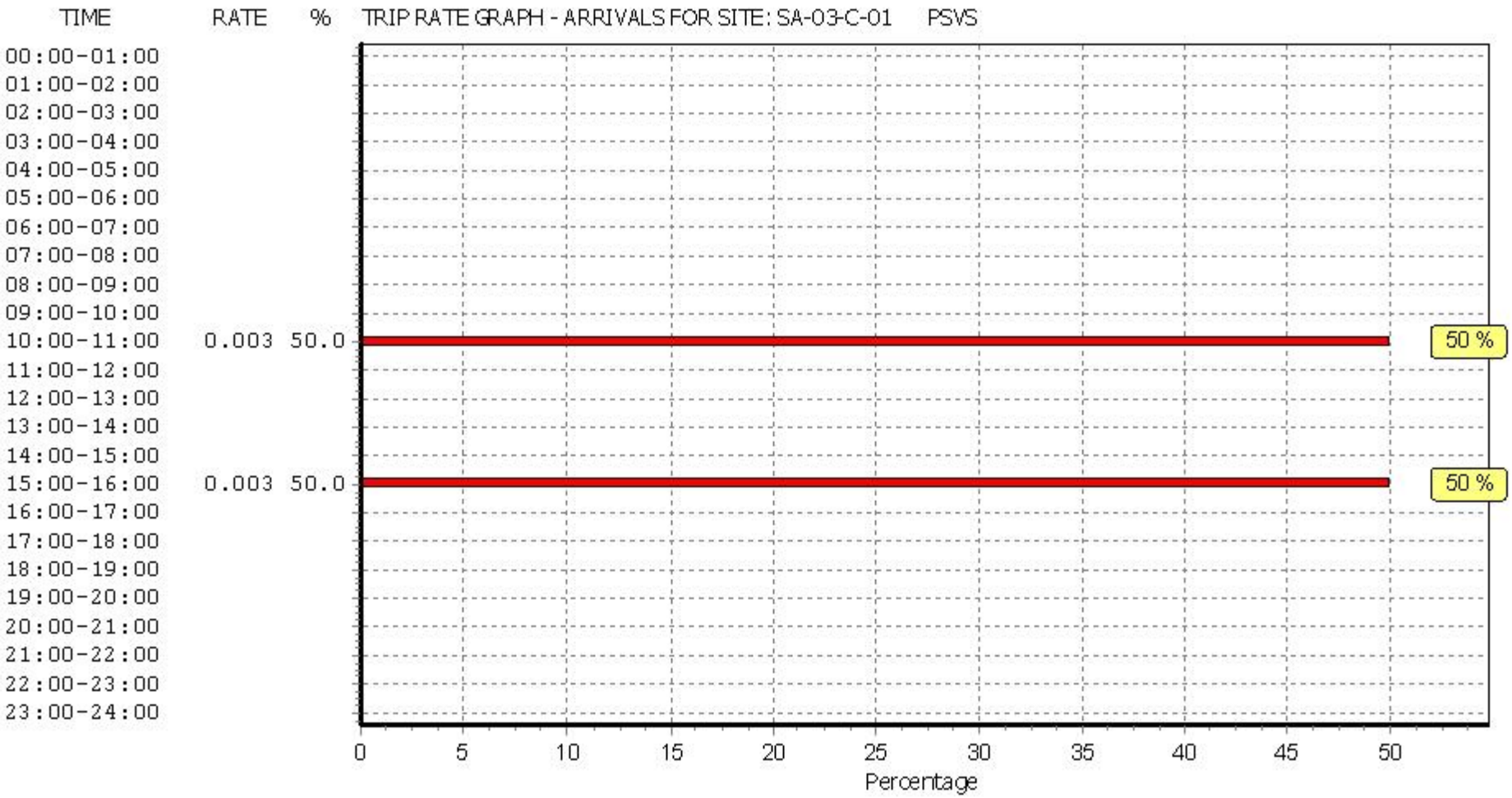
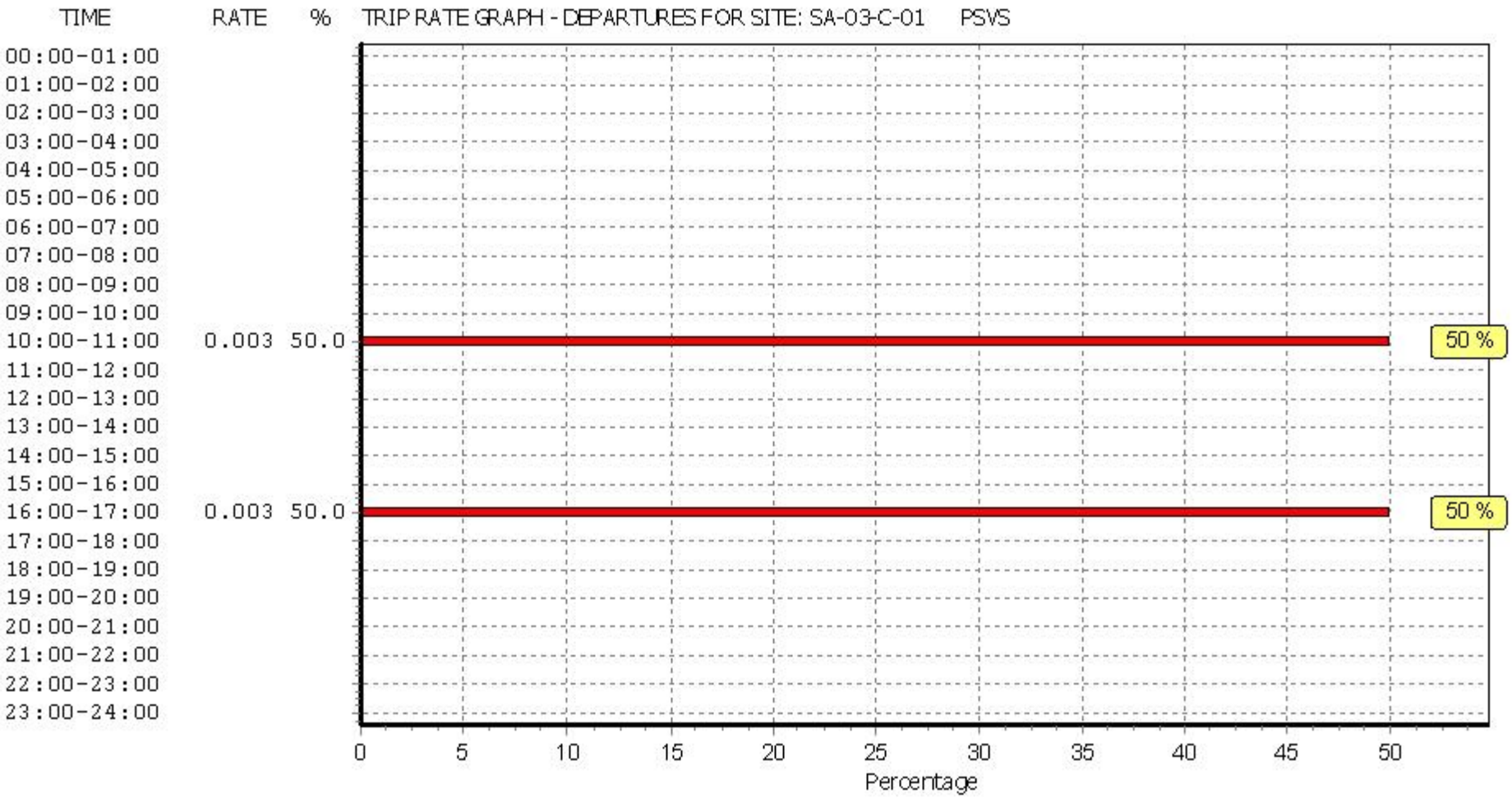


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



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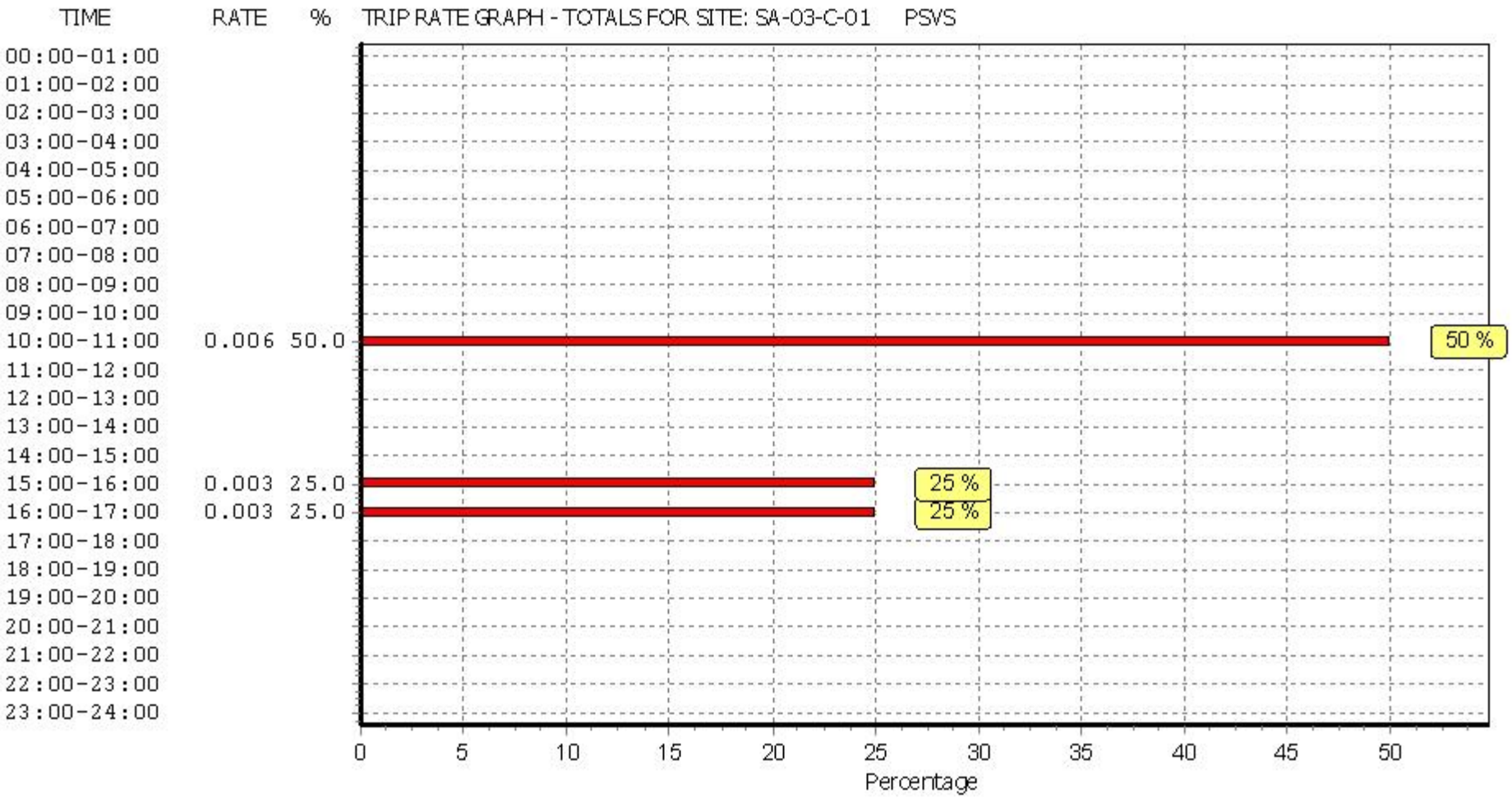
DBFL Ormond House Dublin Licence No: 638801



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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	11	32	0.003	11	32	0.006	11	32	0.009
08:00 - 09:00	11	32	0.006	11	32	0.006	11	32	0.012
09:00 - 10:00	11	32	0.006	11	32	0.006	11	32	0.012
10:00 - 11:00	11	32	0.003	11	32	0.003	11	32	0.006
11:00 - 12:00	11	32	0.003	11	32	0.003	11	32	0.006
12:00 - 13:00	11	32	0.003	11	32	0.003	11	32	0.006
13:00 - 14:00	11	32	0.000	11	32	0.006	11	32	0.006
14:00 - 15:00	11	32	0.003	11	32	0.000	11	32	0.003
15:00 - 16:00	11	32	0.009	11	32	0.009	11	32	0.018
16:00 - 17:00	11	32	0.009	11	32	0.006	11	32	0.015
17:00 - 18:00	11	32	0.003	11	32	0.000	11	32	0.003
18:00 - 19:00	11	32	0.000	11	32	0.000	11	32	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.048			0.048			0.096

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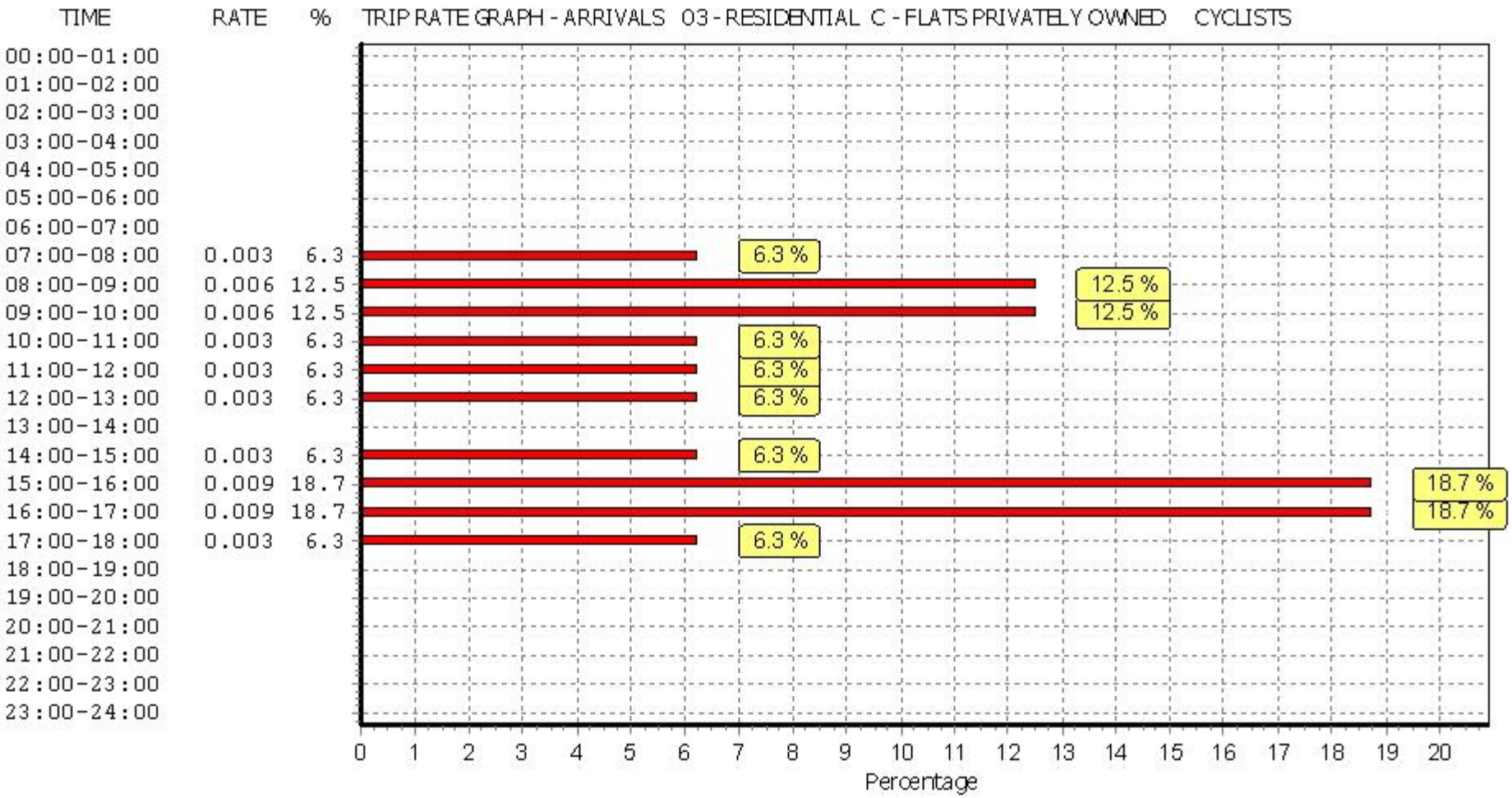

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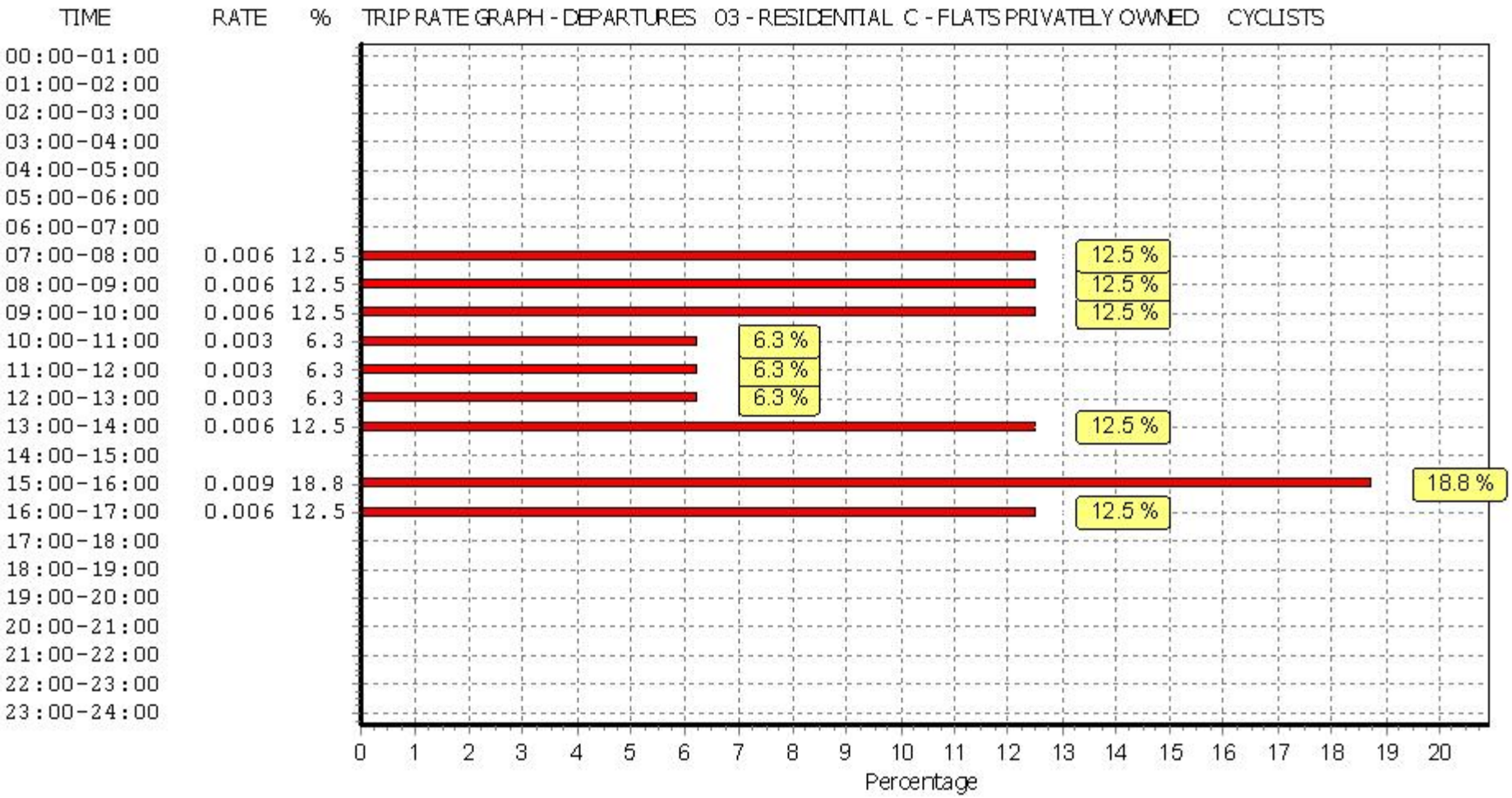

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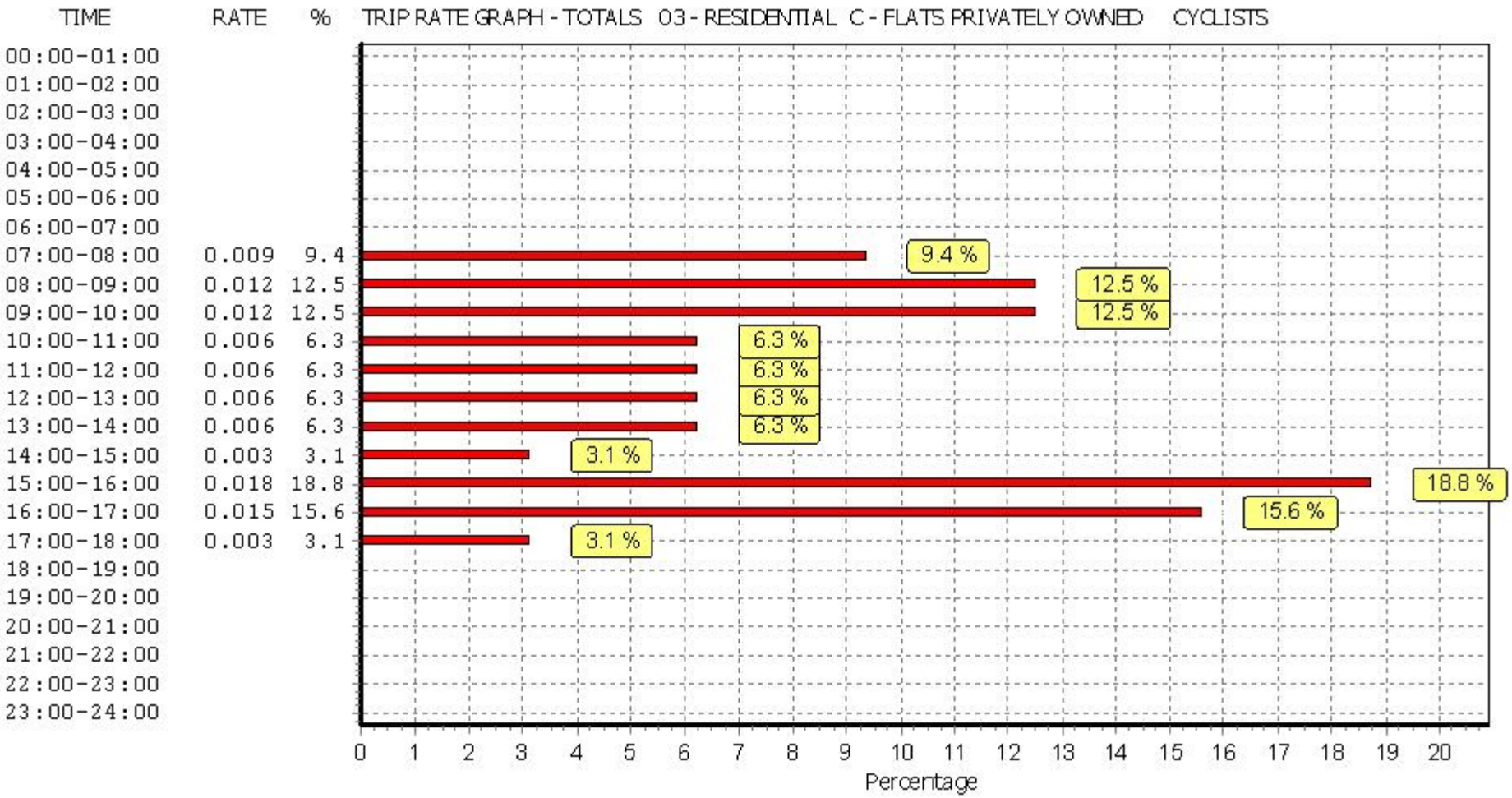
DBFL Ormond House Dublin Licence No: 638801



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Calculation Reference: AUDIT-638801-190507-0513

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
09	NORTH		
	TV	TEES VALLEY	1 days
10	WALES		
	BG	BRIDGEND	1 days
11	SCOTLAND		
	SR	STIRLING	1 days
12	CONNAUGHT		
	RO	ROSCOMMON	1 days
17	ULSTER (NORTHERN IRELAND)		
	DE	DERRY	1 days

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

Secondary 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 1300 (units: sqm)
Range Selected by User: 150 to 2350 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 12/07/18

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

Selected survey days:

Monday	2 days
Friday	4 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:

Edge of Town	5
Free Standing (PPS6 Out of Town)	1

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

Selected Location Sub Categories:

Industrial Zone	2
Residential Zone	3
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	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:

1,001 to 5,000	2 days
5,001 to 10,000	2 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days

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

Population within 5 miles:

5,001 to 25,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	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	1 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	6 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	6 days

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

LIST OF SITES relevant to selection parameters

1 BG-04-D-01 NURSERY BRIDGEND
GEORGE STREET
BRIDGEND
BRIDGEND IND. ESTATE
Edge of Town
Industrial Zone
Total Gross floor area: 210 sqm
Survey date: MONDAY *13/10/14* *Survey Type: MANUAL*

2 DE-04-D-01 DAY NURSERY DERRY
COURTAULD WAY
NEAR LONDONDERRY
EGLINTON
Free Standing (PPS6 Out of Town)
Industrial Zone
Total Gross floor area: 1300 sqm
Survey date: FRIDAY *22/06/12* *Survey Type: MANUAL*

3 RO-04-D-01 NURSERY ROSCOMMON
PARK VIEW
ROSCOMMON
CRUBY HILL
Edge of Town
Residential Zone
Total Gross floor area: 500 sqm
Survey date: FRIDAY *26/09/14* *Survey Type: MANUAL*

4 SR-04-D-01 NURSERY STIRLING
HENDERSON STREET
STIRLING
BRIDGE OF ALLAN
Edge of Town
No Sub Category
Total Gross floor area: 250 sqm
Survey date: MONDAY *16/06/14* *Survey Type: MANUAL*

5 TV-04-D-01 NURSERY TEES VALLEY
COTSWOLD DRIVE
REDCAR

Edge of Town
Residential Zone
Total Gross floor area: 150 sqm
Survey date: FRIDAY *19/05/17* *Survey Type: MANUAL*

6 WK-04-D-01 NURSERY WARWICKSHIRE
THE RIDGEWAY
STRATFORD UPON AVON

Edge of Town
Residential Zone
Total Gross floor area: 340 sqm
Survey date: FRIDAY *29/06/18* *Survey Type: MANUAL*

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	458	1.455	6	458	0.400	6	458	1.855
08:00 - 09:00	6	458	3.600	6	458	2.436	6	458	6.036
09:00 - 10:00	6	458	2.036	6	458	1.927	6	458	3.963
10:00 - 11:00	6	458	0.909	6	458	0.618	6	458	1.527
11:00 - 12:00	6	458	0.764	6	458	0.473	6	458	1.237
12:00 - 13:00	6	458	1.673	6	458	2.218	6	458	3.891
13:00 - 14:00	6	458	0.836	6	458	1.309	6	458	2.145
14:00 - 15:00	6	458	1.018	6	458	0.873	6	458	1.891
15:00 - 16:00	6	458	0.764	6	458	1.273	6	458	2.037
16:00 - 17:00	6	458	1.236	6	458	1.236	6	458	2.472
17:00 - 18:00	6	458	2.109	6	458	3.127	6	458	5.236
18:00 - 19:00	5	520	0.000	5	520	0.769	5	520	0.769
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			16.400			16.659			33.059

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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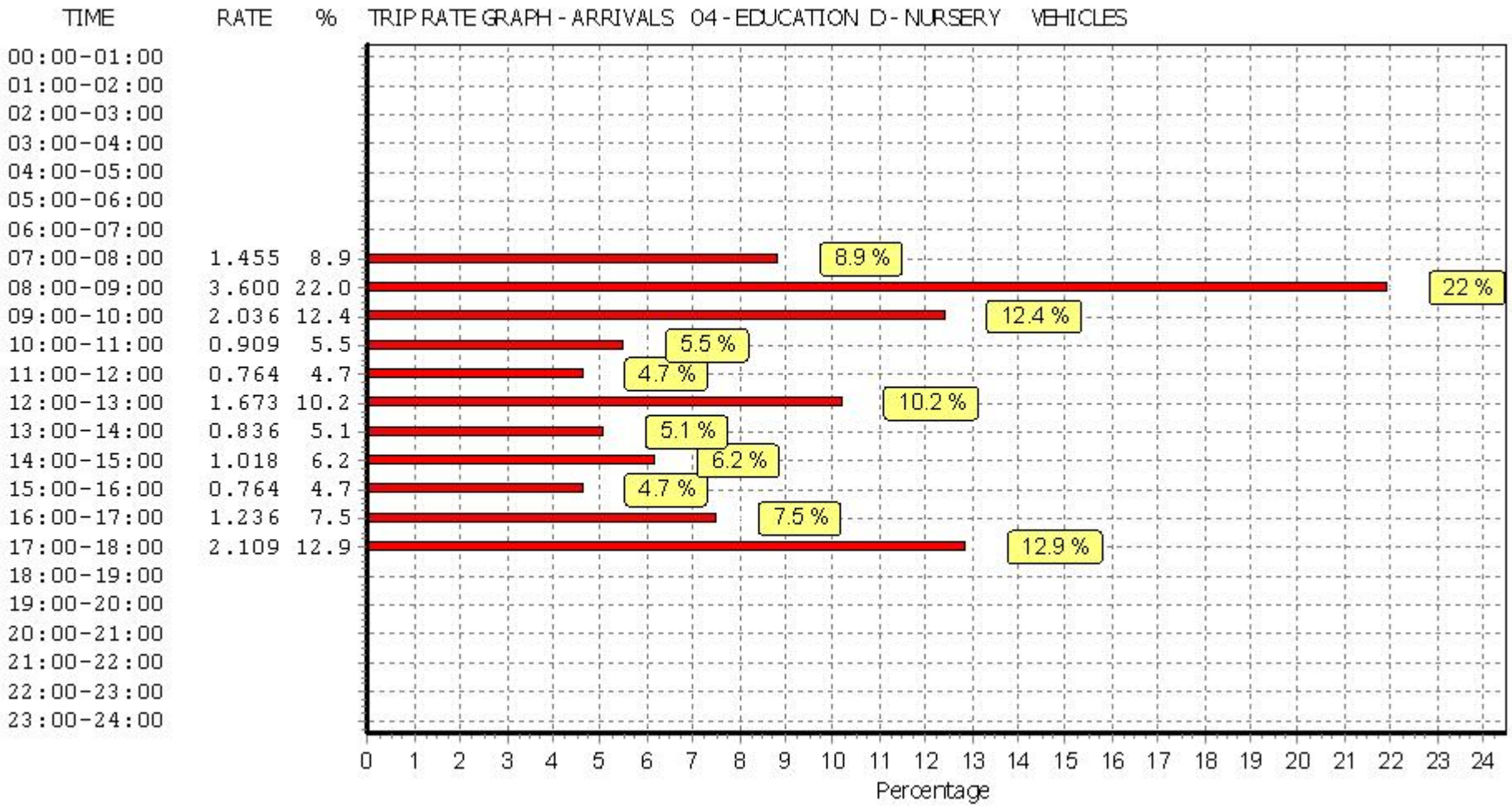
Parameter summary

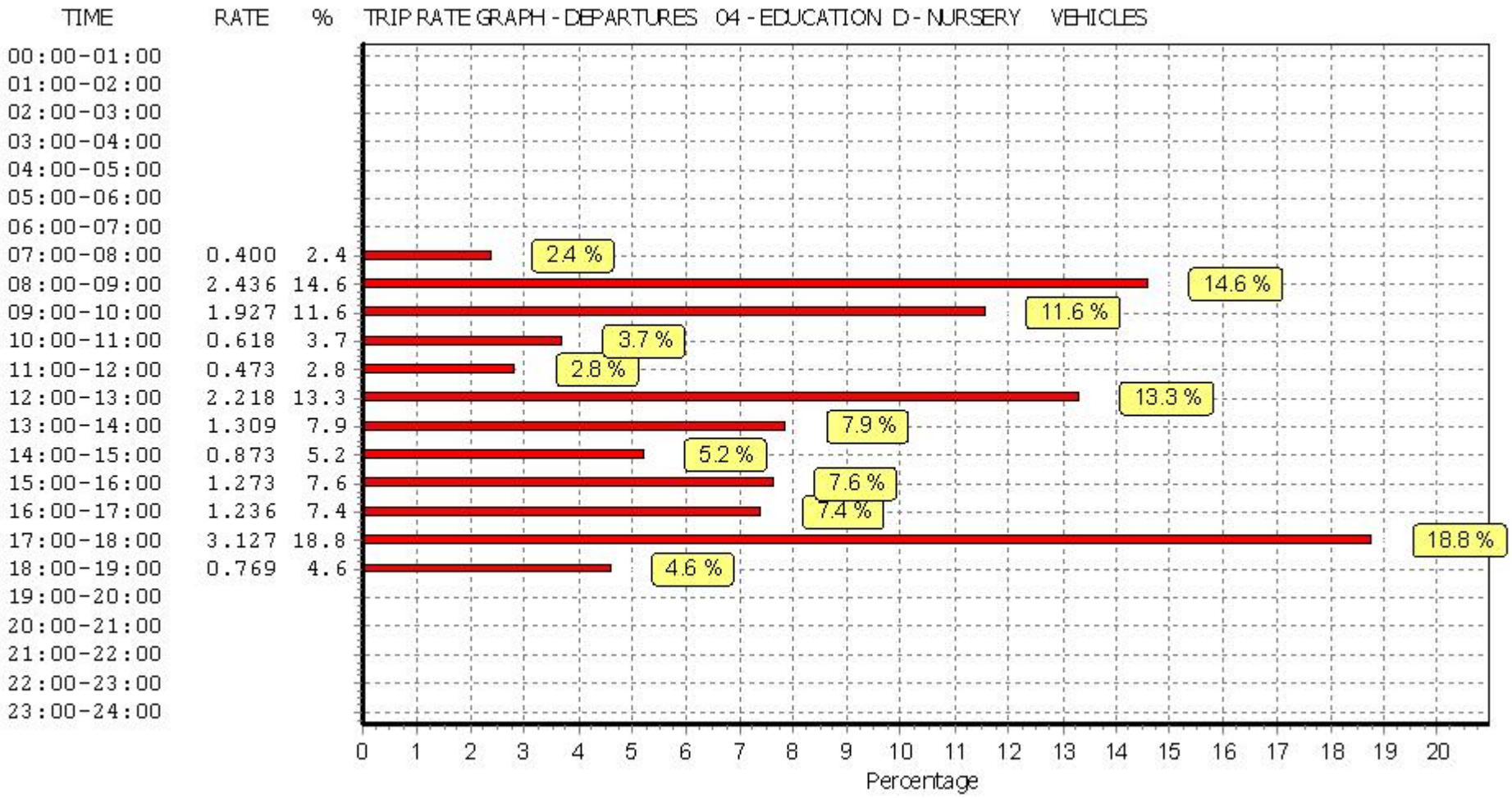
Trip rate parameter range selected:	150 - 1300 (units: sqm)
Survey date date range:	01/01/11 - 12/07/18
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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.

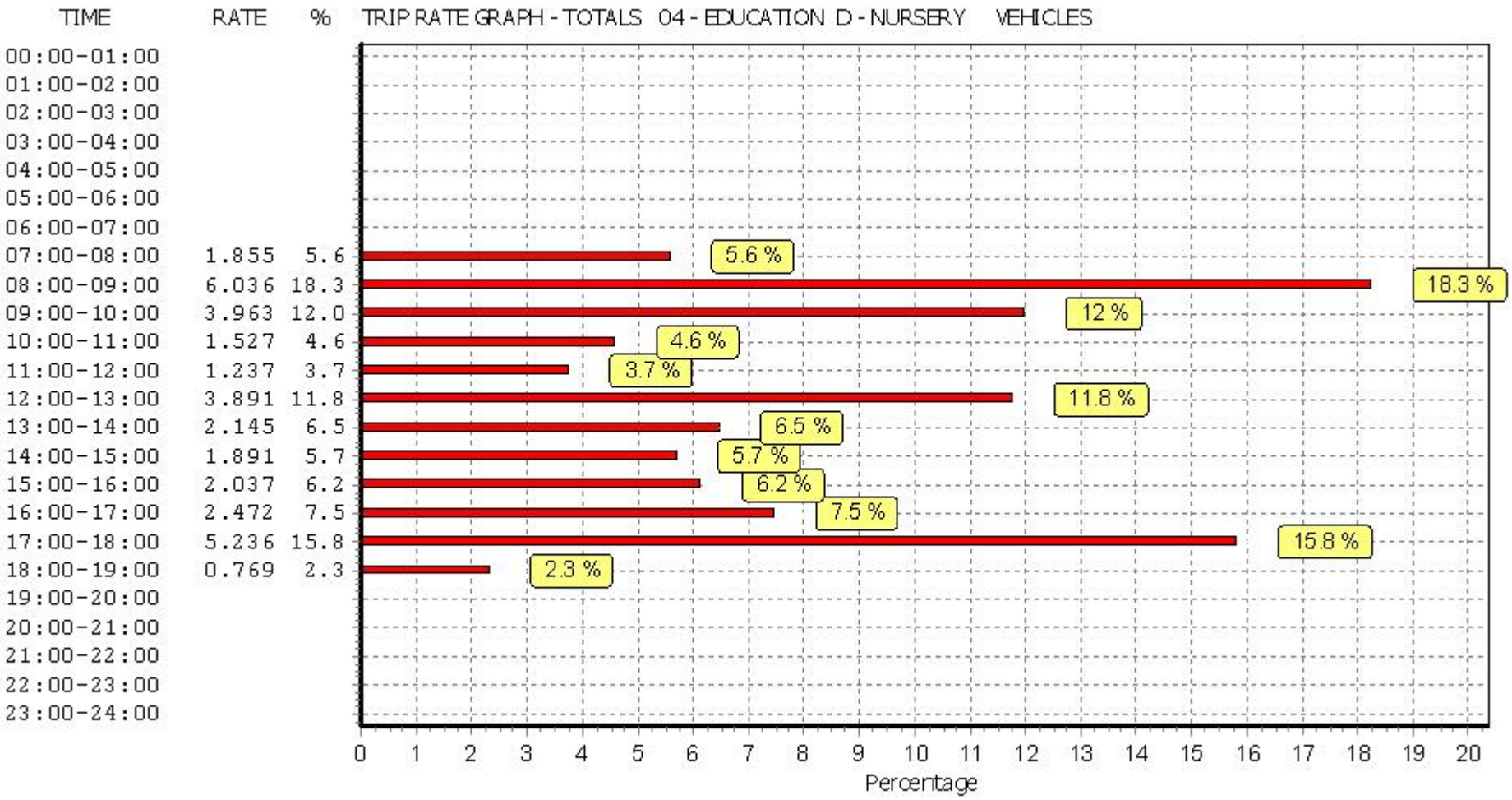


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

DBFL Ormond House Dublin Licence No: 638801



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



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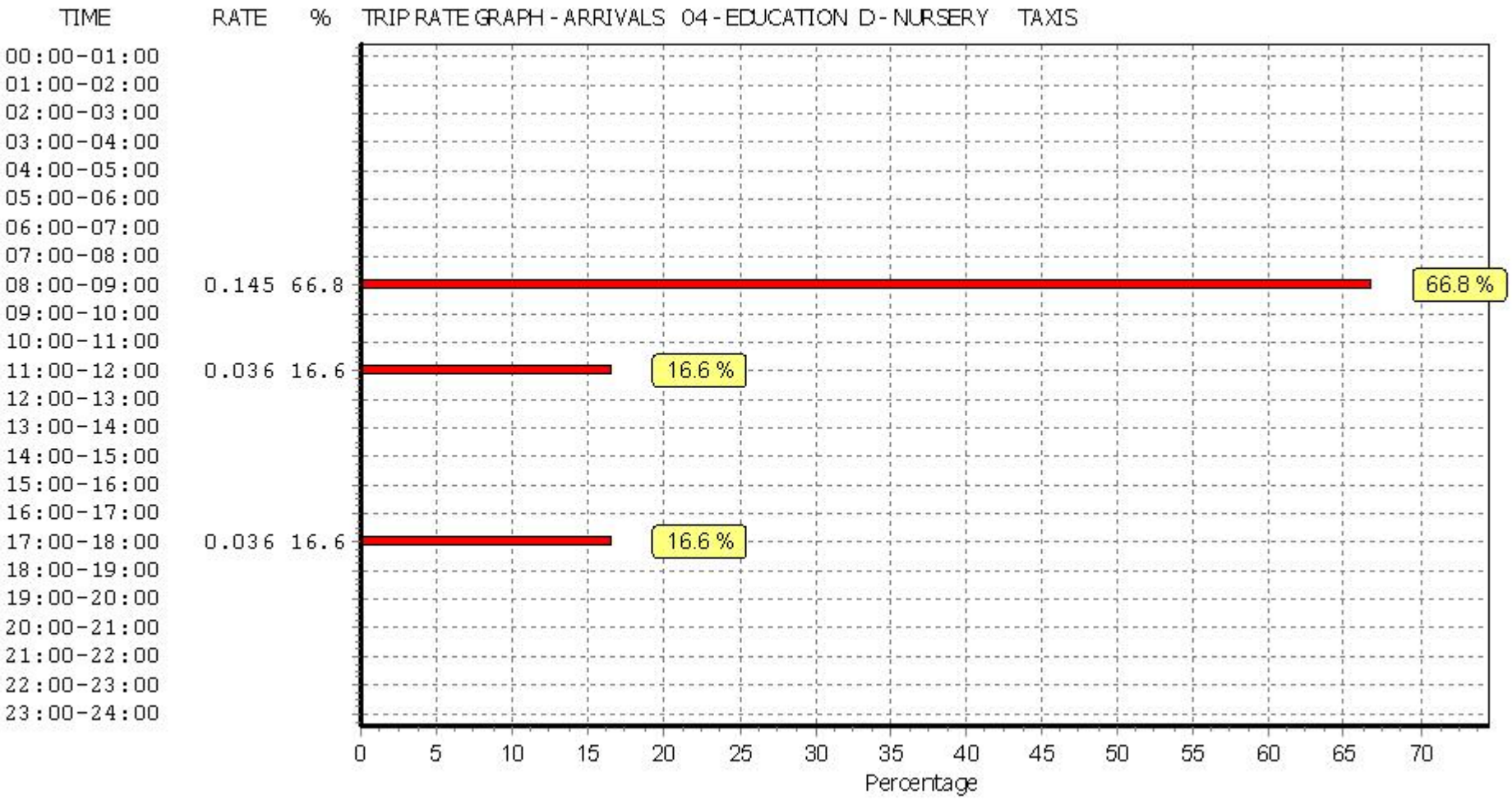
TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	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	6	458	0.000	6	458	0.000	6	458	0.000
08:00 - 09:00	6	458	0.145	6	458	0.073	6	458	0.218
09:00 - 10:00	6	458	0.000	6	458	0.073	6	458	0.073
10:00 - 11:00	6	458	0.000	6	458	0.000	6	458	0.000
11:00 - 12:00	6	458	0.036	6	458	0.036	6	458	0.072
12:00 - 13:00	6	458	0.000	6	458	0.000	6	458	0.000
13:00 - 14:00	6	458	0.000	6	458	0.000	6	458	0.000
14:00 - 15:00	6	458	0.000	6	458	0.000	6	458	0.000
15:00 - 16:00	6	458	0.000	6	458	0.000	6	458	0.000
16:00 - 17:00	6	458	0.000	6	458	0.000	6	458	0.000
17:00 - 18:00	6	458	0.036	6	458	0.036	6	458	0.072
18:00 - 19:00	5	520	0.000	5	520	0.000	5	520	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.217			0.218			0.435

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.*



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

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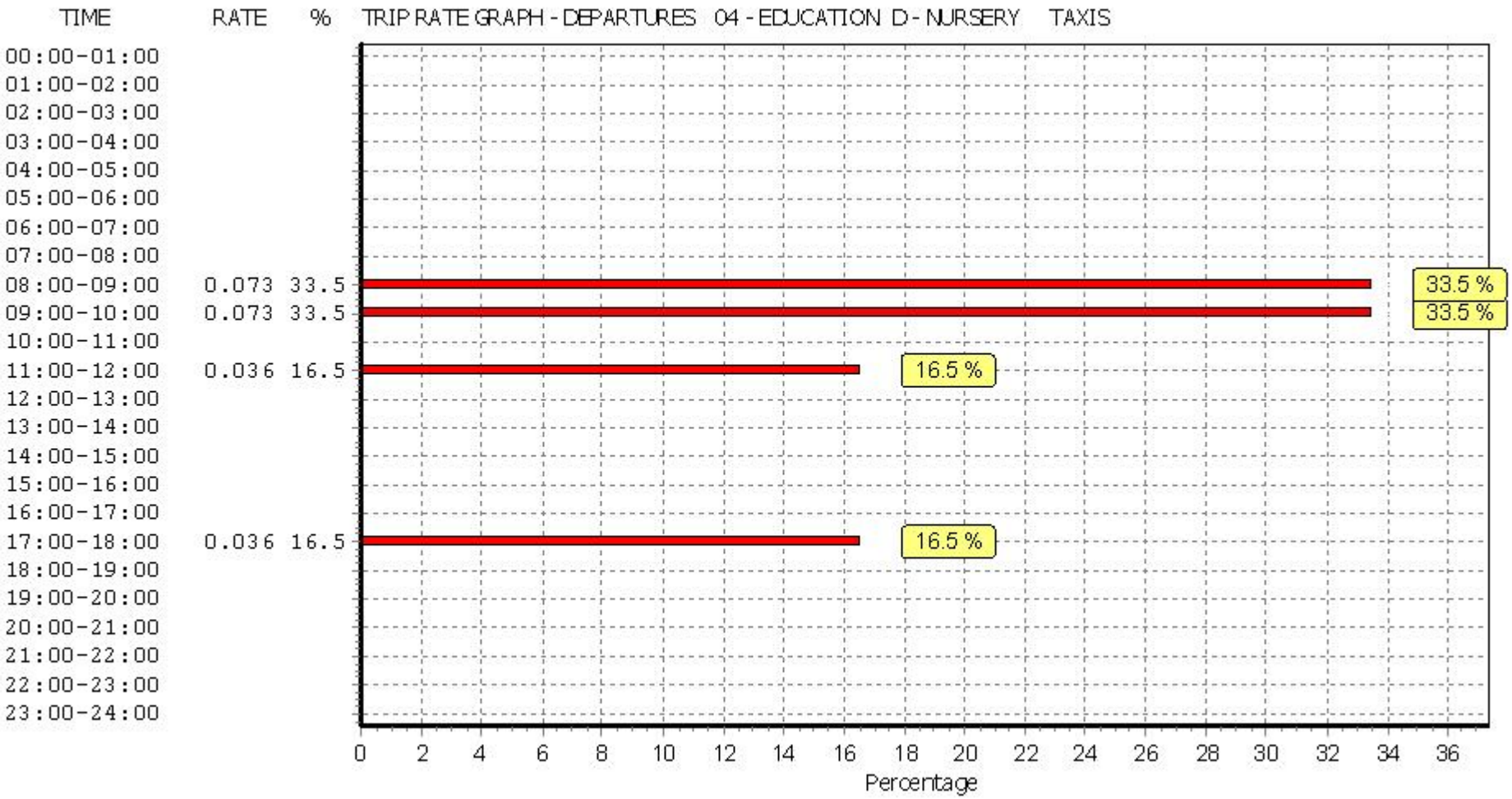
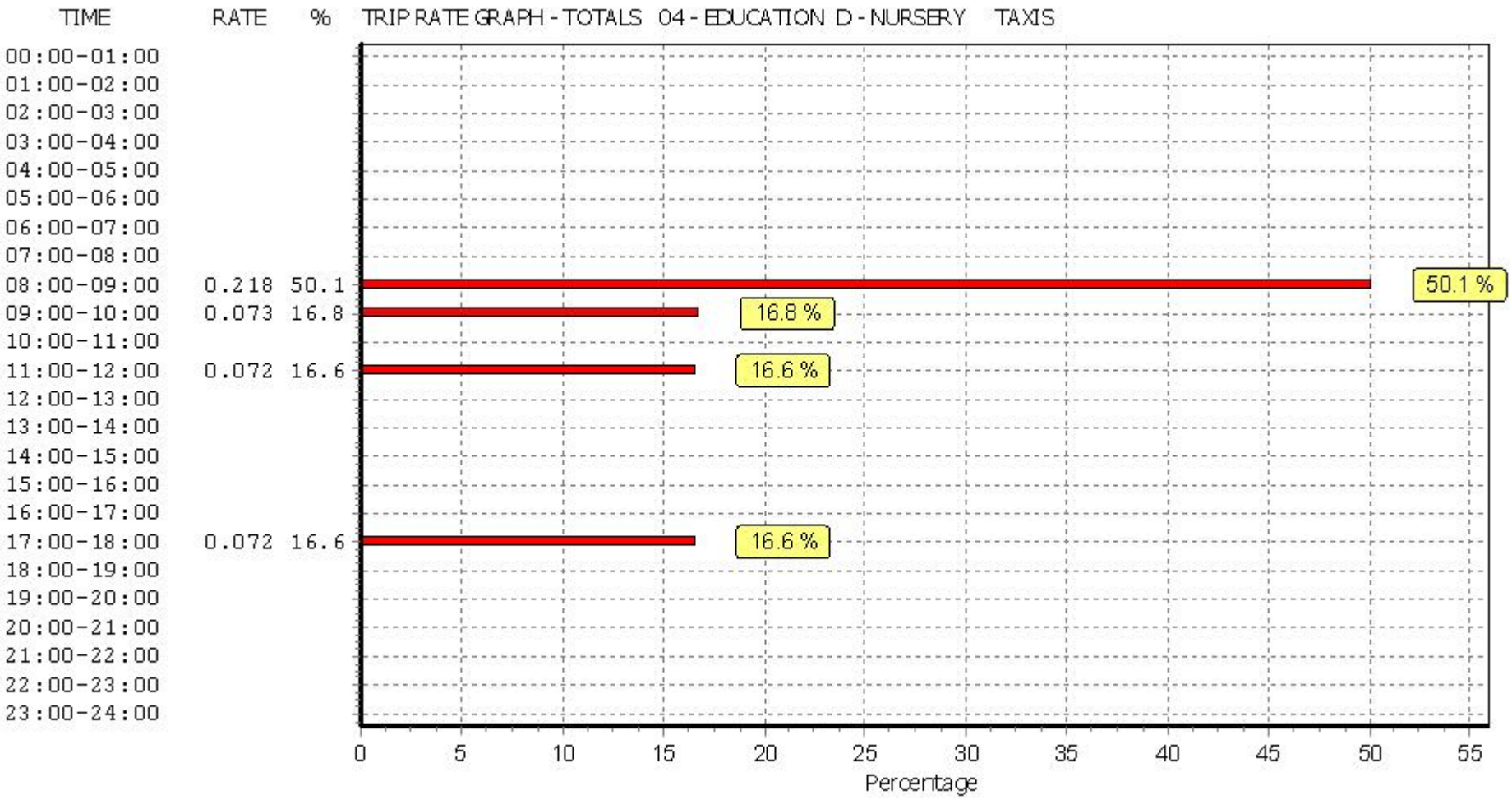


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



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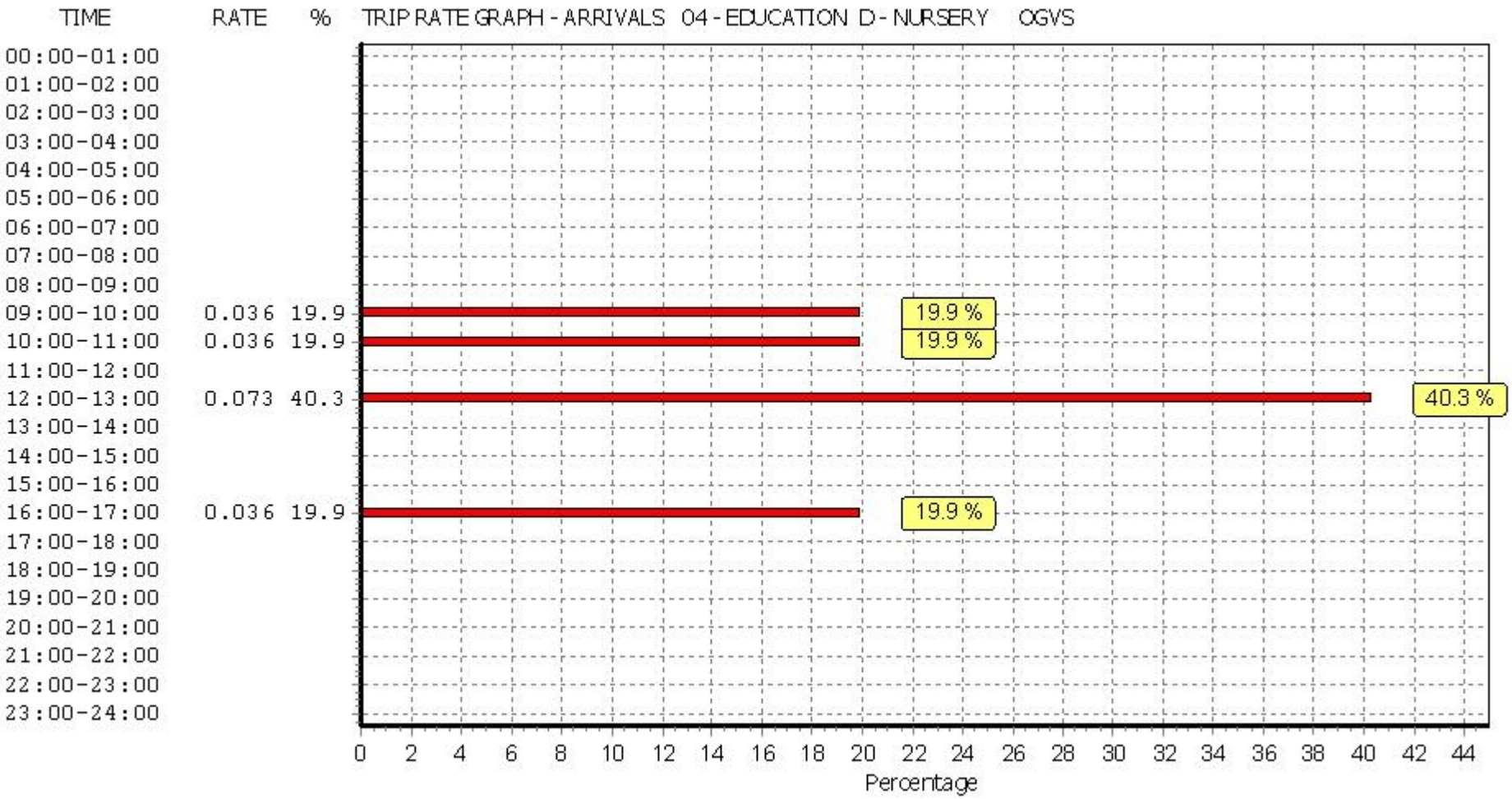
TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	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	6	458	0.000	6	458	0.000	6	458	0.000
08:00 - 09:00	6	458	0.000	6	458	0.000	6	458	0.000
09:00 - 10:00	6	458	0.036	6	458	0.036	6	458	0.072
10:00 - 11:00	6	458	0.036	6	458	0.000	6	458	0.036
11:00 - 12:00	6	458	0.000	6	458	0.036	6	458	0.036
12:00 - 13:00	6	458	0.073	6	458	0.073	6	458	0.146
13:00 - 14:00	6	458	0.000	6	458	0.000	6	458	0.000
14:00 - 15:00	6	458	0.000	6	458	0.000	6	458	0.000
15:00 - 16:00	6	458	0.000	6	458	0.000	6	458	0.000
16:00 - 17:00	6	458	0.036	6	458	0.036	6	458	0.072
17:00 - 18:00	6	458	0.000	6	458	0.000	6	458	0.000
18:00 - 19:00	5	520	0.000	5	520	0.000	5	520	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.181			0.181			0.362

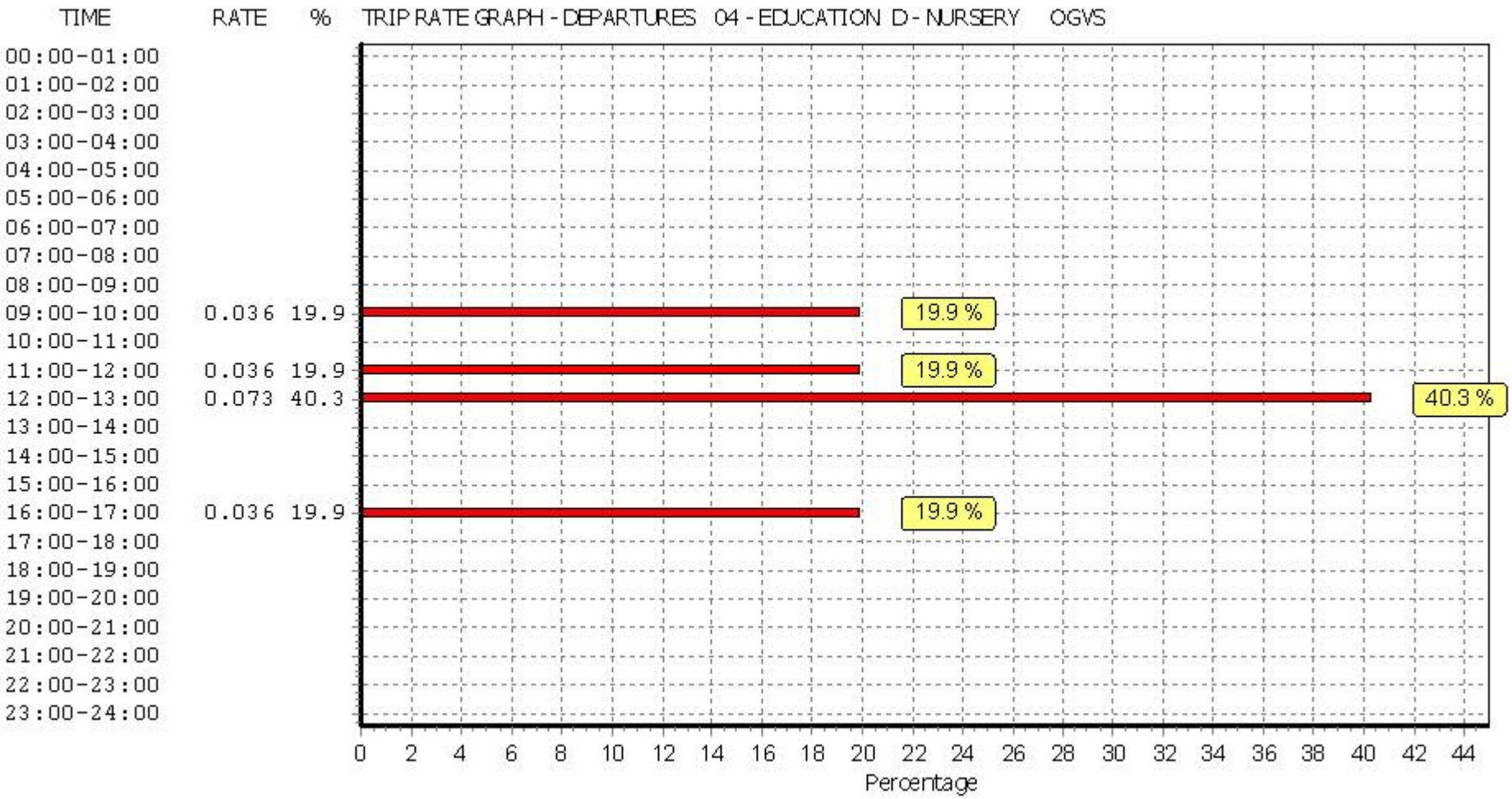
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are 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.*

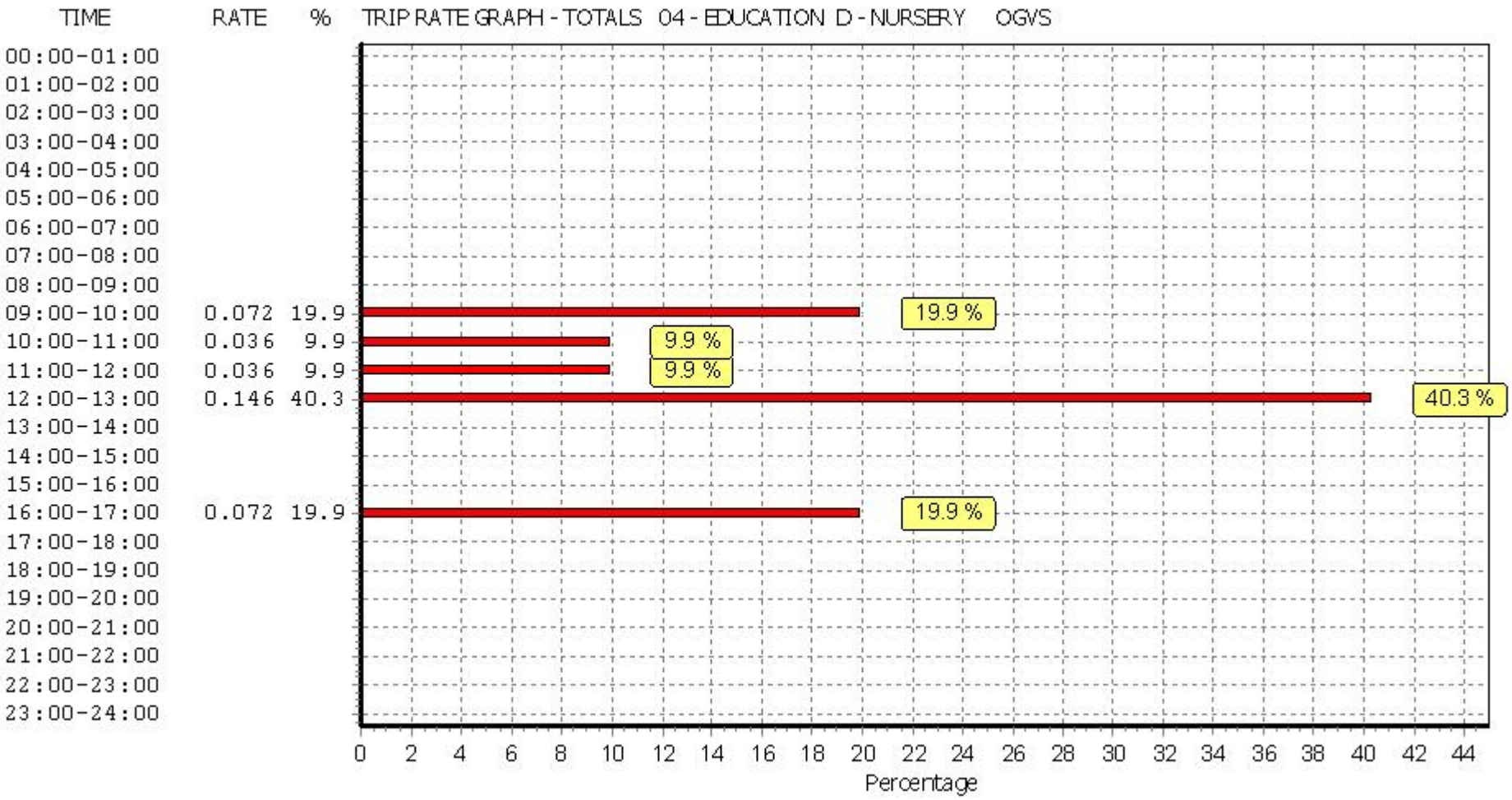


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

DBFL Ormond House Dublin Licence No: 638801



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
CYCLISTS
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	6	458	0.000	6	458	0.000	6	458	0.000
08:00 - 09:00	6	458	0.036	6	458	0.036	6	458	0.072
09:00 - 10:00	6	458	0.000	6	458	0.000	6	458	0.000
10:00 - 11:00	6	458	0.000	6	458	0.000	6	458	0.000
11:00 - 12:00	6	458	0.000	6	458	0.000	6	458	0.000
12:00 - 13:00	6	458	0.000	6	458	0.000	6	458	0.000
13:00 - 14:00	6	458	0.000	6	458	0.000	6	458	0.000
14:00 - 15:00	6	458	0.000	6	458	0.000	6	458	0.000
15:00 - 16:00	6	458	0.000	6	458	0.000	6	458	0.000
16:00 - 17:00	6	458	0.036	6	458	0.036	6	458	0.072
17:00 - 18:00	6	458	0.036	6	458	0.036	6	458	0.072
18:00 - 19:00	5	520	0.000	5	520	0.000	5	520	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.108			0.108			0.216

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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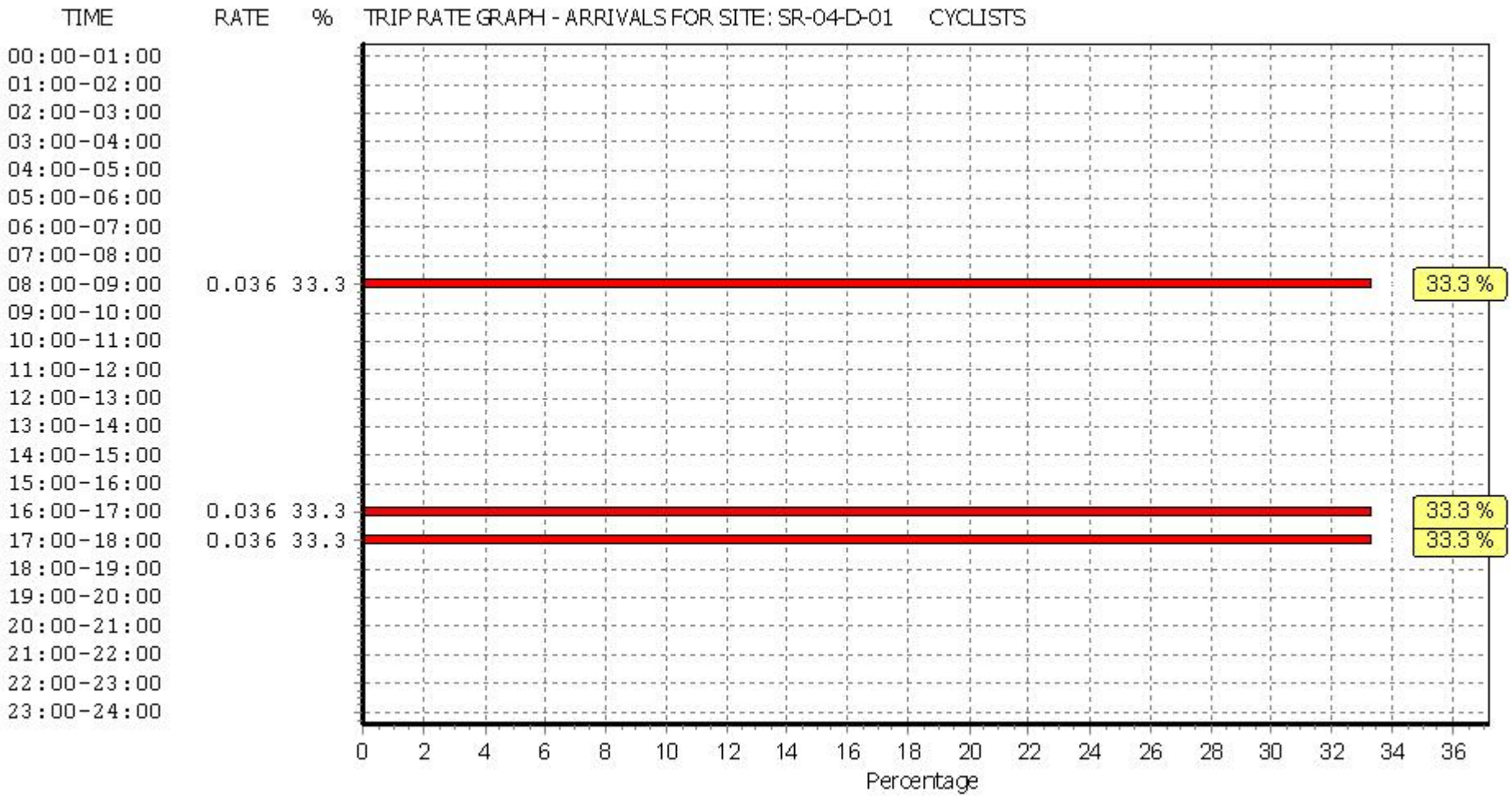

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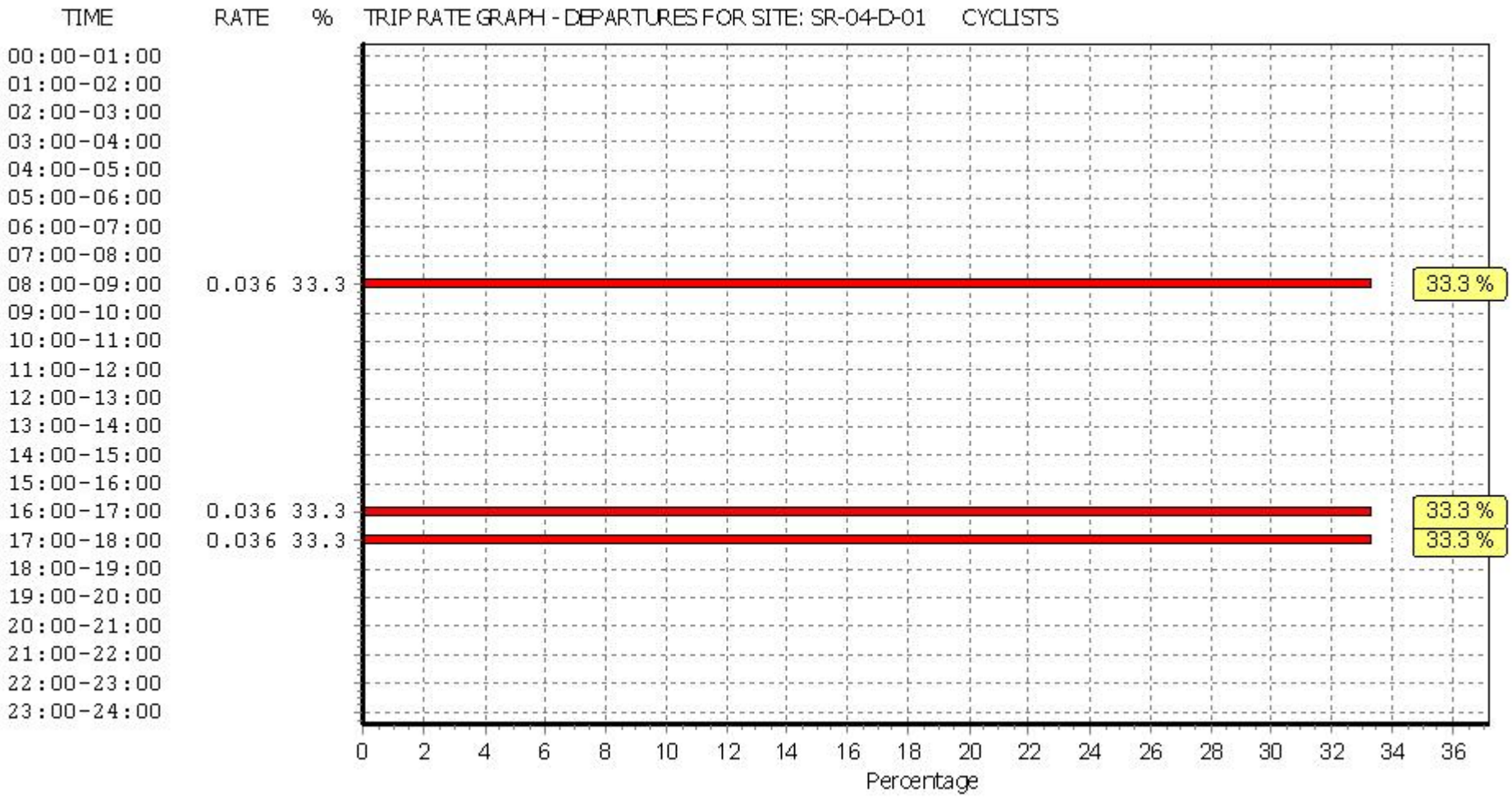
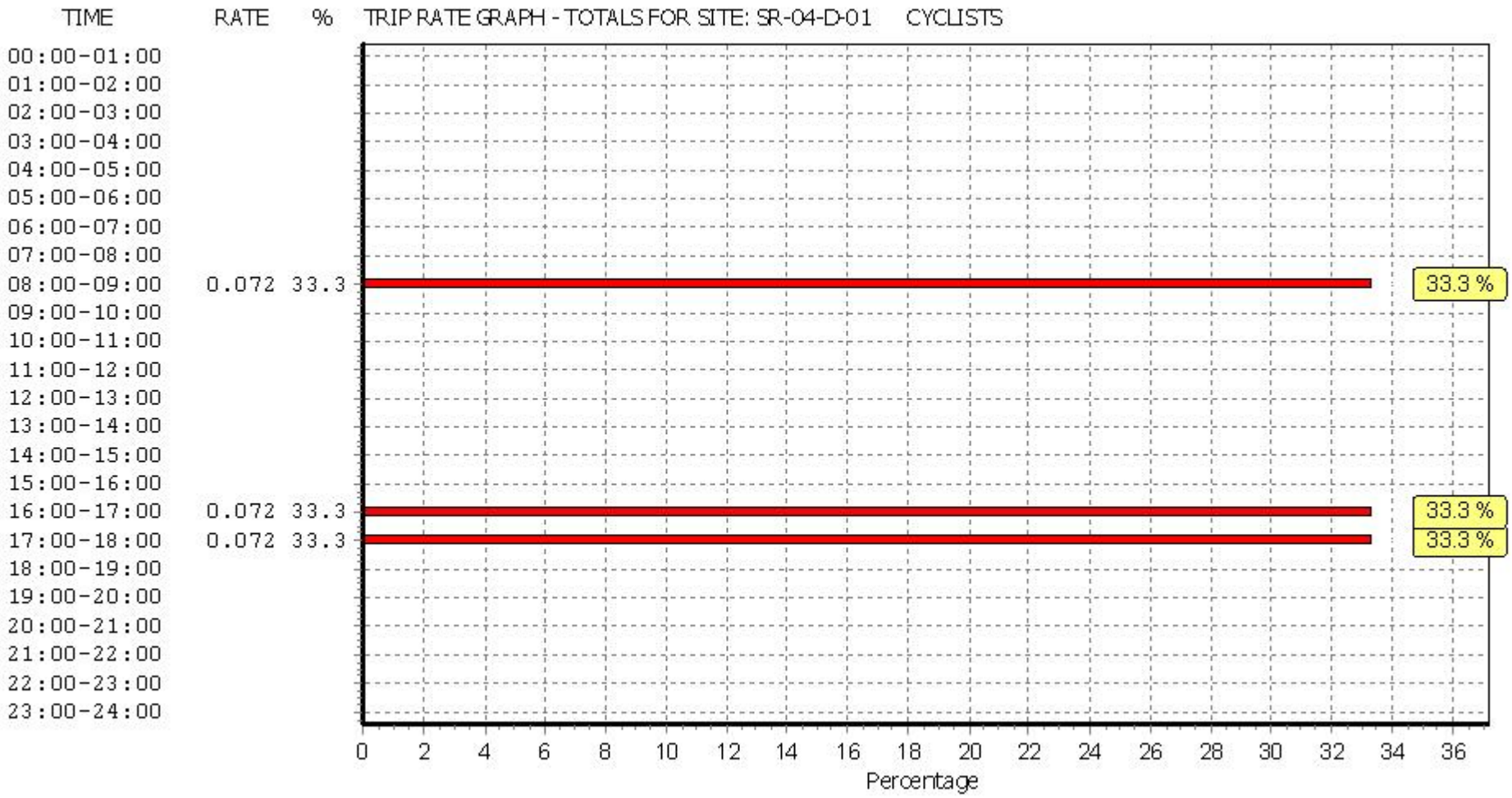


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



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Appendix 12.C ARCADY Output Files

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.0.4211 []

Filename: 162074-DBFL-CA-D-0001_ARCADY_Do_Something_Proposed_Roundabout.j9
Path: G:\2016\p162074\calcs\arcady
Report generation date: 29/03/2019 12:36:21

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2017							
1 - Proposed link street	0.0	0.00	0.00	A	0.0	0.00	0.00	A
2 - R407 Southbound arm	0.0	0.00	0.00	A	0.0	0.00	0.00	A
3 - R407 Northbound arm	0.0	0.00	0.00	A	0.0	0.00	0.00	A
4 - Existing Capdoo link street	0.0	0.00	0.00	A	0.0	0.00	0.00	A
	2020							
1 - Proposed link street	0.0	4.21	0.04	A	0.1	4.42	0.06	A
2 - R407 Southbound arm	0.6	4.86	0.34	A	0.6	4.98	0.35	A
3 - R407 Northbound arm	0.8	5.73	0.41	A	0.8	5.94	0.43	A
4 - Existing Capdoo link street	0.0	6.62	0.04	A	0.1	7.12	0.08	A
	2025							
1 - Proposed link street	0.1	4.41	0.07	A	0.1	4.60	0.08	A
2 - R407 Southbound arm	0.7	5.15	0.38	A	0.7	5.35	0.40	A
3 - R407 Northbound arm	0.9	6.14	0.45	A	1.0	6.75	0.49	A
4 - Existing Capdoo link street	0.1	6.88	0.04	A	0.1	7.73	0.10	A
	2035							
1 - Proposed link street	0.1	4.54	0.07	A	0.1	4.76	0.09	A
2 - R407 Southbound arm	0.8	5.48	0.41	A	0.9	5.74	0.44	A
3 - R407 Northbound arm	1.0	6.67	0.49	A	1.3	7.44	0.54	A
4 - Existing Capdoo link street	0.1	7.17	0.05	A	0.1	8.17	0.11	A

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

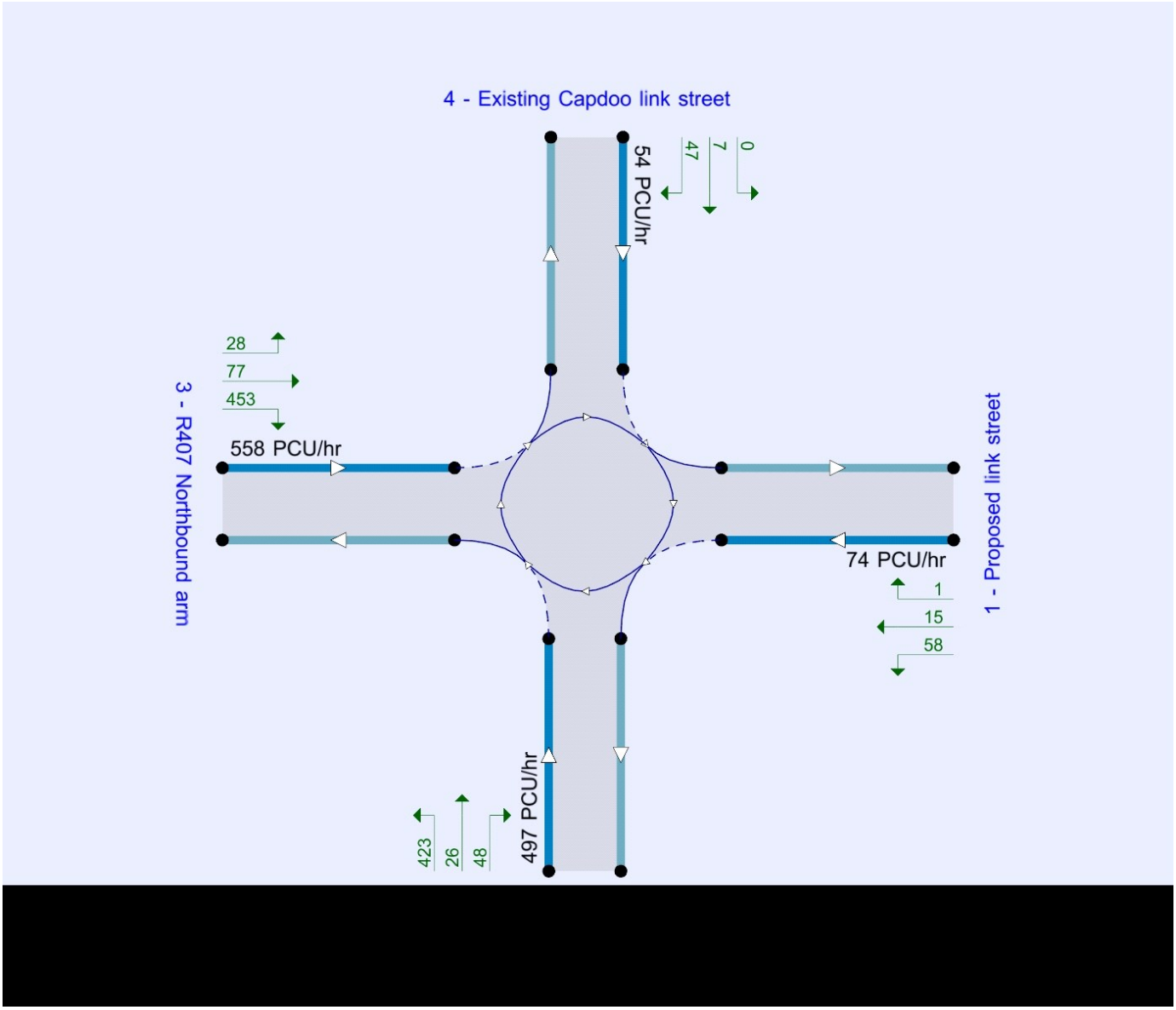
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HEADOFFICE"mcgeoughp
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2017	AM	ONE HOUR	08:00	09:30	15
2017	PM	ONE HOUR	17:00	18:30	15
2020	AM	ONE HOUR	08:00	09:30	15
2020	PM	ONE HOUR	17:00	18:30	15
2025	AM	ONE HOUR	08:00	09:30	15
2025	PM	ONE HOUR	17:00	18:30	15
2035	AM	ONE HOUR	08:00	09:30	15
2035	PM	ONE HOUR	17:00	18:30	15

2017, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	0.00	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Proposed link street	
2	R407 Southbound arm	
3	R407 Northbound arm	
4	Existing Capdoo link street	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1 - Proposed link street	0.00	99999.00
2 - R407 Southbound arm	0.00	99999.00
3 - R407 Northbound arm	0.00	99999.00
4 - Existing Capdoo link street	0.00	99999.00

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
1 - Proposed link street	4.50	4.50	0.0	6.0	36.0	32.1	
2 - R407 Southbound arm	4.50	4.50	0.0	6.5	36.0	19.5	
3 - R407 Northbound arm	4.50	4.50	0.0	6.0	36.0	34.2	
4 - Existing Capdoo link street	3.00	3.00	0.0	6.0	36.0	22.7	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Proposed link street	0.511	1198.003
2 - R407 Southbound arm	0.544	1274.795
3 - R407 Northbound arm	0.507	1188.053
4 - Existing Capdoo link street	0.446	828.227

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Proposed link street		✓	0.00	100.000
2 - R407 Southbound arm		✓	0.00	100.000
3 - R407 Northbound arm		✓	0.00	100.000
4 - Existing Capdoo link street		✓	0.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	0.000	0.000	0.000	0.000
	2 - R407 Southbound arm	0.000	0.000	0.000	0.000
	3 - R407 Northbound arm	0.000	0.000	0.000	0.000
	4 - Existing Capdoo link street	0.000	0.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	10	10	10	10
	2 - R407 Southbound arm	10	10	10	10
	3 - R407 Northbound arm	10	10	10	10
	4 - Existing Capdoo link street	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Proposed link street	0.00	0.00	0.0	A
2 - R407 Southbound arm	0.00	0.00	0.0	A
3 - R407 Northbound arm	0.00	0.00	0.0	A
4 - Existing Capdoo link street	0.00	0.00	0.0	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

2017, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	0.00	F

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2017	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Proposed link street		✓	0.00	100.000
2 - R407 Southbound arm		✓	0.00	100.000
3 - R407 Northbound arm		✓	0.00	100.000
4 - Existing Capdoo link street		✓	0.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	0.000	0.000	0.000	0.000
	2 - R407 Southbound arm	0.000	0.000	0.000	0.000
	3 - R407 Northbound arm	0.000	0.000	0.000	0.000
	4 - Existing Capdoo link street	0.000	0.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	10	10	10	10
	2 - R407 Southbound arm	10	10	10	10
	3 - R407 Northbound arm	10	10	10	10
	4 - Existing Capdoo link street	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Proposed link street	0.00	0.00	0.0	A
2 - R407 Southbound arm	0.00	0.00	0.0	A
3 - R407 Northbound arm	0.00	0.00	0.0	A
4 - Existing Capdoo link street	0.00	0.00	0.0	A

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	0.00	0.00	1198.00	0.000	0.00	0.0	0.000	A
2 - R407 Southbound arm	0.00	0.00	1274.79	0.000	0.00	0.0	0.000	A
3 - R407 Northbound arm	0.00	0.00	1188.05	0.000	0.00	0.0	0.000	A
4 - Existing Capdoo link street	0.00	0.00	828.23	0.000	0.00	0.0	0.000	A

2020, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	5.30	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2020	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Proposed link street		✓	37.00	100.000
2 - R407 Southbound arm		✓	390.00	100.000
3 - R407 Northbound arm		✓	435.00	100.000
4 - Existing Capdoo link street		✓	22.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	0.000	5.000	32.000	0.000
	2 - R407 Southbound arm	17.000	0.000	358.000	15.000
	3 - R407 Northbound arm	39.000	363.000	0.000	33.000
	4 - Existing Capdoo link street	0.000	4.000	18.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	10	10	10	10
	2 - R407 Southbound arm	10	10	10	10
	3 - R407 Northbound arm	10	10	10	10
	4 - Existing Capdoo link street	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Proposed link street	0.04	4.21	0.0	A
2 - R407 Southbound arm	0.34	4.86	0.6	A
3 - R407 Northbound arm	0.41	5.73	0.8	A
4 - Existing Capdoo link street	0.04	6.62	0.0	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	27.86	288.33	1050.58	0.027	27.74	0.0	3.871	A
2 - R407 Southbound arm	293.61	37.45	1254.42	0.234	292.28	0.3	4.109	A
3 - R407 Northbound arm	327.49	23.98	1175.89	0.279	325.80	0.4	4.648	A
4 - Existing Capdoo link street	16.56	313.83	688.11	0.024	16.45	0.0	5.896	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	33.26	345.67	1021.27	0.033	33.23	0.0	4.007	A
2 - R407 Southbound arm	350.60	44.90	1250.37	0.280	350.24	0.4	4.397	A
3 - R407 Northbound arm	391.06	28.74	1173.48	0.333	390.56	0.5	5.054	A
4 - Existing Capdoo link street	19.78	376.20	660.26	0.030	19.75	0.0	6.182	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	40.74	423.15	981.65	0.042	40.70	0.0	4.208	A
2 - R407 Southbound arm	429.40	54.98	1244.88	0.345	428.80	0.6	4.849	A
3 - R407 Northbound arm	478.94	35.18	1170.21	0.409	478.11	0.8	5.714	A
4 - Existing Capdoo link street	24.22	460.53	622.61	0.039	24.18	0.0	6.616	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	40.74	423.88	981.28	0.042	40.74	0.0	4.210	A
2 - R407 Southbound arm	429.40	55.05	1244.84	0.345	429.39	0.6	4.855	A
3 - R407 Northbound arm	478.94	35.23	1170.19	0.409	478.93	0.8	5.728	A
4 - Existing Capdoo link street	24.22	461.31	622.26	0.039	24.22	0.0	6.620	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	33.26	346.83	1020.68	0.033	33.30	0.0	4.012	A
2 - R407 Southbound arm	350.60	45.02	1250.30	0.280	351.18	0.4	4.408	A
3 - R407 Northbound arm	391.06	28.82	1173.44	0.333	391.87	0.6	5.073	A
4 - Existing Capdoo link street	19.78	377.45	659.70	0.030	19.82	0.0	6.190	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	27.86	290.30	1049.58	0.027	27.88	0.0	3.877	A
2 - R407 Southbound arm	293.61	37.69	1254.29	0.234	293.99	0.3	4.126	A
3 - R407 Northbound arm	327.49	24.12	1175.82	0.279	328.00	0.4	4.675	A
4 - Existing Capdoo link street	16.56	315.93	687.17	0.024	16.59	0.0	5.907	A

2020, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	5.51	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D4	2020	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Proposed link street		✓	54.00	100.000
2 - R407 Southbound arm		✓	390.00	100.000
3 - R407 Northbound arm		✓	457.00	100.000
4 - Existing Capdoo link street		✓	46.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	0.000	11.000	43.000	0.000
	2 - R407 Southbound arm	17.000	0.000	358.000	15.000
	3 - R407 Northbound arm	48.000	385.000	0.000	24.000
	4 - Existing Capdoo link street	0.000	6.000	40.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	10	10	10	10
	2 - R407 Southbound arm	10	10	10	10
	3 - R407 Northbound arm	10	10	10	10
	4 - Existing Capdoo link street	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Proposed link street	0.06	4.42	0.1	A
2 - R407 Southbound arm	0.35	4.98	0.6	A
3 - R407 Northbound arm	0.43	5.94	0.8	A
4 - Existing Capdoo link street	0.08	7.12	0.1	A

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	40.65	322.72	1033.00	0.039	40.47	0.0	3.990	A
2 - R407 Southbound arm	293.61	62.14	1240.99	0.237	292.26	0.3	4.168	A
3 - R407 Northbound arm	344.05	23.98	1175.89	0.293	342.25	0.5	4.741	A
4 - Existing Capdoo link street	34.63	337.01	677.76	0.051	34.40	0.1	6.154	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	48.54	386.94	1000.17	0.049	48.50	0.1	4.161	A
2 - R407 Southbound arm	350.60	74.53	1234.25	0.284	350.22	0.4	4.477	A
3 - R407 Northbound arm	410.83	28.74	1173.48	0.350	410.29	0.6	5.185	A
4 - Existing Capdoo link street	41.35	404.01	647.84	0.064	41.29	0.1	6.528	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	59.46	473.66	955.83	0.062	59.39	0.1	4.417	A
2 - R407 Southbound arm	429.40	91.25	1225.15	0.350	428.78	0.6	4.968	A
3 - R407 Northbound arm	503.17	35.18	1170.21	0.430	502.23	0.8	5.919	A
4 - Existing Capdoo link street	50.65	494.55	607.42	0.083	50.55	0.1	7.111	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	59.46	474.52	955.39	0.062	59.45	0.1	4.419	A
2 - R407 Southbound arm	429.40	91.38	1225.08	0.351	429.39	0.6	4.976	A
3 - R407 Northbound arm	503.17	35.23	1170.19	0.430	503.15	0.8	5.936	A
4 - Existing Capdoo link street	50.65	495.44	607.02	0.083	50.65	0.1	7.116	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	48.54	388.32	999.46	0.049	48.61	0.1	4.166	A
2 - R407 Southbound arm	350.60	74.75	1234.13	0.284	351.21	0.4	4.487	A
3 - R407 Northbound arm	410.83	28.82	1173.44	0.350	411.74	0.6	5.206	A
4 - Existing Capdoo link street	41.35	405.43	647.21	0.064	41.45	0.1	6.540	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	40.65	325.01	1031.83	0.039	40.70	0.0	3.996	A
2 - R407 Southbound arm	293.61	62.58	1240.75	0.237	294.00	0.3	4.184	A
3 - R407 Northbound arm	344.05	24.12	1175.82	0.293	344.61	0.5	4.768	A
4 - Existing Capdoo link street	34.63	339.33	676.72	0.051	34.69	0.1	6.167	A

2025, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	5.62	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D5	2025	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Proposed link street		✓	61.00	100.000
2 - R407 Southbound arm		✓	424.00	100.000
3 - R407 Northbound arm		✓	473.00	100.000
4 - Existing Capdoo link street		✓	24.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	0.000	16.000	44.000	1.000
	2 - R407 Southbound arm	24.000	0.000	384.000	16.000
	3 - R407 Northbound arm	47.000	390.000	0.000	36.000
	4 - Existing Capdoo link street	0.000	4.000	20.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	10	10	10	10
	2 - R407 Southbound arm	10	10	10	10
	3 - R407 Northbound arm	10	10	10	10
	4 - Existing Capdoo link street	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Proposed link street	0.07	4.41	0.1	A
2 - R407 Southbound arm	0.38	5.15	0.7	A
3 - R407 Northbound arm	0.45	6.14	0.9	A
4 - Existing Capdoo link street	0.04	6.88	0.1	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	45.92	309.99	1039.51	0.044	45.72	0.1	3.983	A
2 - R407 Southbound arm	319.21	48.69	1248.31	0.256	317.71	0.4	4.248	A
3 - R407 Northbound arm	356.10	30.72	1172.48	0.304	354.19	0.5	4.829	A
4 - Existing Capdoo link street	18.07	345.22	674.09	0.027	17.95	0.0	6.035	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	54.84	371.66	1007.98	0.054	54.79	0.1	4.154	A
2 - R407 Southbound arm	381.17	58.37	1243.04	0.307	380.74	0.5	4.590	A
3 - R407 Northbound arm	425.22	36.82	1169.39	0.364	424.63	0.6	5.312	A
4 - Existing Capdoo link street	21.58	413.86	643.45	0.034	21.54	0.0	6.367	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	67.16	454.93	965.41	0.070	67.09	0.1	4.408	A
2 - R407 Southbound arm	466.83	71.47	1235.91	0.378	466.12	0.7	5.140	A
3 - R407 Northbound arm	520.78	45.07	1165.20	0.447	519.76	0.9	6.125	A
4 - Existing Capdoo link street	26.42	506.59	602.05	0.044	26.38	0.1	6.878	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	67.16	455.80	964.96	0.070	67.16	0.1	4.410	A
2 - R407 Southbound arm	466.83	71.56	1235.86	0.378	466.82	0.7	5.148	A
3 - R407 Northbound arm	520.78	45.14	1165.17	0.447	520.76	0.9	6.144	A
4 - Existing Capdoo link street	26.42	507.55	601.62	0.044	26.42	0.1	6.883	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	54.84	373.05	1007.27	0.054	54.91	0.1	4.158	A
2 - R407 Southbound arm	381.17	58.53	1242.95	0.307	381.87	0.5	4.604	A
3 - R407 Northbound arm	425.22	36.93	1169.33	0.364	426.21	0.6	5.335	A
4 - Existing Capdoo link street	21.58	415.39	642.76	0.034	21.62	0.0	6.375	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	45.92	312.21	1038.38	0.044	45.97	0.1	3.990	A
2 - R407 Southbound arm	319.21	49.00	1248.14	0.256	319.65	0.4	4.268	A
3 - R407 Northbound arm	356.10	30.91	1172.38	0.304	356.70	0.5	4.859	A
4 - Existing Capdoo link street	18.07	347.65	673.01	0.027	18.10	0.0	6.048	A

2025, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	6.07	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D6	2025	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Proposed link street		✓	69.00	100.000
2 - R407 Southbound arm		✓	454.00	100.000
3 - R407 Northbound arm		✓	511.00	100.000
4 - Existing Capdoo link street		✓	50.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	0.000	54.000	14.000	1.000
	2 - R407 Southbound arm	46.000	0.000	385.000	23.000
	3 - R407 Northbound arm	72.000	413.000	0.000	26.000
	4 - Existing Capdoo link street	0.000	7.000	43.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	10	10	10	10
	2 - R407 Southbound arm	10	10	10	10
	3 - R407 Northbound arm	10	10	10	10
	4 - Existing Capdoo link street	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Proposed link street	0.08	4.60	0.1	A
2 - R407 Southbound arm	0.40	5.35	0.7	A
3 - R407 Northbound arm	0.49	6.75	1.0	A
4 - Existing Capdoo link street	0.10	7.73	0.1	A

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	51.95	346.56	1020.82	0.051	51.71	0.1	4.085	A
2 - R407 Southbound arm	341.80	43.38	1251.19	0.273	340.15	0.4	4.338	A
3 - R407 Northbound arm	384.71	52.45	1161.46	0.331	382.55	0.5	5.069	A
4 - Existing Capdoo link street	37.64	397.55	650.73	0.058	37.37	0.1	6.453	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	62.03	415.58	985.53	0.063	61.97	0.1	4.287	A
2 - R407 Southbound arm	408.14	52.06	1246.47	0.327	407.65	0.5	4.719	A
3 - R407 Northbound arm	459.38	62.85	1156.18	0.397	458.67	0.7	5.671	A
4 - Existing Capdoo link street	44.95	476.63	615.42	0.073	44.87	0.1	6.940	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	75.97	508.61	937.96	0.081	75.88	0.1	4.593	A
2 - R407 Southbound arm	499.86	63.73	1240.12	0.403	499.05	0.7	5.338	A
3 - R407 Northbound arm	562.62	76.95	1149.04	0.490	561.33	1.0	6.723	A
4 - Existing Capdoo link street	55.05	583.33	567.78	0.097	54.93	0.1	7.720	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	75.97	509.75	937.38	0.081	75.97	0.1	4.596	A
2 - R407 Southbound arm	499.86	63.86	1240.05	0.403	499.85	0.7	5.349	A
3 - R407 Northbound arm	562.62	77.07	1148.98	0.490	562.59	1.0	6.752	A
4 - Existing Capdoo link street	55.05	584.61	567.21	0.097	55.05	0.1	7.731	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	62.03	417.37	984.61	0.063	62.12	0.1	4.292	A
2 - R407 Southbound arm	408.14	52.26	1246.36	0.327	408.93	0.5	4.734	A
3 - R407 Northbound arm	459.38	63.05	1156.08	0.397	460.64	0.7	5.703	A
4 - Existing Capdoo link street	44.95	478.64	614.53	0.073	45.07	0.1	6.957	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	51.95	349.24	1019.44	0.051	52.01	0.1	4.093	A
2 - R407 Southbound arm	341.80	43.74	1251.00	0.273	342.29	0.4	4.361	A
3 - R407 Northbound arm	384.71	52.78	1161.29	0.331	385.44	0.5	5.110	A
4 - Existing Capdoo link street	37.64	400.51	649.41	0.058	37.72	0.1	6.476	A

2035, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	6.04	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D7	2035	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Proposed link street		✓	64.00	100.000
2 - R407 Southbound arm		✓	464.00	100.000
3 - R407 Northbound arm		✓	518.00	100.000
4 - Existing Capdoo link street		✓	26.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	0.000	16.000	47.000	1.000
	2 - R407 Southbound arm	25.000	0.000	422.000	17.000
	3 - R407 Northbound arm	51.000	428.000	0.000	39.000
	4 - Existing Capdoo link street	0.000	5.000	21.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	10	10	10	10
	2 - R407 Southbound arm	10	10	10	10
	3 - R407 Northbound arm	10	10	10	10
	4 - Existing Capdoo link street	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Proposed link street	0.07	4.54	0.1	A
2 - R407 Southbound arm	0.41	5.48	0.8	A
3 - R407 Northbound arm	0.49	6.67	1.0	A
4 - Existing Capdoo link street	0.05	7.17	0.1	A

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	48.18	339.86	1024.24	0.047	47.97	0.1	4.055	A
2 - R407 Southbound arm	349.32	51.68	1246.68	0.280	347.62	0.4	4.397	A
3 - R407 Northbound arm	389.98	32.22	1171.72	0.333	387.80	0.5	5.037	A
4 - Existing Capdoo link street	19.57	377.33	659.76	0.030	19.44	0.0	6.182	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	57.53	407.51	989.65	0.058	57.48	0.1	4.248	A
2 - R407 Southbound arm	417.13	61.96	1241.09	0.336	416.62	0.6	4.800	A
3 - R407 Northbound arm	465.67	38.61	1168.48	0.399	464.96	0.7	5.622	A
4 - Existing Capdoo link street	23.37	452.40	626.24	0.037	23.34	0.0	6.567	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	70.47	498.75	943.00	0.075	70.38	0.1	4.538	A
2 - R407 Southbound arm	510.87	75.86	1233.52	0.414	510.00	0.8	5.466	A
3 - R407 Northbound arm	570.33	47.26	1164.09	0.490	569.05	1.0	6.639	A
4 - Existing Capdoo link street	28.63	553.68	581.02	0.049	28.57	0.1	7.167	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	70.47	499.84	942.45	0.075	70.46	0.1	4.541	A
2 - R407 Southbound arm	510.87	75.97	1233.46	0.414	510.86	0.8	5.479	A
3 - R407 Northbound arm	570.33	47.34	1164.05	0.490	570.30	1.0	6.669	A
4 - Existing Capdoo link street	28.63	554.89	580.48	0.049	28.63	0.1	7.174	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	57.53	409.23	988.77	0.058	57.62	0.1	4.254	A
2 - R407 Southbound arm	417.13	62.14	1240.99	0.336	417.98	0.6	4.818	A
3 - R407 Northbound arm	465.67	38.73	1168.41	0.399	466.92	0.7	5.654	A
4 - Existing Capdoo link street	23.37	454.29	625.40	0.037	23.43	0.0	6.580	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	48.18	342.44	1022.92	0.047	48.24	0.1	4.064	A
2 - R407 Southbound arm	349.32	52.02	1246.49	0.280	349.84	0.4	4.420	A
3 - R407 Northbound arm	389.98	32.42	1171.61	0.333	390.71	0.6	5.077	A
4 - Existing Capdoo link street	19.57	380.14	658.50	0.030	19.61	0.0	6.197	A

2035, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	6.59	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D8	2035	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Proposed link street		✓	74.00	100.000
2 - R407 Southbound arm		✓	497.00	100.000
3 - R407 Northbound arm		✓	558.00	100.000
4 - Existing Capdoo link street		✓	54.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	0.000	58.000	15.000	1.000
	2 - R407 Southbound arm	48.000	0.000	423.000	26.000
	3 - R407 Northbound arm	77.000	453.000	0.000	28.000
	4 - Existing Capdoo link street	0.000	7.000	47.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Proposed link street	2 - R407 Southbound arm	3 - R407 Northbound arm	4 - Existing Capdoo link street
From	1 - Proposed link street	10	10	10	10
	2 - R407 Southbound arm	10	10	10	10
	3 - R407 Northbound arm	10	10	10	10
	4 - Existing Capdoo link street	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Proposed link street	0.09	4.76	0.1	A
2 - R407 Southbound arm	0.44	5.74	0.9	A
3 - R407 Northbound arm	0.54	7.44	1.3	A
4 - Existing Capdoo link street	0.11	8.17	0.1	A

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	55.71	379.39	1004.03	0.055	55.45	0.1	4.173	A
2 - R407 Southbound arm	374.17	47.11	1249.16	0.300	372.30	0.5	4.507	A
3 - R407 Northbound arm	420.09	56.18	1159.57	0.362	417.62	0.6	5.321	A
4 - Existing Capdoo link street	40.65	432.62	635.07	0.064	40.36	0.1	6.655	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	66.52	454.99	965.38	0.069	66.46	0.1	4.405	A
2 - R407 Southbound arm	446.79	56.54	1244.03	0.359	446.22	0.6	4.960	A
3 - R407 Northbound arm	501.63	67.34	1153.91	0.435	500.76	0.8	6.056	A
4 - Existing Capdoo link street	48.54	518.73	596.62	0.081	48.46	0.1	7.224	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	81.48	556.73	913.36	0.089	81.37	0.1	4.759	A
2 - R407 Southbound arm	547.21	69.21	1237.14	0.442	546.20	0.9	5.723	A
3 - R407 Northbound arm	614.37	82.43	1146.26	0.536	612.72	1.2	7.397	A
4 - Existing Capdoo link street	59.46	634.72	544.84	0.109	59.31	0.1	8.153	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	81.48	558.18	912.62	0.089	81.47	0.1	4.764	A
2 - R407 Southbound arm	547.21	69.36	1237.06	0.442	547.19	0.9	5.739	A
3 - R407 Northbound arm	614.37	82.57	1146.19	0.536	614.33	1.3	7.445	A
4 - Existing Capdoo link street	59.46	636.35	544.11	0.109	59.45	0.1	8.170	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	66.52	457.24	964.23	0.069	66.63	0.1	4.411	A
2 - R407 Southbound arm	446.79	56.78	1243.90	0.359	447.78	0.6	4.981	A
3 - R407 Northbound arm	501.63	67.57	1153.79	0.435	503.25	0.9	6.104	A
4 - Existing Capdoo link street	48.54	521.24	595.50	0.082	48.69	0.1	7.245	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Proposed link street	55.71	382.52	1002.43	0.056	55.78	0.1	4.183	A
2 - R407 Southbound arm	374.17	47.52	1248.94	0.300	374.76	0.5	4.534	A
3 - R407 Northbound arm	420.09	56.55	1159.38	0.362	420.99	0.6	5.371	A
4 - Existing Capdoo link street	40.65	436.06	633.53	0.064	40.74	0.1	6.683	A

Appendix 12.D PICADY Output Files

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: 162074-DBFL-CA-D-0004_PICADY_DO_NOTHING.j9
Path: G:\2016\p162074\calcs\picady
Report generation date: 29/03/2019 10:51:36

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2017							
Stream B-AC	0.1	13.02	0.07	B	0.2	14.77	0.15	B
Stream C-AB	0.1	5.86	0.04	A	0.1	5.94	0.06	A
Stream C-A								
Stream A-B								
Stream A-C								
	2020							
Stream B-AC	0.1	13.26	0.08	B	0.2	15.28	0.16	C
Stream C-AB	0.1	5.83	0.04	A	0.1	5.91	0.07	A
Stream C-A								
Stream A-B								
Stream A-C								
	2025							
Stream B-AC	0.1	13.93	0.09	B	0.2	16.13	0.18	C
Stream C-AB	0.1	5.77	0.05	A	0.1	5.85	0.07	A
Stream C-A								
Stream A-B								
Stream A-C								
	2035							
Stream B-AC	0.1	14.61	0.10	B	0.3	17.65	0.21	C
Stream C-AB	0.1	5.67	0.05	A	0.2	5.79	0.08	A
Stream C-A								
Stream A-B								
Stream A-C								

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

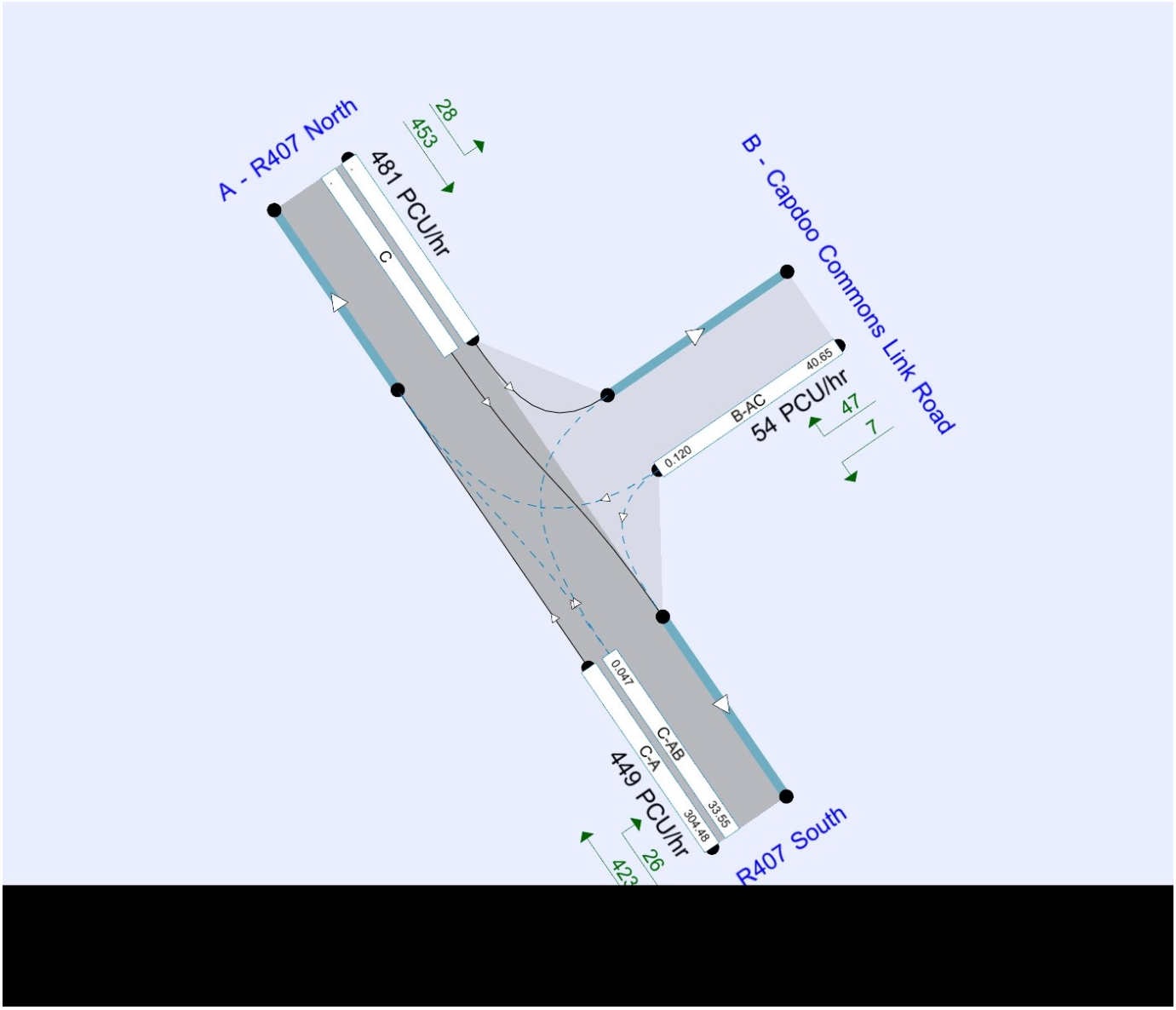
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HEADOFFICE"mcgeoughp
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2017	AM	ONE HOUR	08:00	09:30	15
2017	PM	ONE HOUR	17:00	18:30	15
2020	AM	ONE HOUR	08:00	09:30	15
2020	PM	ONE HOUR	17:00	18:30	15
2025	AM	ONE HOUR	08:00	09:30	15
2025	PM	ONE HOUR	17:00	18:30	15
2035	AM	ONE HOUR	08:00	09:30	15
2035	PM	ONE HOUR	17:00	18:30	15

2017, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	0.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R407 North		Major
B	Capdoo Commons Link Road		Minor
C	R407 South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - R407 South	6.00			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Capdoo Commons Link Road	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	439.579	0.080	0.202	0.127	0.289
1	B-C	573.963	0.088	0.222	-	-
1	C-B	573.963	0.222	0.222	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R407 North		✓	381.00	100.000
B - Capdoo Commons Link Road		✓	22.00	100.000
C - R407 South		✓	358.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	0.000	32.000	349.000
	B - Capdoo Commons Link Road	18.000	0.000	4.000
	C - R407 South	344.000	14.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To			
From		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
	A - R407 North	10	10	10
	B - Capdoo Commons Link Road	10	10	10
	C - R407 South	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.07	13.02	0.1	B
C-AB	0.04	5.86	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	16.56	370.08	0.045	16.36	0.1	11.190	B
C-AB	16.36	692.45	0.024	16.24	0.0	5.856	A
C-A	253.16			253.16			
A-B	24.09			24.09			
A-C	262.75			262.75			

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	19.78	352.58	0.056	19.72	0.1	11.895	B
C-AB	21.27	716.05	0.030	21.23	0.0	5.699	A
C-A	300.56			300.56			
A-B	28.77			28.77			
A-C	313.74			313.74			

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	24.22	328.31	0.074	24.13	0.1	13.014	B
C-AB	29.14	748.53	0.039	29.07	0.1	5.504	A
C-A	365.02			365.02			
A-B	35.23			35.23			
A-C	384.26			384.26			

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	24.22	328.30	0.074	24.22	0.1	13.022	B
C-AB	29.16	748.56	0.039	29.16	0.1	5.507	A
C-A	365.00			365.00			
A-B	35.23			35.23			
A-C	384.26			384.26			

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	19.78	352.57	0.056	19.86	0.1	11.904	B
C-AB	21.30	716.10	0.030	21.37	0.0	5.702	A
C-A	300.53			300.53			
A-B	28.77			28.77			
A-C	313.74			313.74			

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	16.56	370.04	0.045	16.62	0.1	11.208	B
C-AB	16.42	692.50	0.024	16.46	0.0	5.857	A
C-A	253.10			253.10			
A-B	24.09			24.09			
A-C	262.75			262.75			

2017, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	1.09	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2017	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R407 North		✓	392.00	100.000
B - Capdoo Commons Link Road		✓	44.00	100.000
C - R407 South		✓	366.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	0.000	23.000	369.000
	B - Capdoo Commons Link Road	38.000	0.000	6.000
	C - R407 South	345.000	21.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	10	10	10
	B - Capdoo Commons Link Road	10	10	10
	C - R407 South	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.15	14.77	0.2	B
C-AB	0.06	5.94	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33.13	360.34	0.092	32.69	0.1	12.070	B
C-AB	24.61	691.39	0.036	24.39	0.1	5.936	A
C-A	250.94			250.94			
A-B	17.32			17.32			
A-C	277.80			277.80			

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	39.56	341.95	0.116	39.43	0.1	13.084	B
C-AB	32.01	714.85	0.045	31.94	0.1	5.798	A
C-A	297.01			297.01			
A-B	20.68			20.68			
A-C	331.72			331.72			

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	48.44	316.47	0.153	48.23	0.2	14.750	B
C-AB	46.02	754.98	0.061	45.87	0.1	5.587	A
C-A	356.96			356.96			
A-B	25.32			25.32			
A-C	406.28			406.28			

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	48.44	316.44	0.153	48.44	0.2	14.775	B
C-AB	46.07	755.05	0.061	46.06	0.1	5.589	A
C-A	356.91			356.91			
A-B	25.32			25.32			
A-C	406.28			406.28			

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	39.56	341.91	0.116	39.76	0.1	13.116	B
C-AB	32.07	714.95	0.045	32.22	0.1	5.804	A
C-A	296.95			296.95			
A-B	20.68			20.68			
A-C	331.72			331.72			

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33.13	360.28	0.092	33.26	0.1	12.116	B
C-AB	24.70	691.47	0.036	24.78	0.1	5.943	A
C-A	250.84			250.84			
A-B	17.32			17.32			
A-C	277.80			277.80			

2020, AM

Data Errors and Warnings
No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	0.56	A

Junction Network Options
[same as above]

Arms

Arms
[same as above]

Major Arm Geometry
[same as above]

Minor Arm Geometry
[same as above]

Slope / Intercept / Capacity
[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2020	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R407 North		✓	396.00	100.000
B - Capdoo Commons Link Road		✓	22.00	100.000
C - R407 South		✓	373.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	0.000	33.000	363.000
	B - Capdoo Commons Link Road	18.000	0.000	4.000
	C - R407 South	358.000	15.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	10	10	10
	B - Capdoo Commons Link Road	10	10	10
	C - R407 South	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.08	13.26	0.1	B
C-AB	0.04	5.83	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	16.56	366.39	0.045	16.36	0.1	11.309	B
C-AB	17.84	697.47	0.026	17.70	0.0	5.826	A
C-A	262.98			262.98			
A-B	24.84			24.84			
A-C	273.29			273.29			

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	19.78	348.15	0.057	19.72	0.1	12.056	B
C-AB	23.26	722.04	0.032	23.21	0.0	5.666	A
C-A	312.06			312.06			
A-B	29.67			29.67			
A-C	326.33			326.33			

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	24.22	322.85	0.075	24.13	0.1	13.252	B
C-AB	32.00	755.80	0.042	31.92	0.1	5.470	A
C-A	378.68			378.68			
A-B	36.33			36.33			
A-C	399.67			399.67			

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	24.22	322.84	0.075	24.22	0.1	13.260	B
C-AB	32.02	755.83	0.042	32.02	0.1	5.473	A
C-A	378.66			378.66			
A-B	36.33			36.33			
A-C	399.67			399.67			

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	19.78	348.13	0.057	19.86	0.1	12.068	B
C-AB	23.29	722.09	0.032	23.37	0.0	5.668	A
C-A	312.03			312.03			
A-B	29.67			29.67			
A-C	326.33			326.33			

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	16.56	366.35	0.045	16.62	0.1	11.324	B
C-AB	17.90	697.52	0.026	17.95	0.0	5.829	A
C-A	262.91			262.91			
A-B	24.84			24.84			
A-C	273.29			273.29			

2020, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	1.12	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D4	2020	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R407 North		✓	409.00	100.000
B - Capdoo Commons Link Road		✓	46.00	100.000
C - R407 South		✓	381.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	0.000	24.000	385.000
	B - Capdoo Commons Link Road	40.000	0.000	6.000
	C - R407 South	359.000	22.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	10	10	10
	B - Capdoo Commons Link Road	10	10	10
	C - R407 South	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.16	15.28	0.2	C
C-AB	0.07	5.91	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34.63	355.59	0.097	34.16	0.1	12.303	B
C-AB	26.23	696.12	0.038	26.01	0.1	5.908	A
C-A	260.60			260.60			
A-B	18.07			18.07			
A-C	289.85			289.85			

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41.35	336.38	0.123	41.21	0.2	13.408	B
C-AB	34.25	720.52	0.048	34.16	0.1	5.769	A
C-A	308.27			308.27			
A-B	21.58			21.58			
A-C	346.11			346.11			

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	50.65	309.78	0.163	50.41	0.2	15.253	C
C-AB	49.62	762.72	0.065	49.45	0.1	5.554	A
C-A	369.87			369.87			
A-B	26.42			26.42			
A-C	423.89			423.89			

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	50.65	309.75	0.164	50.64	0.2	15.282	C
C-AB	49.67	762.80	0.065	49.67	0.1	5.555	A
C-A	369.81			369.81			
A-B	26.42			26.42			
A-C	423.89			423.89			

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41.35	336.34	0.123	41.58	0.2	13.446	B
C-AB	34.31	720.63	0.048	34.48	0.1	5.773	A
C-A	308.20			308.20			
A-B	21.58			21.58			
A-C	346.11			346.11			

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34.63	355.52	0.097	34.78	0.1	12.353	B
C-AB	26.34	696.22	0.038	26.42	0.1	5.913	A
C-A	260.50			260.50			
A-B	18.07			18.07			
A-C	289.85			289.85			

2025, AM

Data Errors and Warnings
No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	0.59	A

Junction Network Options
[same as above]

Arms

Arms
[same as above]

Major Arm Geometry
[same as above]

Minor Arm Geometry
[same as above]

Slope / Intercept / Capacity
[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D5	2025	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R407 North		✓	426.00	100.000
B - Capdoo Commons Link Road		✓	24.00	100.000
C - R407 South		✓	400.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	0.000	36.000	390.000
	B - Capdoo Commons Link Road	20.000	0.000	4.000
	C - R407 South	384.000	16.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	10	10	10
	B - Capdoo Commons Link Road	10	10	10
	C - R407 South	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	13.93	0.1	B
C-AB	0.05	5.77	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	18.07	357.55	0.051	17.84	0.1	11.650	B
C-AB	19.65	706.48	0.028	19.49	0.0	5.765	A
C-A	281.49			281.49			
A-B	27.10			27.10			
A-C	293.61			293.61			

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	21.58	337.91	0.064	21.51	0.1	12.512	B
C-AB	25.77	732.78	0.035	25.72	0.1	5.600	A
C-A	333.82			333.82			
A-B	32.36			32.36			
A-C	350.60			350.60			

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	26.42	310.65	0.085	26.32	0.1	13.927	B
C-AB	35.73	768.83	0.046	35.64	0.1	5.401	A
C-A	404.68			404.68			
A-B	39.64			39.64			
A-C	429.40			429.40			

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	26.42	310.63	0.085	26.42	0.1	13.932	B
C-AB	35.76	768.87	0.047	35.76	0.1	5.404	A
C-A	404.65			404.65			
A-B	39.64			39.64			
A-C	429.40			429.40			

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	21.58	337.88	0.064	21.68	0.1	12.526	B
C-AB	25.81	732.84	0.035	25.90	0.1	5.604	A
C-A	333.78			333.78			
A-B	32.36			32.36			
A-C	350.60			350.60			

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	18.07	357.50	0.051	18.14	0.1	11.672	B
C-AB	19.72	706.54	0.028	19.78	0.0	5.768	A
C-A	281.42			281.42			
A-B	27.10			27.10			
A-C	293.61			293.61			

2025, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	1.18	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D6	2025	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R407 North		✓	439.00	100.000
B - Capdoo Commons Link Road		✓	50.00	100.000
C - R407 South		✓	408.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	0.000	26.000	413.000
	B - Capdoo Commons Link Road	43.000	0.000	7.000
	C - R407 South	385.000	23.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	10	10	10
	B - Capdoo Commons Link Road	10	10	10
	C - R407 South	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.18	16.13	0.2	C
C-AB	0.07	5.85	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	37.64	349.72	0.108	37.12	0.1	12.648	B
C-AB	28.33	705.15	0.040	28.08	0.1	5.847	A
C-A	278.84			278.84			
A-B	19.57			19.57			
A-C	310.93			310.93			

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	44.95	329.13	0.137	44.79	0.2	13.916	B
C-AB	37.20	731.29	0.051	37.10	0.1	5.707	A
C-A	329.59			329.59			
A-B	23.37			23.37			
A-C	371.28			371.28			

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	55.05	300.58	0.183	54.77	0.2	16.084	C
C-AB	54.70	777.48	0.070	54.50	0.1	5.480	A
C-A	394.52			394.52			
A-B	28.63			28.63			
A-C	454.72			454.72			

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	55.05	300.55	0.183	55.04	0.2	16.128	C
C-AB	54.77	777.57	0.070	54.77	0.1	5.481	A
C-A	394.45			394.45			
A-B	28.63			28.63			
A-C	454.72			454.72			

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	44.95	329.08	0.137	45.22	0.2	13.965	B
C-AB	37.28	731.42	0.051	37.47	0.1	5.711	A
C-A	329.51			329.51			
A-B	23.37			23.37			
A-C	371.28			371.28			

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	37.64	349.65	0.108	37.81	0.1	12.705	B
C-AB	28.45	705.26	0.040	28.54	0.1	5.855	A
C-A	278.71			278.71			
A-B	19.57			19.57			
A-C	310.93			310.93			

2035, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	0.62	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D7	2035	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R407 North		✓	467.00	100.000
B - Capdoo Commons Link Road		✓	26.00	100.000
C - R407 South		✓	439.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	0.000	39.000	428.000
	B - Capdoo Commons Link Road	21.000	0.000	5.000
	C - R407 South	422.000	17.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	10	10	10
	B - Capdoo Commons Link Road	10	10	10
	C - R407 South	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	14.61	0.1	B
C-AB	0.05	5.67	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	19.57	351.09	0.056	19.32	0.1	11.928	B
C-AB	21.87	720.04	0.030	21.69	0.0	5.671	A
C-A	308.63			308.63			
A-B	29.36			29.36			
A-C	322.22			322.22			

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	23.37	329.55	0.071	23.30	0.1	12.928	B
C-AB	28.92	748.89	0.039	28.86	0.1	5.499	A
C-A	365.73			365.73			
A-B	35.06			35.06			
A-C	384.76			384.76			

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	28.63	299.59	0.096	28.50	0.1	14.602	B
C-AB	43.39	801.25	0.054	43.25	0.1	5.224	A
C-A	439.96			439.96			
A-B	42.94			42.94			
A-C	471.24			471.24			

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	28.63	299.57	0.096	28.62	0.1	14.614	B
C-AB	43.43	801.32	0.054	43.43	0.1	5.228	A
C-A	439.91			439.91			
A-B	42.94			42.94			
A-C	471.24			471.24			

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	23.37	329.52	0.071	23.49	0.1	12.944	B
C-AB	28.97	748.98	0.039	29.11	0.1	5.504	A
C-A	365.68			365.68			
A-B	35.06			35.06			
A-C	384.76			384.76			

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	19.57	351.04	0.056	19.65	0.1	11.954	B
C-AB	21.96	720.11	0.030	22.02	0.0	5.673	A
C-A	308.54			308.54			
A-B	29.36			29.36			
A-C	322.22			322.22			

2035, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	1.28	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D8	2035	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R407 North		✓	481.00	100.000
B - Capdoo Commons Link Road		✓	54.00	100.000
C - R407 South		✓	449.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	0.000	28.000	453.000
	B - Capdoo Commons Link Road	47.000	0.000	7.000
	C - R407 South	423.000	26.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - R407 North	B - Capdoo Commons Link Road	C - R407 South
From	A - R407 North	10	10	10
	B - Capdoo Commons Link Road	10	10	10
	C - R407 South	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.21	17.65	0.3	C
C-AB	0.08	5.79	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	40.65	338.00	0.120	40.06	0.1	13.271	B
C-AB	33.55	718.60	0.047	33.25	0.1	5.777	A
C-A	304.48			304.48			
A-B	21.08			21.08			
A-C	341.04			341.04			

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	48.54	315.31	0.154	48.35	0.2	14.823	B
C-AB	46.56	755.14	0.062	46.42	0.1	5.588	A
C-A	357.08			357.08			
A-B	25.17			25.17			
A-C	407.24			407.24			

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	59.46	283.85	0.209	59.10	0.3	17.592	C
C-AB	66.80	799.56	0.084	66.55	0.2	5.406	A
C-A	427.56			427.56			
A-B	30.83			30.83			
A-C	498.76			498.76			

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	59.46	283.80	0.209	59.44	0.3	17.647	C
C-AB	66.90	799.68	0.084	66.89	0.2	5.409	A
C-A	427.46			427.46			
A-B	30.83			30.83			
A-C	498.76			498.76			

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	48.54	315.24	0.154	48.88	0.2	14.887	B
C-AB	46.69	755.33	0.062	46.93	0.1	5.596	A
C-A	356.96			356.96			
A-B	25.17			25.17			
A-C	407.24			407.24			

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	40.65	337.91	0.120	40.86	0.2	13.342	B
C-AB	33.71	718.76	0.047	33.86	0.1	5.786	A
C-A	304.32			304.32			
A-B	21.08			21.08			
A-C	341.04			341.04			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

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Filename: 162074-DBFL-CA-D-0002_East PICADY.j9
Path: G:\2016\p162074\calcs\picady
Report generation date: 29/03/2019 10:35:25

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2020 DN							
Stream B-ACD	0.5	13.52	0.31	B	0.2	14.19	0.12	B
Stream A-BCD	0.1	6.44	0.04	A	0.8	4.69	0.20	A
Stream A-B								
Stream A-C								
Stream D-AB	0.2	10.82	0.13	B	0.1	7.79	0.06	A
Stream D-BC	0.1	19.52	0.08	C	0.0	17.63	0.04	C
Stream C-ABD	0.1	4.48	0.04	A	0.7	7.13	0.23	A
Stream C-D								
Stream C-A								
	2020 DS							
Stream B-ACD	0.5	13.58	0.32	B	0.1	14.08	0.12	B
Stream A-BCD	0.4	7.14	0.15	A	2.2	6.68	0.46	A
Stream A-B								
Stream A-C								
Stream D-AB	0.4	12.45	0.26	B	0.1	8.53	0.11	A
Stream D-BC	0.2	20.50	0.14	C	0.4	23.38	0.27	C
Stream C-ABD	0.1	4.60	0.04	A	0.7	7.65	0.22	A
Stream C-D								
Stream C-A								

	2025 DN							
Stream B-ACD	0.6	14.67	0.35	B	0.2	15.82	0.14	C
Stream A-BCD	0.1	6.40	0.05	A	1.1	4.63	0.24	A
Stream A-B								
Stream A-C								
Stream D-AB	0.2	11.48	0.15	B	0.1	7.98	0.06	A
Stream D-BC	0.1	21.85	0.09	C	0.1	19.45	0.05	C
Stream C-ABD	0.1	4.39	0.05	A	0.9	7.32	0.26	A
Stream C-D								
Stream C-A								
	2025 DS							
Stream B-ACD	0.6	15.22	0.36	C	0.2	16.72	0.15	C
Stream A-BCD	0.5	7.46	0.20	A	4.8	10.62	0.66	B
Stream A-B								
Stream A-C								
Stream D-AB	0.7	15.74	0.39	C	0.3	9.92	0.19	A
Stream D-BC	0.3	24.90	0.21	C	0.7	33.17	0.41	D
Stream C-ABD	0.1	4.51	0.05	A	0.9	7.91	0.27	A
Stream C-D								
Stream C-A								
	2035 DN							
Stream B-ACD	0.7	16.82	0.40	C	0.2	18.89	0.18	C
Stream A-BCD	0.1	6.35	0.06	A	1.6	4.65	0.31	A
Stream A-B								
Stream A-C								
Stream D-AB	0.2	12.75	0.17	B	0.1	8.25	0.07	A
Stream D-BC	0.1	26.31	0.12	D	0.1	22.77	0.06	C
Stream C-ABD	0.1	4.27	0.06	A	1.3	7.77	0.32	A
Stream C-D								
Stream C-A								
	2035 DS							
Stream B-ACD	0.8	17.75	0.41	C	0.3	21.23	0.20	C
Stream A-BCD	0.7	7.66	0.23	A	11.1	21.73	0.83	C
Stream A-B								
Stream A-C								
Stream D-AB	0.9	18.70	0.45	C	0.3	10.73	0.21	B
Stream D-BC	0.4	31.40	0.27	D	1.1	48.15	0.52	E
Stream C-ABD	0.1	4.39	0.06	A	1.4	8.58	0.34	A
Stream C-D								
Stream C-A								
	2017 - Existing							
Stream B-ACD	0.5	12.97	0.30	B	0.1	13.63	0.11	B
Stream A-BCD	0.1	6.45	0.04	A	0.7	4.73	0.19	A
Stream A-B								
Stream A-C								
Stream D-AB	0.2	10.48	0.12	B	0.1	7.70	0.05	A
Stream D-BC	0.1	18.35	0.07	C	0.0	16.80	0.04	C
Stream C-ABD	0.1	4.54	0.04	A	0.6	7.06	0.21	A
Stream C-D								
Stream C-A								

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

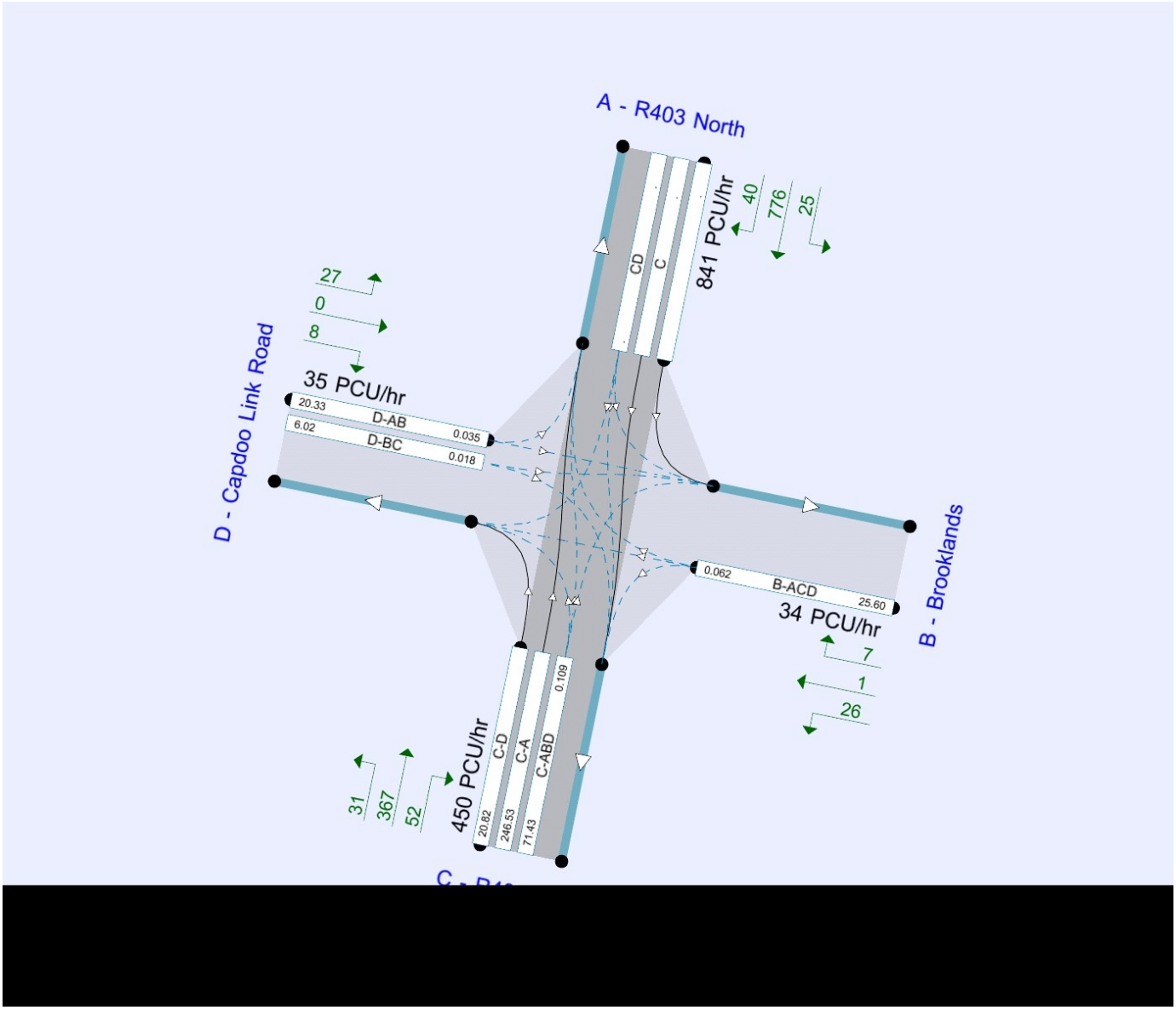
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HEADOFFICE"mcgeoughp
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
2020 DN	AM	ONE HOUR	07:30	09:00	15
2020 DN	PM	ONE HOUR	17:15	18:45	15
2020 DS	AM	ONE HOUR	07:30	09:00	15
2020 DS	PM	ONE HOUR	17:15	18:45	15
2025 DN	AM	ONE HOUR	07:30	09:00	15
2025 DN	PM	ONE HOUR	17:15	18:45	15
2025 DS	AM	ONE HOUR	07:30	09:00	15
2025 DS	PM	ONE HOUR	17:15	18:45	15
2035 DN	AM	ONE HOUR	07:30	09:00	15
2035 DN	PM	ONE HOUR	17:15	18:45	15
2035 DS	AM	ONE HOUR	07:30	09:00	15
2035 DS	PM	ONE HOUR	17:15	18:45	15
2017 - Existing	AM	ONE HOUR	07:30	09:00	15
2017 - Existing	PM	ONE HOUR	17:15	18:45	15

2020 DN, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	2.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R403 North		Major
B	Brooklands		Minor
C	R403 South		Major
D	Capdoo Link Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - R403 North	6.00			0.0	✓	0.00
C - R403 South	6.00			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Brooklands	One lane	3.00			0	0
D - Capdoo Link Road	Two lanes		3.50	3.50	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	573.963	-	-	-	-	-	-	0.222	0.318	0.222	-	-	-
1	B-A	477.852	0.087	0.220	0.220	-	-	-	0.138	0.314	-	0.220	0.220	0.110
1	B-C	623.937	0.096	0.242	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	477.852	0.087	0.220	0.220	-	-	-	0.138	0.314	0.138	-	-	-
1	B-D, offside lane	477.852	0.087	0.220	0.220	-	-	-	0.138	0.314	0.138	-	-	-
1	C-B	573.963	0.222	0.222	0.318	-	-	-	-	-	-	-	-	-
1	D-A	655.170	-	-	-	-	-	-	0.254	-	0.100	-	-	-
1	D-B, nearside lane	501.772	0.145	0.145	0.330	-	-	-	0.231	0.231	0.091	-	-	-
1	D-B, offside lane	501.772	0.145	0.145	0.330	-	-	-	0.231	0.231	0.091	-	-	-
1	D-C	501.772	-	0.145	0.330	0.116	0.231	0.231	0.231	0.231	0.091	-	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D1	2020 DN	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	351.00	100.000
B - Brooklands		✓	122.00	100.000
C - R403 South		✓	791.00	100.000
D - Capdoo Link Road		✓	65.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	5.000	334.000	12.000
	B - Brooklands	28.000	0.000	93.000	1.000
	C - R403 South	762.000	11.000	0.000	18.000
	D - Capdoo Link Road	48.000	3.000	14.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.31	13.52	0.5	B
A-BCD	0.04	6.44	0.1	A
A-B				
A-C				
D-AB	0.13	10.82	0.2	B
D-BC	0.08	19.52	0.1	C
C-ABD	0.04	4.48	0.1	A
C-D				
C-A				

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	91.85	481.40	0.191	90.82	0.3	10.113	B
A-BCD	14.75	630.13	0.023	14.62	0.0	6.434	A
A-B	3.68			3.68			
A-C	245.82			245.82			
D-AB	37.30	494.75	0.075	36.95	0.1	8.644	A
D-BC	11.63	309.42	0.038	11.46	0.0	13.284	B
C-ABD	19.27	902.61	0.021	19.16	0.0	4.482	A
C-D	13.30			13.30			
C-A	562.93			562.93			

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	109.68	459.44	0.239	109.34	0.3	11.299	B
A-BCD	19.64	643.79	0.031	19.59	0.0	6.343	A
A-B	4.36			4.36			
A-C	291.54			291.54			
D-AB	44.56	463.98	0.096	44.46	0.1	9.437	A
D-BC	13.87	271.77	0.051	13.81	0.1	15.347	C
C-ABD	26.27	958.37	0.027	26.23	0.0	4.248	A
C-D	15.80			15.80			
C-A	669.01			669.01			

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	134.32	427.12	0.314	133.71	0.5	13.464	B
A-BCD	28.03	663.66	0.042	27.94	0.1	6.229	A
A-B	5.29			5.29			
A-C	353.14			353.14			
D-AB	54.62	420.70	0.130	54.43	0.2	10.806	B
D-BC	16.95	219.92	0.077	16.82	0.1	19.486	C
C-ABD	45.80	1075.82	0.043	45.68	0.1	3.844	A
C-D	19.04			19.04			
C-A	806.07			806.07			

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	134.32	427.06	0.315	134.30	0.5	13.524	B
A-BCD	28.06	663.68	0.042	28.06	0.1	6.233	A
A-B	5.29			5.29			
A-C	353.11			353.11			
D-AB	54.62	420.59	0.130	54.62	0.2	10.819	B
D-BC	16.95	219.76	0.077	16.94	0.1	19.524	C
C-ABD	45.84	1075.87	0.043	45.83	0.1	3.844	A
C-D	19.04			19.04			
C-A	806.03			806.03			

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	109.68	459.35	0.239	110.27	0.4	11.365	B
A-BCD	19.68	643.83	0.031	19.77	0.0	6.348	A
A-B	4.36			4.36			
A-C	291.50			291.50			
D-AB	44.56	463.85	0.096	44.74	0.1	9.454	A
D-BC	13.87	271.52	0.051	13.99	0.1	15.383	C
C-ABD	26.31	958.42	0.027	26.43	0.0	4.249	A
C-D	15.80			15.80			
C-A	668.98			668.98			

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	91.85	481.29	0.191	92.20	0.3	10.188	B
A-BCD	14.81	630.16	0.024	14.86	0.0	6.436	A
A-B	3.68			3.68			
A-C	245.76			245.76			
D-AB	37.31	494.62	0.075	37.42	0.1	8.664	A
D-BC	11.63	309.07	0.038	11.70	0.0	13.321	B
C-ABD	19.35	902.63	0.021	19.39	0.0	4.485	A
C-D	13.30			13.30			
C-A	562.86			562.86			

2020 DN, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	1.78	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D2	2020 DN	PM	ONE HOUR	17:15	18:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	877.00	100.000
B - Brooklands		✓	35.00	100.000
C - R403 South		✓	469.00	100.000
D - Capdoo Link Road		✓	36.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	26.000	809.000	42.000
	B - Brooklands	7.000	0.000	27.000	1.000
	C - R403 South	383.000	54.000	0.000	32.000
	D - Capdoo Link Road	28.000	0.000	8.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.12	14.19	0.2	B
A-BCD	0.20	4.69	0.8	A
A-B				
A-C				
D-AB	0.06	7.79	0.1	A
D-BC	0.04	17.63	0.0	C
C-ABD	0.23	7.13	0.7	A
C-D				
C-A				

Main Results for each time segment

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	26.35	408.43	0.065	26.05	0.1	10.356	B
A-BCD	88.55	935.67	0.095	87.71	0.2	4.670	A
A-B	17.80			17.80			
A-C	553.90			553.90			
D-AB	21.08	576.82	0.037	20.91	0.0	7.121	A
D-BC	6.02	319.15	0.019	5.94	0.0	12.641	B
C-ABD	76.37	661.90	0.115	75.27	0.3	6.751	A
C-D	21.34			21.34			
C-A	255.38			255.38			

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	31.46	371.67	0.085	31.36	0.1	11.632	B
A-BCD	135.31	1018.22	0.133	134.70	0.4	4.488	A
A-B	20.34			20.34			
A-C	632.76			632.76			
D-AB	25.17	561.13	0.045	25.13	0.1	7.387	A
D-BC	7.19	283.21	0.025	7.16	0.0	14.342	B
C-ABD	105.84	684.40	0.155	105.29	0.4	6.853	A
C-D	24.35			24.35			
C-A	291.43			291.43			

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	38.54	318.11	0.121	38.34	0.1	14.144	B
A-BCD	229.13	1129.80	0.203	227.51	0.8	4.401	A
A-B	22.93			22.93			
A-C	713.53			713.53			
D-AB	30.83	539.18	0.057	30.77	0.1	7.788	A
D-BC	8.81	233.95	0.038	8.75	0.0	17.579	C
C-ABD	162.60	720.98	0.226	161.36	0.7	7.100	A
C-D	27.28			27.28			
C-A	326.50			326.50			

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	38.54	317.55	0.121	38.53	0.2	14.191	B
A-BCD	230.33	1130.61	0.204	230.27	0.8	4.418	A
A-B	22.89			22.89			
A-C	712.37			712.37			
D-AB	30.83	538.91	0.057	30.83	0.1	7.793	A
D-BC	8.81	233.36	0.038	8.81	0.0	17.634	C
C-ABD	163.29	721.43	0.226	163.24	0.7	7.134	A
C-D	27.23			27.23			
C-A	325.86			325.86			

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	31.46	370.94	0.085	31.65	0.1	11.677	B
A-BCD	136.39	1019.29	0.134	138.01	0.4	4.509	A
A-B	20.30			20.30			
A-C	631.71			631.71			
D-AB	25.17	560.75	0.045	25.23	0.1	7.397	A
D-BC	7.19	282.35	0.025	7.25	0.0	14.399	B
C-ABD	106.54	685.00	0.156	107.74	0.4	6.897	A
C-D	24.30			24.30			
C-A	290.79			290.79			

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	26.35	407.90	0.065	26.46	0.1	10.385	B
A-BCD	89.39	936.08	0.096	90.04	0.2	4.690	A
A-B	17.78			17.78			
A-C	553.08			553.08			
D-AB	21.08	576.53	0.037	21.12	0.0	7.129	A
D-BC	6.02	318.37	0.019	6.05	0.0	12.682	B
C-ABD	77.12	662.31	0.116	77.71	0.3	6.795	A
C-D	21.28			21.28			
C-A	254.69			254.69			

2020 DS, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	3.15	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D3	2020 DS	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	353.00	100.000
B - Brooklands		✓	122.00	100.000
C - R403 South		✓	742.00	100.000
D - Capdoo Link Road		✓	132.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	5.000	304.000	44.000
	B - Brooklands	28.000	0.000	93.000	1.000
	C - R403 South	711.000	11.000	0.000	20.000
	D - Capdoo Link Road	102.000	3.000	27.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.32	13.58	0.5	B
A-BCD	0.15	7.14	0.4	A
A-B				
A-C				
D-AB	0.26	12.45	0.4	B
D-BC	0.14	20.50	0.2	C
C-ABD	0.04	4.60	0.1	A
C-D				
C-A				

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	91.85	481.98	0.191	90.83	0.3	10.098	B
A-BCD	51.74	621.01	0.083	51.06	0.2	6.947	A
A-B	3.46			3.46			
A-C	210.55			210.55			
D-AB	77.99	504.50	0.155	77.20	0.2	9.251	A
D-BC	21.38	312.71	0.068	21.06	0.1	13.565	B
C-ABD	18.58	879.28	0.021	18.47	0.0	4.600	A
C-D	14.78			14.78			
C-A	525.26			525.26			

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	109.68	459.49	0.239	109.34	0.3	11.297	B
A-BCD	70.16	636.43	0.110	69.86	0.2	6.995	A
A-B	4.00			4.00			
A-C	243.18			243.18			
D-AB	93.17	474.68	0.196	92.90	0.3	10.364	B
D-BC	25.50	275.57	0.093	25.38	0.1	15.820	C
C-ABD	25.27	932.05	0.027	25.23	0.0	4.366	A
C-D	17.56			17.56			
C-A	624.22			624.22			

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	134.32	426.11	0.315	133.70	0.5	13.512	B
A-BCD	100.11	656.26	0.153	99.54	0.4	7.124	A
A-B	4.67			4.67			
A-C	283.88			283.88			
D-AB	114.18	432.47	0.264	113.69	0.4	12.383	B
D-BC	31.16	224.58	0.139	30.91	0.2	20.420	C
C-ABD	43.19	1041.41	0.041	43.08	0.1	3.966	A
C-D	21.17			21.17			
C-A	752.59			752.59			

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	134.32	425.89	0.315	134.30	0.5	13.578	B
A-BCD	100.33	656.52	0.153	100.31	0.4	7.138	A
A-B	4.67			4.67			
A-C	283.66			283.66			
D-AB	114.18	432.29	0.264	114.17	0.4	12.448	B
D-BC	31.15	224.31	0.139	31.15	0.2	20.499	C
C-ABD	43.24	1041.39	0.042	43.24	0.1	3.967	A
C-D	21.17			21.17			
C-A	752.55			752.55			

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	109.68	459.17	0.239	110.28	0.4	11.369	B
A-BCD	70.42	636.83	0.111	70.97	0.3	7.015	A
A-B	4.00			4.00			
A-C	242.92			242.92			
D-AB	93.17	474.45	0.196	93.64	0.3	10.411	B
D-BC	25.50	275.15	0.093	25.74	0.1	15.892	C
C-ABD	25.31	931.96	0.027	25.42	0.0	4.368	A
C-D	17.56			17.56			
C-A	624.17			624.17			

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	91.85	481.63	0.191	92.20	0.3	10.177	B
A-BCD	52.07	621.30	0.084	52.39	0.2	6.971	A
A-B	3.46			3.46			
A-C	210.23			210.23			
D-AB	78.00	504.26	0.155	78.27	0.2	9.301	A
D-BC	21.38	312.14	0.069	21.51	0.1	13.630	B
C-ABD	18.66	879.13	0.021	18.70	0.0	4.602	A
C-D	14.77			14.77			
C-A	525.18			525.18			

2020 DS, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	3.89	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D4	2020 DS	PM	ONE HOUR	17:15	18:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	885.00	100.000
B - Brooklands		✓	35.00	100.000
C - R403 South		✓	419.00	100.000
D - Capdoo Link Road		✓	109.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	26.000	759.000	100.000
	B - Brooklands	7.000	0.000	27.000	1.000
	C - R403 South	326.000	54.000	0.000	39.000
	D - Capdoo Link Road	51.000	0.000	58.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.12	14.08	0.1	B
A-BCD	0.46	6.68	2.2	A
A-B				
A-C				
D-AB	0.11	8.53	0.1	A
D-BC	0.27	23.38	0.4	C
C-ABD	0.22	7.65	0.7	A
C-D				
C-A				

Main Results for each time segment

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	26.35	412.33	0.064	26.05	0.1	10.245	B
A-BCD	204.63	923.44	0.222	201.95	0.7	5.491	A
A-B	15.29			15.29			
A-C	446.36			446.36			
D-AB	38.40	569.77	0.067	38.08	0.1	7.442	A
D-BC	43.67	319.64	0.137	42.98	0.2	14.281	B
C-ABD	71.82	628.87	0.114	70.79	0.3	7.094	A
C-D	26.03			26.03			
C-A	217.60			217.60			

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	31.46	375.31	0.084	31.36	0.1	11.509	B
A-BCD	303.83	999.01	0.304	302.21	1.1	5.710	A
A-B	16.29			16.29			
A-C	475.48			475.48			
D-AB	45.85	550.26	0.083	45.77	0.1	7.848	A
D-BC	52.14	283.43	0.184	51.85	0.2	17.076	C
C-ABD	98.59	644.28	0.153	98.08	0.4	7.261	A
C-D	29.71			29.71			
C-A	248.37			248.37			

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	38.54	320.98	0.120	38.34	0.1	14.000	B
A-BCD	501.08	1104.22	0.454	496.83	2.1	6.581	A
A-B	15.68			15.68			
A-C	457.64			457.64			
D-AB	56.15	520.82	0.108	56.02	0.1	8.518	A
D-BC	63.86	234.14	0.273	63.23	0.4	23.085	C
C-ABD	147.31	668.19	0.220	146.20	0.7	7.610	A
C-D	33.55			33.55			
C-A	280.46			280.46			

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	38.54	319.70	0.121	38.53	0.1	14.083	B
A-BCD	504.80	1106.67	0.456	504.58	2.2	6.683	A
A-B	15.55			15.55			
A-C	454.05			454.05			
D-AB	56.15	520.11	0.108	56.15	0.1	8.535	A
D-BC	63.86	233.14	0.274	63.83	0.4	23.376	C
C-ABD	148.07	668.04	0.222	148.02	0.7	7.655	A
C-D	33.47			33.47			
C-A	279.79			279.79			

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	31.46	373.64	0.084	31.65	0.1	11.587	B
A-BCD	307.11	1002.41	0.306	311.30	1.1	5.809	A
A-B	16.18			16.18			
A-C	472.31			472.31			
D-AB	45.85	549.37	0.083	45.97	0.1	7.868	A
D-BC	52.14	281.96	0.185	52.75	0.3	17.322	C
C-ABD	99.33	644.01	0.154	100.41	0.4	7.319	A
C-D	29.63			29.63			
C-A	247.71			247.71			

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	26.35	411.11	0.064	26.46	0.1	10.299	B
A-BCD	207.34	925.40	0.224	209.09	0.7	5.566	A
A-B	15.20			15.20			
A-C	443.73			443.73			
D-AB	38.40	569.02	0.067	38.48	0.1	7.464	A
D-BC	43.67	318.29	0.137	43.97	0.2	14.451	B
C-ABD	72.53	628.53	0.115	73.09	0.3	7.151	A
C-D	25.95			25.95			
C-A	216.96			216.96			

2025 DN, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	2.26	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D5	2025 DN	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	377.00	100.000
B - Brooklands		✓	130.00	100.000
C - R403 South		✓	848.00	100.000
D - Capdoo Link Road		✓	70.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	6.000	358.000	13.000
	B - Brooklands	30.000	0.000	99.000	1.000
	C - R403 South	817.000	12.000	0.000	19.000
	D - Capdoo Link Road	52.000	3.000	15.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.35	14.67	0.6	B
A-BCD	0.05	6.40	0.1	A
A-B				
A-C				
D-AB	0.15	11.48	0.2	B
D-BC	0.09	21.85	0.1	C
C-ABD	0.05	4.39	0.1	A
C-D				
C-A				

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	97.87	473.06	0.207	96.74	0.3	10.492	B
A-BCD	16.62	635.42	0.026	16.48	0.0	6.398	A
A-B	4.40			4.40			
A-C	262.80			262.80			
D-AB	40.32	484.10	0.083	39.93	0.1	8.907	A
D-BC	12.38	295.50	0.042	12.19	0.0	13.969	B
C-ABD	22.08	923.53	0.024	21.95	0.0	4.392	A
C-D	14.01			14.01			
C-A	602.33			602.33			

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	116.87	448.96	0.260	116.48	0.4	11.895	B
A-BCD	22.35	650.40	0.034	22.29	0.1	6.304	A
A-B	5.22			5.22			
A-C	311.35			311.35			
D-AB	48.17	450.99	0.107	48.04	0.1	9.824	A
D-BC	14.76	255.11	0.058	14.68	0.1	16.466	C
C-ABD	30.28	981.77	0.031	30.23	0.0	4.161	A
C-D	16.64			16.64			
C-A	715.42			715.42			

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	143.13	413.14	0.346	142.38	0.6	14.582	B
A-BCD	32.35	672.14	0.048	32.24	0.1	6.188	A
A-B	6.31			6.31			
A-C	376.42			376.42			
D-AB	59.04	404.18	0.146	58.82	0.2	11.459	B
D-BC	18.03	199.48	0.090	17.87	0.1	21.785	C
C-ABD	54.23	1107.85	0.049	54.08	0.1	3.757	A
C-D	19.99			19.99			
C-A	859.45			859.45			

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	143.13	413.05	0.347	143.11	0.6	14.668	B
A-BCD	32.40	672.17	0.048	32.39	0.1	6.190	A
A-B	6.31			6.31			
A-C	376.38			376.38			
D-AB	59.05	404.04	0.146	59.04	0.2	11.477	B
D-BC	18.03	199.27	0.090	18.02	0.1	21.845	C
C-ABD	54.28	1107.91	0.049	54.28	0.1	3.761	A
C-D	19.99			19.99			
C-A	859.40			859.40			

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	116.87	448.85	0.260	117.60	0.4	11.982	B
A-BCD	22.40	650.45	0.034	22.51	0.1	6.310	A
A-B	5.22			5.22			
A-C	311.30			311.30			
D-AB	48.17	450.82	0.107	48.38	0.1	9.844	A
D-BC	14.76	254.80	0.058	14.92	0.1	16.519	C
C-ABD	30.32	981.84	0.031	30.47	0.0	4.164	A
C-D	16.64			16.64			
C-A	715.37			715.37			

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	97.87	472.93	0.207	98.28	0.3	10.583	B
A-BCD	16.70	635.45	0.026	16.76	0.0	6.403	A
A-B	4.40			4.40			
A-C	262.72			262.72			
D-AB	40.32	483.94	0.083	40.45	0.1	8.933	A
D-BC	12.38	295.11	0.042	12.46	0.0	14.016	B
C-ABD	22.18	923.56	0.024	22.23	0.0	4.393	A
C-D	14.01			14.01			
C-A	602.24			602.24			

2025 DN, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	1.97	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D6	2025 DN	PM	ONE HOUR	17:15	18:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	940.00	100.000
B - Brooklands		✓	38.00	100.000
C - R403 South		✓	504.00	100.000
D - Capdoo Link Road		✓	39.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	28.000	867.000	45.000
	B - Brooklands	8.000	0.000	29.000	1.000
	C - R403 South	411.000	58.000	0.000	35.000
	D - Capdoo Link Road	30.000	0.000	9.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.14	15.82	0.2	C
A-BCD	0.24	4.63	1.1	A
A-B				
A-C				
D-AB	0.06	7.98	0.1	A
D-BC	0.05	19.45	0.1	C
C-ABD	0.26	7.32	0.9	A
C-D				
C-A				

Main Results for each time segment

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	28.61	392.92	0.073	28.27	0.1	10.850	B
A-BCD	101.58	961.04	0.106	100.58	0.2	4.601	A
A-B	18.96			18.96			
A-C	587.14			587.14			
D-AB	22.59	570.80	0.040	22.41	0.0	7.219	A
D-BC	6.78	305.85	0.022	6.68	0.0	13.232	B
C-ABD	86.53	670.65	0.129	85.24	0.3	6.765	A
C-D	22.99			22.99			
C-A	269.93			269.93			

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	34.16	352.62	0.097	34.04	0.1	12.420	B
A-BCD	158.62	1050.39	0.151	157.81	0.5	4.444	A
A-B	21.47			21.47			
A-C	664.95			664.95			
D-AB	26.97	553.79	0.049	26.93	0.1	7.515	A
D-BC	8.09	267.26	0.030	8.05	0.0	15.275	C
C-ABD	121.61	695.57	0.175	120.92	0.5	6.906	A
C-D	26.01			26.01			
C-A	305.46			305.46			

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	41.84	292.99	0.143	41.59	0.2	15.736	C
A-BCD	284.96	1178.09	0.242	282.44	1.1	4.437	A
A-B	23.46			23.46			
A-C	726.53			726.53			
D-AB	33.03	529.88	0.062	32.96	0.1	7.968	A
D-BC	9.91	214.36	0.046	9.84	0.1	19.355	C
C-ABD	191.50	736.60	0.260	189.85	0.9	7.277	A
C-D	28.52			28.52			
C-A	334.90			334.90			

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	41.84	292.11	0.143	41.83	0.2	15.821	C
A-BCD	287.07	1179.46	0.243	286.96	1.1	4.467	A
A-B	23.40			23.40			
A-C	724.49			724.49			
D-AB	33.03	529.50	0.062	33.03	0.1	7.976	A
D-BC	9.91	213.53	0.046	9.91	0.1	19.447	C
C-ABD	192.54	737.20	0.261	192.47	0.9	7.324	A
C-D	28.44			28.44			
C-A	333.93			333.93			

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	34.16	351.53	0.097	34.41	0.1	12.498	B
A-BCD	160.27	1052.07	0.152	162.80	0.5	4.476	A
A-B	21.42			21.42			
A-C	663.34			663.34			
D-AB	26.97	553.27	0.049	27.03	0.1	7.528	A
D-BC	8.09	266.07	0.030	8.16	0.0	15.357	C
C-ABD	122.60	696.34	0.176	124.20	0.5	6.969	A
C-D	25.94			25.94			
C-A	304.55			304.55			

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	28.61	392.26	0.073	28.74	0.1	10.896	B
A-BCD	102.67	961.61	0.107	103.54	0.3	4.626	A
A-B	18.93			18.93			
A-C	586.08			586.08			
D-AB	22.59	570.43	0.040	22.63	0.0	7.231	A
D-BC	6.78	304.92	0.022	6.81	0.0	13.284	B
C-ABD	87.48	671.18	0.130	88.23	0.3	6.816	A
C-D	22.91			22.91			
C-A	269.04			269.04			

2025 DS, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	4.11	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D7	2025 DS	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	386.00	100.000
B - Brooklands		✓	130.00	100.000
C - R403 South		✓	800.00	100.000
D - Capdoo Link Road		✓	183.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	6.000	326.000	54.000
	B - Brooklands	30.000	0.000	99.000	1.000
	C - R403 South	762.000	12.000	0.000	26.000
	D - Capdoo Link Road	143.000	3.000	37.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.36	15.22	0.6	C
A-BCD	0.20	7.46	0.5	A
A-B				
A-C				
D-AB	0.39	15.74	0.7	C
D-BC	0.21	24.90	0.3	C
C-ABD	0.05	4.51	0.1	A
C-D				
C-A				

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	97.87	469.55	0.208	96.73	0.3	10.591	B
A-BCD	67.30	627.69	0.107	66.39	0.2	7.054	A
A-B	4.04			4.04			
A-C	219.27			219.27			
D-AB	108.89	491.84	0.221	107.66	0.3	10.275	B
D-BC	28.88	296.94	0.097	28.41	0.1	14.722	B
C-ABD	21.38	899.90	0.024	21.26	0.0	4.507	A
C-D	19.17			19.17			
C-A	561.73			561.73			

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	116.87	443.33	0.264	116.46	0.4	12.098	B
A-BCD	90.54	642.35	0.141	90.13	0.3	7.182	A
A-B	4.63			4.63			
A-C	251.83			251.83			
D-AB	130.08	458.79	0.284	129.60	0.4	12.011	B
D-BC	34.43	256.65	0.134	34.23	0.2	17.787	C
C-ABD	29.29	955.26	0.031	29.24	0.0	4.276	A
C-D	22.76			22.76			
C-A	667.13			667.13			

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	143.13	403.57	0.355	142.32	0.6	15.108	C
A-BCD	131.21	664.34	0.198	130.39	0.5	7.433	A
A-B	5.31			5.31			
A-C	288.47			288.47			
D-AB	159.44	411.29	0.388	158.44	0.7	15.596	C
D-BC	42.05	201.38	0.209	41.59	0.3	24.710	C
C-ABD	51.56	1073.70	0.048	51.42	0.1	3.873	A
C-D	27.36			27.36			
C-A	801.90			801.90			

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	143.13	403.16	0.355	143.10	0.6	15.222	C
A-BCD	131.56	664.75	0.198	131.53	0.5	7.457	A
A-B	5.30			5.30			
A-C	288.13			288.13			
D-AB	159.44	410.96	0.388	159.40	0.7	15.737	C
D-BC	42.04	201.01	0.209	42.02	0.3	24.900	C
C-ABD	51.62	1073.65	0.048	51.62	0.1	3.875	A
C-D	27.36			27.36			
C-A	801.84			801.84			

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	116.87	442.78	0.264	117.65	0.4	12.210	B
A-BCD	90.94	642.94	0.141	91.74	0.3	7.210	A
A-B	4.63			4.63			
A-C	251.44			251.44			
D-AB	130.08	458.37	0.284	131.06	0.4	12.133	B
D-BC	34.43	256.09	0.134	34.87	0.2	17.937	C
C-ABD	29.34	955.14	0.031	29.48	0.0	4.278	A
C-D	22.76			22.76			
C-A	667.08			667.08			

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	97.87	469.03	0.209	98.30	0.3	10.693	B
A-BCD	67.79	628.13	0.108	68.22	0.2	7.089	A
A-B	4.03			4.03			
A-C	218.79			218.79			
D-AB	108.90	491.47	0.222	109.40	0.3	10.379	B
D-BC	28.88	296.24	0.097	29.09	0.1	14.833	B
C-ABD	21.49	899.70	0.024	21.53	0.0	4.511	A
C-D	19.16			19.16			
C-A	561.63			561.63			

2025 DS, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	6.60	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D8	2025 DS	PM	ONE HOUR	17:15	18:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	972.00	100.000
B - Brooklands		✓	38.00	100.000
C - R403 South		✓	469.00	100.000
D - Capdoo Link Road		✓	159.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	28.000	814.000	130.000
	B - Brooklands	8.000	0.000	29.000	1.000
	C - R403 South	350.000	58.000	0.000	61.000
	D - Capdoo Link Road	84.000	0.000	75.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.15	16.72	0.2	C
A-BCD	0.66	10.62	4.8	B
A-B				
A-C				
D-AB	0.19	9.92	0.3	A
D-BC	0.41	33.17	0.7	D
C-ABD	0.27	7.91	0.9	A
C-D				
C-A				

Main Results for each time segment

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	28.61	391.38	0.073	28.27	0.1	10.896	B
A-BCD	286.90	947.55	0.303	282.90	1.0	5.960	A
A-B	14.79			14.79			
A-C	430.08			430.08			
D-AB	63.24	556.15	0.114	62.68	0.1	8.016	A
D-BC	56.46	299.35	0.189	55.46	0.3	16.175	C
C-ABD	83.70	641.22	0.131	82.44	0.3	7.088	A
C-D	39.98			39.98			
C-A	229.40			229.40			

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	34.16	348.17	0.098	34.03	0.1	12.600	B
A-BCD	435.12	1029.72	0.423	432.11	1.8	6.678	A
A-B	14.59			14.59			
A-C	424.10			424.10			
D-AB	75.51	532.01	0.142	75.35	0.2	8.669	A
D-BC	67.42	258.89	0.260	66.92	0.4	20.572	C
C-ABD	117.56	659.98	0.178	116.86	0.5	7.310	A
C-D	45.13			45.13			
C-A	258.93			258.93			

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	41.84	282.16	0.148	41.56	0.2	16.433	C
A-BCD	749.52	1146.97	0.653	738.35	4.5	9.902	A
A-B	10.66			10.66			
A-C	310.00			310.00			
D-AB	92.49	493.60	0.187	92.20	0.3	9.858	A
D-BC	82.58	203.87	0.405	81.25	0.7	31.954	D
C-ABD	184.96	692.29	0.267	183.25	0.9	7.817	A
C-D	49.19			49.19			
C-A	282.23			282.23			

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	41.84	278.64	0.150	41.82	0.2	16.719	C
A-BCD	762.91	1153.70	0.661	761.78	4.8	10.620	B
A-B	10.22			10.22			
A-C	297.06			297.06			
D-AB	92.49	491.78	0.188	92.48	0.3	9.917	A
D-BC	82.58	201.57	0.410	82.46	0.7	33.171	D
C-ABD	186.82	691.38	0.270	186.71	0.9	7.910	A
C-D	48.91			48.91			
C-A	280.64			280.64			

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	34.16	343.97	0.099	34.44	0.1	12.804	B
A-BCD	445.12	1038.56	0.429	456.76	1.9	7.044	A
A-B	14.26			14.26			
A-C	414.43			414.43			
D-AB	75.51	530.05	0.142	75.79	0.2	8.722	A
D-BC	67.42	255.68	0.264	68.75	0.4	21.327	C
C-ABD	119.09	658.57	0.181	120.76	0.5	7.418	A
C-D	44.90			44.90			
C-A	257.63			257.63			

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	28.61	389.29	0.073	28.75	0.1	10.989	B
A-BCD	291.76	951.11	0.307	295.16	1.1	6.111	A
A-B	14.63			14.63			
A-C	425.38			425.38			
D-AB	63.24	554.90	0.114	63.41	0.1	8.061	A
D-BC	56.46	297.32	0.190	57.03	0.3	16.518	C
C-ABD	84.78	640.56	0.132	85.56	0.3	7.160	A
C-D	39.82			39.82			
C-A	228.49			228.49			

2035 DN, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	2.58	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D9	2035 DN	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	413.00	100.000
B - Brooklands		✓	143.00	100.000
C - R403 South		✓	931.00	100.000
D - Capdoo Link Road		✓	77.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	6.000	393.000	14.000
	B - Brooklands	33.000	0.000	109.000	1.000
	C - R403 South	897.000	13.000	0.000	21.000
	D - Capdoo Link Road	57.000	4.000	16.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.40	16.82	0.7	C
A-BCD	0.06	6.35	0.1	A
A-B				
A-C				
D-AB	0.17	12.75	0.2	B
D-BC	0.12	26.31	0.1	D
C-ABD	0.06	4.27	0.1	A
C-D				
C-A				

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	107.66	461.40	0.233	106.34	0.3	11.112	B
A-BCD	18.94	642.55	0.029	18.78	0.0	6.346	A
A-B	4.39			4.39			
A-C	287.59			287.59			
D-AB	44.48	465.81	0.096	44.03	0.1	9.378	A
D-BC	13.49	275.72	0.049	13.26	0.1	15.076	C
C-ABD	25.64	953.58	0.027	25.49	0.0	4.267	A
C-D	15.45			15.45			
C-A	659.82			659.82			

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	128.55	434.09	0.296	128.06	0.5	12.917	B
A-BCD	25.83	659.35	0.039	25.76	0.1	6.250	A
A-B	5.19			5.19			
A-C	340.25			340.25			
D-AB	53.15	428.92	0.124	53.00	0.2	10.529	B
D-BC	16.07	231.41	0.069	15.97	0.1	18.372	C
C-ABD	42.24	1057.96	0.040	42.14	0.1	3.898	A
C-D	18.18			18.18			
C-A	776.53			776.53			

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	157.45	392.79	0.401	156.40	0.7	16.676	C
A-BCD	40.77	695.97	0.059	40.60	0.1	6.043	A
A-B	6.22			6.22			
A-C	407.72			407.72			
D-AB	65.20	376.03	0.173	64.90	0.2	12.716	B
D-BC	19.58	170.30	0.115	19.35	0.1	26.194	D
C-ABD	65.97	1153.18	0.057	65.82	0.1	3.641	A
C-D	21.94			21.94			
C-A	937.14			937.14			

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	157.45	392.66	0.401	157.40	0.7	16.823	C
A-BCD	40.84	696.05	0.059	40.84	0.1	6.048	A
A-B	6.22			6.22			
A-C	407.66			407.66			
D-AB	65.20	375.82	0.173	65.19	0.2	12.747	B
D-BC	19.58	170.03	0.115	19.57	0.1	26.315	D
C-ABD	66.05	1153.23	0.057	66.04	0.1	3.642	A
C-D	21.94			21.94			
C-A	937.07			937.07			

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	128.55	433.92	0.296	129.57	0.5	13.053	B
A-BCD	25.90	659.43	0.039	26.07	0.1	6.256	A
A-B	5.19			5.19			
A-C	340.18			340.18			
D-AB	53.16	428.66	0.124	53.44	0.2	10.561	B
D-BC	16.06	231.00	0.070	16.29	0.1	18.463	C
C-ABD	42.33	1058.05	0.040	42.48	0.1	3.901	A
C-D	18.18			18.18			
C-A	776.45			776.45			

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	107.66	461.24	0.233	108.19	0.3	11.235	B
A-BCD	19.04	642.59	0.030	19.12	0.0	6.354	A
A-B	4.39			4.39			
A-C	287.50			287.50			
D-AB	44.49	465.59	0.096	44.65	0.1	9.410	A
D-BC	13.48	275.25	0.049	13.59	0.1	15.141	C
C-ABD	25.75	953.64	0.027	25.85	0.0	4.268	A
C-D	15.44			15.44			
C-A	659.71			659.71			

2035 DN, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	2.34	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D10	2035 DN	PM	ONE HOUR	17:15	18:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	1032.00	100.000
B - Brooklands		✓	42.00	100.000
C - R403 South		✓	553.00	100.000
D - Capdoo Link Road		✓	43.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	31.000	952.000	49.000
	B - Brooklands	9.000	0.000	32.000	1.000
	C - R403 South	451.000	64.000	0.000	38.000
	D - Capdoo Link Road	33.000	0.000	10.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.18	18.89	0.2	C
A-BCD	0.31	4.65	1.6	A
A-B				
A-C				
D-AB	0.07	8.25	0.1	A
D-BC	0.06	22.77	0.1	C
C-ABD	0.32	7.77	1.3	A
C-D				
C-A				

Main Results for each time segment

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	31.62	372.64	0.085	31.22	0.1	11.586	B
A-BCD	129.11	1011.55	0.128	127.75	0.3	4.481	A
A-B	20.43			20.43			
A-C	627.40			627.40			
D-AB	24.84	562.39	0.044	24.64	0.1	7.362	A
D-BC	7.53	286.74	0.026	7.41	0.0	14.170	B
C-ABD	103.07	682.52	0.151	101.47	0.4	6.817	A
C-D	24.34			24.34			
C-A	288.91			288.91			

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	37.76	326.95	0.115	37.59	0.1	13.679	B
A-BCD	204.92	1107.55	0.185	203.68	0.7	4.390	A
A-B	22.80			22.80			
A-C	700.03			700.03			
D-AB	29.67	543.50	0.055	29.62	0.1	7.705	A
D-BC	8.99	244.30	0.037	8.94	0.0	16.822	C
C-ABD	147.92	710.81	0.208	146.95	0.6	7.045	A
C-D	27.14			27.14			
C-A	322.08			322.08			

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	46.24	257.25	0.180	45.87	0.2	18.700	C
A-BCD	383.65	1246.17	0.308	379.94	1.6	4.597	A
A-B	23.73			23.73			
A-C	728.87			728.87			
D-AB	36.33	516.67	0.070	36.26	0.1	8.242	A
D-BC	11.01	186.13	0.059	10.91	0.1	22.585	C
C-ABD	241.87	758.29	0.319	239.35	1.3	7.683	A
C-D	28.52			28.52			
C-A	338.47			338.47			

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	46.24	255.82	0.181	46.23	0.2	18.891	C
A-BCD	387.38	1248.30	0.310	387.23	1.6	4.647	A
A-B	23.62			23.62			
A-C	725.25			725.25			
D-AB	36.33	516.05	0.070	36.33	0.1	8.254	A
D-BC	11.01	184.91	0.060	11.01	0.1	22.771	C
C-ABD	243.75	759.33	0.321	243.61	1.3	7.770	A
C-D	28.37			28.37			
C-A	336.74			336.74			

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	37.76	325.26	0.116	38.13	0.1	13.810	B
A-BCD	207.73	1110.27	0.187	211.41	0.7	4.440	A
A-B	22.71			22.71			
A-C	697.31			697.31			
D-AB	29.67	542.69	0.055	29.74	0.1	7.720	A
D-BC	8.99	242.56	0.037	9.09	0.0	16.970	C
C-ABD	149.54	712.10	0.210	152.02	0.7	7.142	A
C-D	27.01			27.01			
C-A	320.58			320.58			

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	31.62	371.68	0.085	31.79	0.1	11.656	B
A-BCD	130.87	1012.62	0.129	132.21	0.4	4.512	A
A-B	20.37			20.37			
A-C	625.70			625.70			
D-AB	24.84	561.88	0.044	24.90	0.1	7.377	A
D-BC	7.53	285.50	0.026	7.58	0.0	14.253	B
C-ABD	104.42	683.27	0.153	105.47	0.4	6.888	A
C-D	24.24			24.24			
C-A	287.67			287.67			

2035 DS, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	4.82	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D11	2035 DS	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	423.00	100.000
B - Brooklands		✓	143.00	100.000
C - R403 South		✓	877.00	100.000
D - Capdoo Link Road		✓	197.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	6.000	358.000	59.000
	B - Brooklands	33.000	0.000	109.000	1.000
	C - R403 South	837.000	13.000	0.000	27.000
	D - Capdoo Link Road	153.000	4.000	40.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.41	17.75	0.8	C
A-BCD	0.23	7.66	0.7	A
A-B				
A-C				
D-AB	0.45	18.70	0.9	C
D-BC	0.27	31.40	0.4	D
C-ABD	0.06	4.39	0.1	A
C-D				
C-A				

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	107.66	457.37	0.235	106.33	0.3	11.239	B
A-BCD	77.75	634.73	0.123	76.67	0.3	7.095	A
A-B	3.97			3.97			
A-C	236.73			236.73			
D-AB	116.86	474.72	0.246	115.44	0.4	10.980	B
D-BC	31.46	277.11	0.114	30.90	0.1	16.050	C
C-ABD	24.78	927.93	0.027	24.63	0.0	4.384	A
C-D	19.86			19.86			
C-A	615.61			615.61			

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	128.55	427.40	0.301	128.03	0.5	13.203	B
A-BCD	106.19	651.55	0.163	105.66	0.4	7.269	A
A-B	4.52			4.52			
A-C	269.56			269.56			
D-AB	139.62	437.69	0.319	139.02	0.5	13.230	B
D-BC	37.47	232.86	0.161	37.20	0.2	20.211	C
C-ABD	40.18	1025.08	0.039	40.09	0.1	4.020	A
C-D	23.38			23.38			
C-A	724.84			724.84			

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	157.45	381.00	0.413	156.30	0.8	17.531	C
A-BCD	157.35	676.78	0.233	156.21	0.7	7.630	A
A-B	5.08			5.08			
A-C	303.30			303.30			
D-AB	171.23	383.36	0.447	169.82	0.9	18.427	C
D-BC	45.67	172.12	0.265	44.97	0.4	30.973	D
C-ABD	62.54	1116.74	0.056	62.39	0.1	3.755	A
C-D	28.22			28.22			
C-A	874.83			874.83			

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	157.45	380.36	0.414	157.39	0.8	17.750	C
A-BCD	157.86	677.38	0.233	157.82	0.7	7.665	A
A-B	5.07			5.07			
A-C	302.80			302.80			
D-AB	171.25	382.80	0.447	171.18	0.9	18.698	C
D-BC	45.66	171.62	0.266	45.62	0.4	31.405	D
C-ABD	62.64	1116.67	0.056	62.63	0.1	3.759	A
C-D	28.22			28.22			
C-A	874.74			874.74			

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	128.55	426.61	0.301	129.67	0.5	13.387	B
A-BCD	106.76	652.41	0.164	107.86	0.4	7.310	A
A-B	4.51			4.51			
A-C	269.00			269.00			
D-AB	139.63	437.04	0.320	141.02	0.5	13.440	B
D-BC	37.47	232.11	0.161	38.15	0.2	20.488	C
C-ABD	40.28	1024.95	0.039	40.43	0.1	4.024	A
C-D	23.38			23.38			
C-A	724.74			724.74			

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	107.66	456.69	0.236	108.22	0.3	11.381	B
A-BCD	78.41	635.32	0.123	78.97	0.3	7.136	A
A-B	3.96			3.96			
A-C	236.09			236.09			
D-AB	116.86	474.22	0.246	117.51	0.4	11.121	B
D-BC	31.45	276.27	0.114	31.74	0.1	16.215	C
C-ABD	24.91	927.72	0.027	25.00	0.0	4.387	A
C-D	19.85			19.85			
C-A	615.49			615.49			

2035 DS, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	12.49	B

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D12	2035 DS	PM	ONE HOUR	17:15	18:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	1065.00	100.000
B - Brooklands		✓	42.00	100.000
C - R403 South		✓	512.00	100.000
D - Capdoo Link Road		✓	169.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	31.000	894.000	140.000
	B - Brooklands	9.000	0.000	32.000	1.000
	C - R403 South	384.000	64.000	0.000	64.000
	D - Capdoo Link Road	88.000	0.000	81.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.20	21.23	0.3	C
A-BCD	0.83	21.73	11.1	C
A-B				
A-C				
D-AB	0.21	10.73	0.3	B
D-BC	0.52	48.15	1.1	E
C-ABD	0.34	8.58	1.4	A
C-D				
C-A				

Main Results for each time segment

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	31.62	370.74	0.085	31.22	0.1	11.645	B
A-BCD	348.91	990.21	0.352	343.76	1.3	6.130	A
A-B	15.18			15.18			
A-C	437.70			437.70			
D-AB	66.25	545.57	0.121	65.65	0.2	8.242	A
D-BC	60.98	280.34	0.218	59.79	0.3	17.863	C
C-ABD	99.17	649.22	0.153	97.60	0.4	7.178	A
C-D	40.90			40.90			
C-A	245.39			245.39			

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	37.76	321.15	0.118	37.59	0.1	13.956	B
A-BCD	543.11	1081.45	0.502	538.41	2.5	7.373	A
A-B	13.88			13.88			
A-C	400.42			400.42			
D-AB	79.11	517.53	0.153	78.93	0.2	9.024	A
D-BC	72.82	235.92	0.309	72.12	0.5	24.068	C
C-ABD	142.31	670.49	0.212	141.33	0.6	7.507	A
C-D	45.42			45.42			
C-A	272.54			272.54			

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	46.24	241.78	0.191	45.81	0.3	20.163	C
A-BCD	979.74	1212.00	0.808	952.68	9.2	16.035	C
A-B	6.46			6.46			
A-C	186.39			186.39			
D-AB	96.89	470.28	0.206	96.55	0.3	10.586	B
D-BC	89.18	175.44	0.508	86.92	1.0	43.662	E
C-ABD	232.80	707.77	0.329	230.15	1.3	8.352	A
C-D	47.27			47.27			
C-A	283.64			283.64			

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	46.24	232.57	0.199	46.19	0.3	21.228	C
A-BCD	1023.34	1228.77	0.833	1015.72	11.1	21.734	C
A-B	5.00			5.00			
A-C	144.25			144.25			
D-AB	96.89	465.95	0.208	96.87	0.3	10.729	B
D-BC	89.18	170.32	0.524	88.81	1.1	48.150	E
C-ABD	237.87	704.89	0.337	237.56	1.4	8.584	A
C-D	46.55			46.55			
C-A	279.30			279.30			

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	37.76	310.23	0.122	38.21	0.2	14.583	B
A-BCD	574.98	1105.39	0.520	608.03	2.9	8.723	A
A-B	12.82			12.82			
A-C	369.62			369.62			
D-AB	79.11	513.38	0.154	79.44	0.2	9.134	A
D-BC	72.82	228.42	0.319	75.21	0.5	26.219	D
C-ABD	146.10	665.72	0.219	148.76	0.7	7.747	A
C-D	44.88			44.88			
C-A	269.30			269.30			

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	31.62	367.55	0.086	31.82	0.1	11.803	B
A-BCD	356.88	996.11	0.358	362.78	1.4	6.372	A
A-B	14.91			14.91			
A-C	429.99			429.99			
D-AB	66.25	543.76	0.122	66.45	0.2	8.299	A
D-BC	60.98	277.50	0.220	61.85	0.3	18.436	C
C-ABD	100.79	648.28	0.155	101.97	0.4	7.285	A
C-D	40.67			40.67			
C-A	244.00			244.00			

2017 - Existing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	2.01	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D13	2017 - Existing	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	336.00	100.000
B - Brooklands		✓	117.00	100.000
C - R403 South		✓	759.00	100.000
D - Capdoo Link Road		✓	62.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	5.000	320.000	11.000
	B - Brooklands	27.000	0.000	89.000	1.000
	C - R403 South	731.000	11.000	0.000	17.000
	D - Capdoo Link Road	46.000	3.000	13.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.30	12.97	0.5	B
A-BCD	0.04	6.45	0.1	A
A-B				
A-C				
D-AB	0.12	10.48	0.2	B
D-BC	0.07	18.35	0.1	C
C-ABD	0.04	4.54	0.1	A
C-D				
C-A				

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	88.08	485.46	0.181	87.12	0.2	9.918	A
A-BCD	13.23	627.19	0.021	13.11	0.0	6.449	A
A-B	3.69			3.69			
A-C	236.04			236.04			
D-AB	35.80	500.93	0.071	35.46	0.1	8.501	A
D-BC	10.88	317.49	0.034	10.73	0.0	12.902	B
C-ABD	18.73	890.48	0.021	18.62	0.0	4.542	A
C-D	12.56			12.56			
C-A	540.12			540.12			

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	105.18	464.60	0.226	104.87	0.3	10.999	B
A-BCD	17.52	640.12	0.027	17.48	0.0	6.359	A
A-B	4.38			4.38			
A-C	280.16			280.16			
D-AB	42.76	471.52	0.091	42.66	0.1	9.231	A
D-BC	12.98	281.43	0.046	12.92	0.1	14.744	B
C-ABD	25.45	944.73	0.027	25.41	0.0	4.307	A
C-D	14.93			14.93			
C-A	641.95			641.95			

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	128.82	434.07	0.297	128.27	0.5	12.926	B
A-BCD	24.81	658.92	0.038	24.74	0.1	6.244	A
A-B	5.31			5.31			
A-C	339.82			339.82			
D-AB	52.40	430.24	0.122	52.23	0.2	10.471	B
D-BC	15.86	231.77	0.068	15.75	0.1	18.322	C
C-ABD	43.66	1057.14	0.041	43.55	0.1	3.907	A
C-D	18.00			18.00			
C-A	774.01			774.01			

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	128.82	434.01	0.297	128.80	0.5	12.972	B
A-BCD	24.84	658.94	0.038	24.84	0.1	6.245	A
A-B	5.31			5.31			
A-C	339.79			339.79			
D-AB	52.40	430.15	0.122	52.40	0.2	10.482	B
D-BC	15.86	231.63	0.068	15.86	0.1	18.352	C
C-ABD	43.70	1057.18	0.041	43.70	0.1	3.909	A
C-D	18.00			18.00			
C-A	773.98			773.98			

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	105.18	464.52	0.226	105.71	0.3	11.054	B
A-BCD	17.55	640.14	0.027	17.62	0.0	6.361	A
A-B	4.38			4.38			
A-C	280.13			280.13			
D-AB	42.76	471.40	0.091	42.92	0.1	9.246	A
D-BC	12.98	281.21	0.046	13.08	0.1	14.776	B
C-ABD	25.48	944.78	0.027	25.59	0.0	4.310	A
C-D	14.93			14.93			
C-A	641.91			641.91			

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	88.08	485.36	0.181	88.40	0.2	9.985	A
A-BCD	13.28	627.21	0.021	13.32	0.0	6.453	A
A-B	3.69			3.69			
A-C	235.99			235.99			
D-AB	35.80	500.81	0.071	35.90	0.1	8.519	A
D-BC	10.88	317.17	0.034	10.94	0.0	12.935	B
C-ABD	18.81	890.51	0.021	18.84	0.0	4.543	A
C-D	12.56			12.56			
C-A	540.05			540.05			

2017 - Existing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Crossroads	Two-way	1.71	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)
D14	2017 - Existing	PM	ONE HOUR	17:15	18:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R403 North		✓	841.00	100.000
B - Brooklands		✓	34.00	100.000
C - R403 South		✓	450.00	100.000
D - Capdoo Link Road		✓	35.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	0.000	25.000	776.000	40.000
	B - Brooklands	7.000	0.000	26.000	1.000
	C - R403 South	367.000	52.000	0.000	31.000
	D - Capdoo Link Road	27.000	0.000	8.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - R403 North	B - Brooklands	C - R403 South	D - Capdoo Link Road
From	A - R403 North	10	10	10	10
	B - Brooklands	10	10	10	10
	C - R403 South	10	10	10	10
	D - Capdoo Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.11	13.63	0.1	B
A-BCD	0.19	4.73	0.7	A
A-B				
A-C				
D-AB	0.05	7.70	0.1	A
D-BC	0.04	16.80	0.0	C
C-ABD	0.21	7.06	0.6	A
C-D				
C-A				

Main Results for each time segment

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	25.60	414.27	0.062	25.31	0.1	10.174	B
A-BCD	81.11	921.06	0.088	80.36	0.2	4.710	A
A-B	17.23			17.23			
A-C	534.81			534.81			
D-AB	20.33	580.00	0.035	20.17	0.0	7.071	A
D-BC	6.02	326.63	0.018	5.94	0.0	12.346	B
C-ABD	71.43	657.42	0.109	70.42	0.3	6.746	A
C-D	20.82			20.82			
C-A	246.53			246.53			

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	30.57	379.19	0.081	30.47	0.1	11.353	B
A-BCD	122.48	999.74	0.123	121.96	0.3	4.515	A
A-B	19.77			19.77			
A-C	613.79			613.79			
D-AB	24.27	564.97	0.043	24.24	0.0	7.322	A
D-BC	7.19	292.19	0.025	7.16	0.0	13.891	B
C-ABD	98.24	678.65	0.145	97.74	0.4	6.827	A
C-D	23.86			23.86			
C-A	282.45			282.45			

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	37.43	328.44	0.114	37.26	0.1	13.591	B
A-BCD	204.10	1106.50	0.184	202.78	0.6	4.392	A
A-B	22.53			22.53			
A-C	699.33			699.33			
D-AB	29.73	543.98	0.055	29.67	0.1	7.698	A
D-BC	8.81	244.96	0.036	8.76	0.0	16.761	C
C-ABD	146.68	710.01	0.207	145.65	0.6	7.037	A
C-D	27.17			27.17			
C-A	321.61			321.61			

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	37.43	327.99	0.114	37.43	0.1	13.628	B
A-BCD	205.01	1107.14	0.185	204.97	0.7	4.404	A
A-B	22.50			22.50			
A-C	698.44			698.44			
D-AB	29.73	543.76	0.055	29.73	0.1	7.703	A
D-BC	8.81	244.47	0.036	8.81	0.0	16.803	C
C-ABD	147.23	710.35	0.207	147.18	0.6	7.065	A
C-D	27.12			27.12			
C-A	321.11			321.11			

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	30.57	378.59	0.081	30.74	0.1	11.388	B
A-BCD	123.33	1000.59	0.123	124.63	0.3	4.534	A
A-B	19.75			19.75			
A-C	612.96			612.96			
D-AB	24.27	564.65	0.043	24.33	0.0	7.328	A
D-BC	7.19	291.46	0.025	7.24	0.0	13.934	B
C-ABD	98.82	679.14	0.146	99.81	0.4	6.868	A
C-D	23.81			23.81			
C-A	281.91			281.91			

Main results: (18:30-18:45)

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-ACD	25.60	413.80	0.062	25.69	0.1	10.207	B
A-BCD	81.84	921.39	0.089	82.38	0.2	4.728	A
A-B	17.21			17.21			
A-C	534.10			534.10			
D-AB	20.33	579.75	0.035	20.37	0.0	7.081	A
D-BC	6.02	325.93	0.018	6.05	0.0	12.380	B
C-ABD	72.08	657.77	0.110	72.61	0.3	6.786	A
C-D	20.77			20.77			
C-A	245.93			245.93			