Project

Capdoo Residential Development
Clane, Co. Kildare

Report Title

Traffic and Transport Assessment

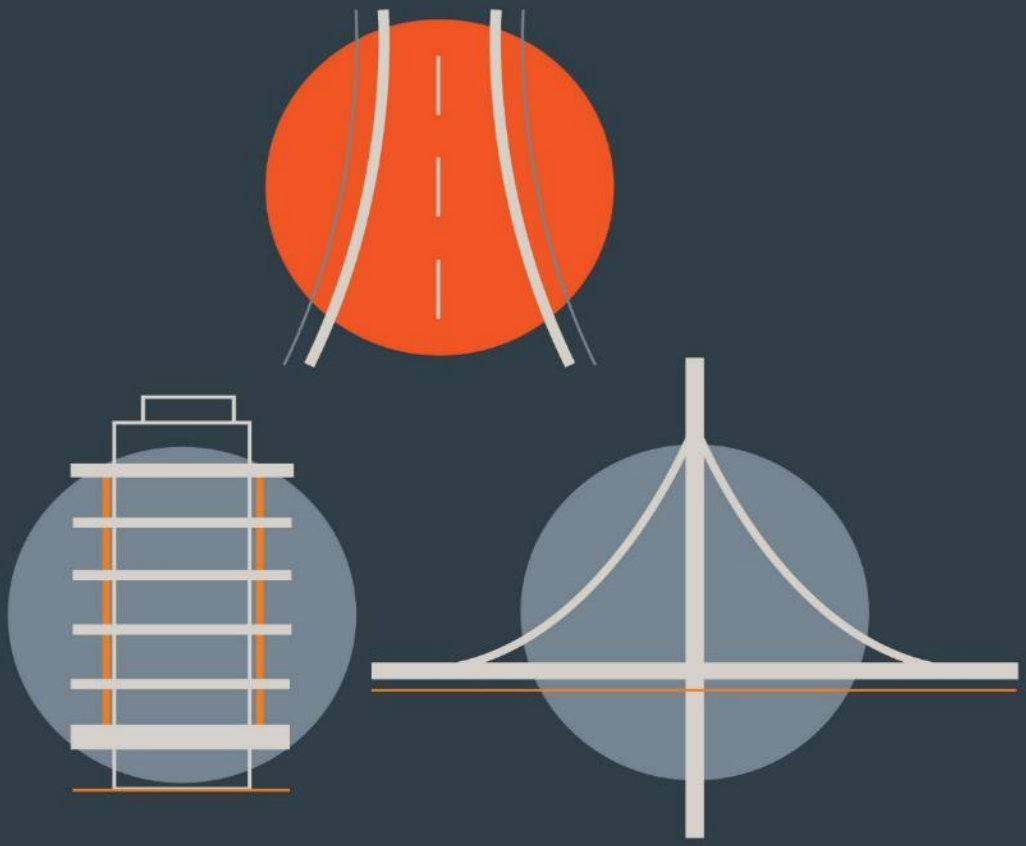
Date

June 2019

Client

Ardstone Homes

TRANSPORTATION



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1.0 INTRODUCTION

1.1 BACKGROUND

1.1.1 DBFL Consulting Engineers have been commissioned by Ardstone Homes to prepare a Traffic and Transport Assessment (TTA) for a proposed residential development and link street on a greenfield site at Capdoo, Clane, Co. Kildare. The general location of the Greenfield site and its boundary has been illustrated in **Figure 1.1** below, and the Clane Local Area Plan's proposed road can be seen in **Figure 2.5**. The subject site is located between Regional Roads linking to Kilcock and Celbridge, via R407 and R403 respectively. Through these links, the site has good existing connections to M4 and M7 motorways.

Figure 1.1: Site Location (Reference: www.google.ie/maps)

1.1.2 The proposed development includes the provision for 184 units of residential housing and 182 apartment units, with the further goal to provide a permeable road network for pedestrian, cyclist and vehicular movements enabling a link between R403 and R407 in accordance with the Clane Local

Area Plan. The subject site holds no substantive previous planning applications, according to Kildare County Council records.

1.2 SCOPE

1.2.1 The objective of this Traffic and Transport Assessment (TTA) is to assess and quantify:

- The principle accessibility characteristics of the existing local receiving environment;
- How the proposed development and link road impacts the local traffic network; and
- The proposed method of access for pedestrians, cyclists and vehicles (patrons, staff and service vehicles) travelling to / from the proposed development.

1.2.2 The availability and subsequent review of this information will enable the planning authority to gain a more detailed understanding of the proposed development at an early stage. This information will enable the authority to respond in an appropriate manner in the context of the scale and nature of the potential impact generated by the proposals made for this development.

1.2.3 This TTA has been prepared in reference to the requirements of the National Roads Authority "Traffic and Transportation Assessment Guidelines". Reference has also been made to the "Clane Local Area Plan 2017-2023" and the "Kildare County Development Plan 2017-2023".

1.3 METHODOLOGY

1.3.1 Our approach to the study accords with policy and guidance both at a 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*.

1.3.2 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, 2025 and 2035 development scenarios.

1.4 REPORT STRUCTURE

1.4.1 As introduced above, this TTA seeks to clarify the potential level of influence generated by the proposed development upon the local road network and subsequently ascertain the existing and future operational performance of the local transport system. The structure of the report responds to the various stages of this exercise including the key tasks summarised below.

1.4.2 **Section 2** of this report describes the existing conditions at the proposed development location and surrounding area, as well as looking at Proposed Transport Infrastructure. **Section 3** looks at the proposed development itself, outlining the characteristics of the development.

1.4.3 **Section 4** outlines the DUMRS design statement for this project, showing how the development complies with urban roads and street design parameters.

1.4.4 The relevant transportation policies that influence the design and appraisal of the subject development proposals are highlighted within **Section 5**.

1.4.5 **Section 6** outlines the trip generation and distribution exercises carried out and the adopted methodology for applying growth factors to establish a baseline for the design year network traffic flows.

1.4.6 The potential traffic impact of the proposals assessed for the 2020 Opening Year and the 2035 Horizon Year are summarised within **Section 7**.

1.4.7 The main conclusions and recommendations derived from the analysis are summarised in **Section 8**.

2.0 RECEIVING ENVIRONMENT

2.1 SITE LOCATION AND LAND USE

2.1.1 As illustrated in **Figure 2.1** below the site of the subject development site is located between Kilcock and Naas in County Kildare with connections via regional roads of R407 connecting to Kilcock northbound, Naas and M7 Southbound, R403 connecting to Celbridge, and further to M4, northbound of the site.

2.1.2 The site is located by Capdoo commons, north of Clane Town centre, and is approximately 9km north of Naas and 14 km south of Kilcock.

2.1.3 The Existing road network offers links to Naas southbound, via R407, Kilcock northbound via R407, and to Celbridge and Dublin Northbound via R403. The existing road network also offers links to M7 and M4 motorways. The existing road network offers some pedestrian and cyclist facilities, however, for the areas where pedestrian and cyclist facilities are substandard, these are outlined in the Clane LAP 2017-2023 for improvement.

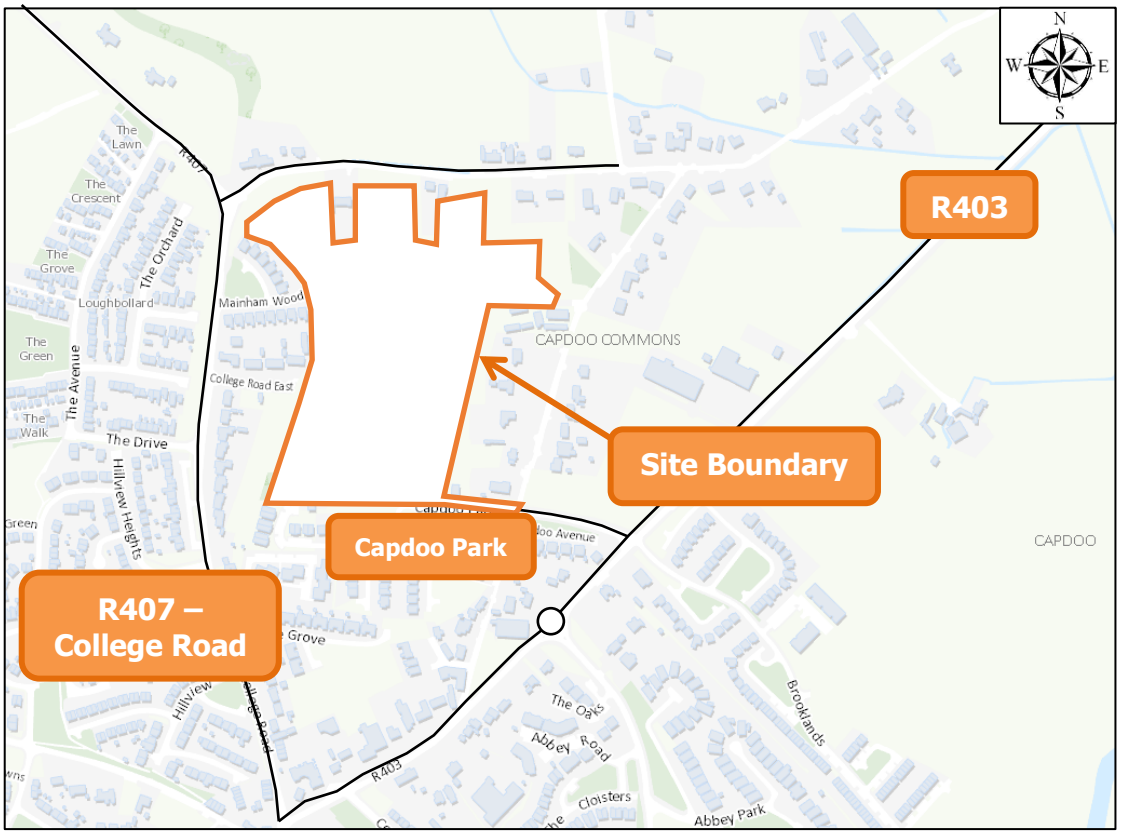


Figure 2.1: Indicative Site Boundary (Source: www.osi.ie)

2.1.4 The subject Greenfield development site is bounded by existing residential estates to the south and west, with sporadic housing to the east, and individual dwellings to the north.

2.1.5 The existing site is a greenfield site, which offers no permeability to pedestrians, cyclists or vehicles.

2.2 EXISTING TRANSPORTATION INFRASTRUCTURE

Pedestrian Environment

2.2.1 The subject site is bounded by housing and a local road to the north which does not have any pedestrian facilities to support a safe pedestrian environment. Pedestrian facilities are most prominent around the residential developments to the south and west of the site.

2.2.2 The subject site is located within walking distance of local amenities, such as supermarkets, schools and access to public transport.

2.2.3 As aforementioned, the site benefits from pedestrian facilities primarily on the R407 which runs proximate to the site to the south and west, with sparse intermittent to no footpath facilities along the local road to the north of the site and northbound along the R403 located to the east of the site. The existing facilities may be seen in **Figures 2.2** and **2.3** below. The existing pedestrian facilities are intermittent and substandard. These are the only available dedicated footpaths in the surrounding area and are lit by street lighting. Vehicular traffic across this area is restricted to 50kph.

Figure 2.2: Lack of Footpath Facilities along Local road L5078

Figure 2.3: Pedestrian and Cyclist Facilities along R407 College Road

Cycling Environment

2.2.4 The subject site offers dedicated on road cycling facilities along the R407 regional road, with dedicated off road facilities along the Clane Inner Relief Road and Capdoo Park. Existing cycle facilities from the Greater Dublin Area Cycle Network Plan (2014), which may be seen in **Figure 2.4**.

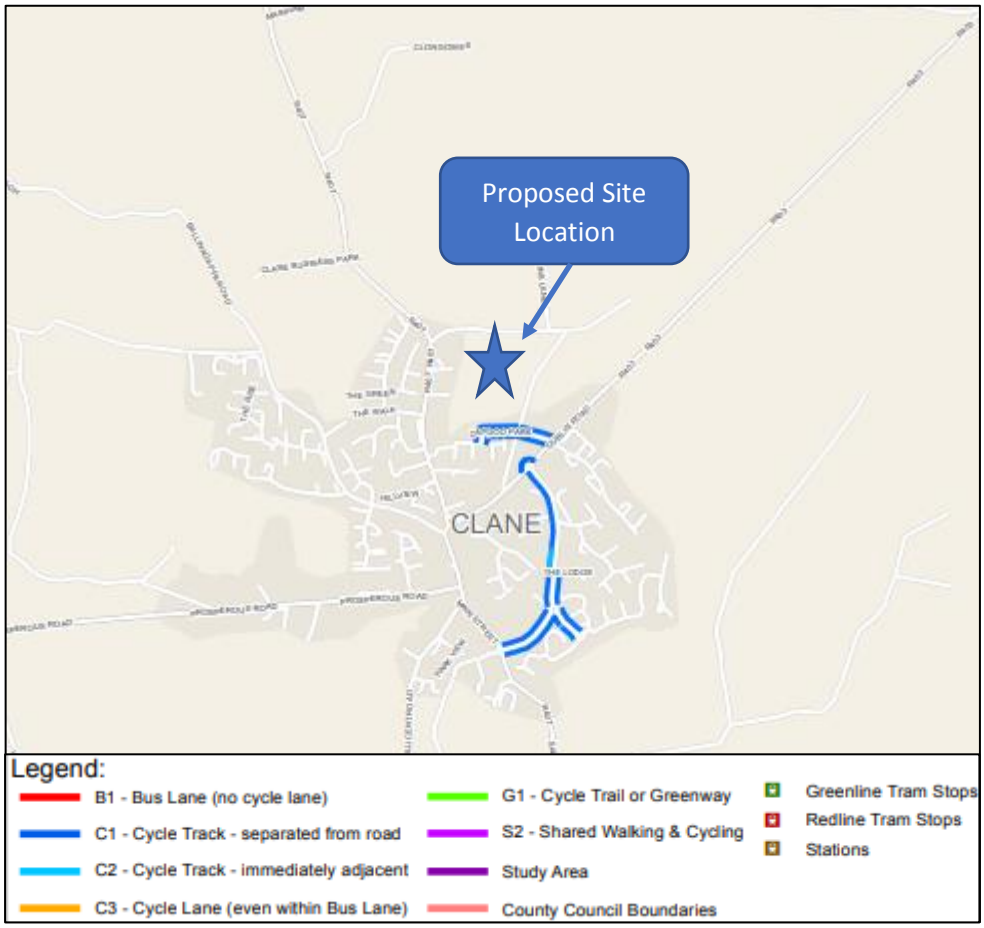


Figure 2.4: GDA Cycle Network Plan Proposals (Extract of Sheet E17)

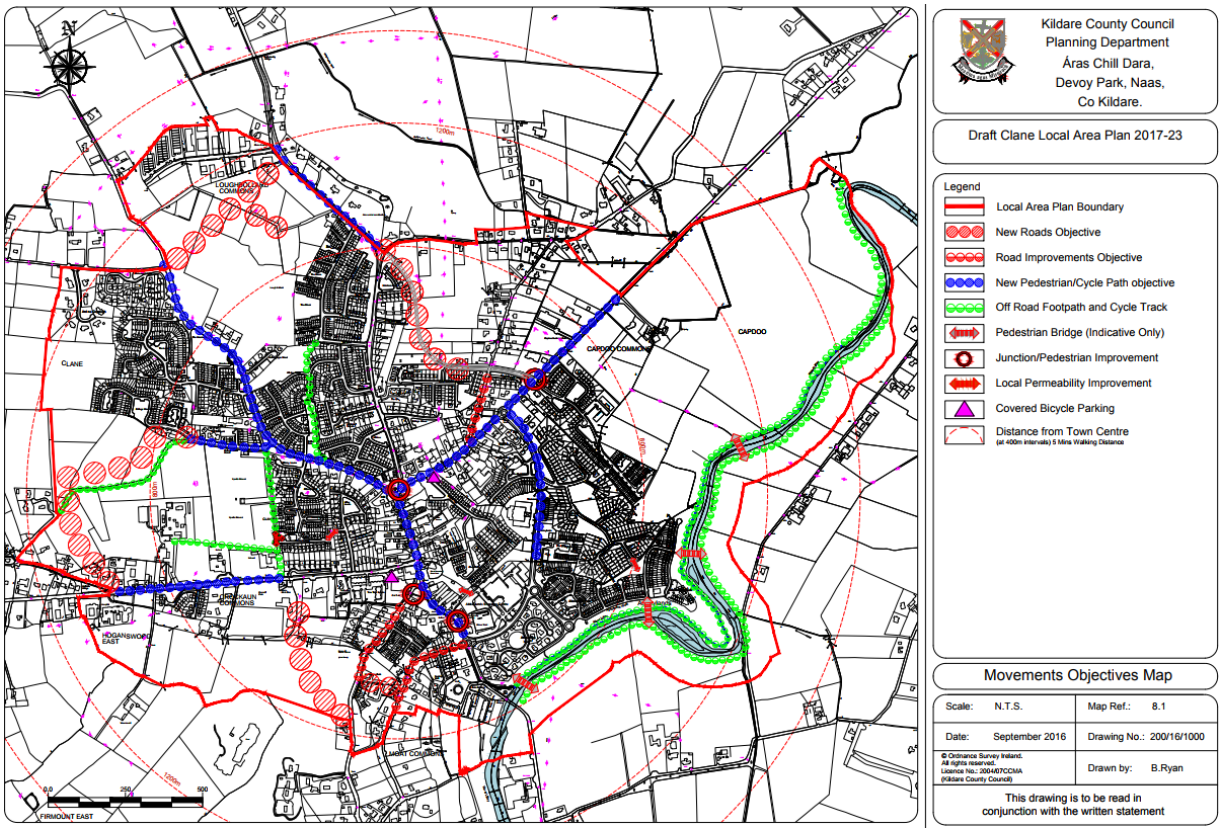


Figure 2.5: Clane Local Area Plan Movement Objective Maps

2.2.5 The delivery of the GDA Cycle Network Plan in parallel with the level of service objectives outlined within the National Cycle Manual will result in a significant enhancement to the local and strategic cycle network which will benefit residents, staff and visitors travelling to and from the proposed development.

Public Transport - Bus

2.2.6 The subject site benefits from proximity to public transport routes, increasing accessibility levels to residents. The R403 forms part of various bus routes linking Clane to Naas, Celbridge and Dublin, whilst the R407 links Clane to Naas and Kilcock. The bus stops along the R403 are both within 800m of walking routes from the furthest points of the residential sites, meaning that all points within the proposed development will be within a reasonable walking distance, and thus, will be capable of accessing the bus stops along both the R407 and R403 regional roads.

2.2.7 Bus Eireann operates some services which service the surrounding area, and as previously mentioned, bus stops are within walking distance of the site.

These routes are listed in **Table 2.1** below. BusEireann routes 120 and 123 service this road for both Northbound and Southbound directions.

Route No.	Route	No. of Buses per Day		
		Mon-Fri	Sat	Sun
120	Dublin – Edenderry - Tullamore	21	12	7
123	Dublin–Celbridge–Clane–Sallins–Naas	4	0	0

Table 2.1: BusEireann Routes Serving the Site (Frequency – No. of Buses per Day)

Public Transport - Heavy Rail Network

2.2.8 The proposed site does not support travel by heavy rail networks. The nearest Heavy Rail station is approximately 6.6 km from the subject site, which is not considered a reasonable walking distance.

Road Network

2.2.9 The development site has proposed accesses to both the R403 and R407 via the proposed Capdoo Link Road, providing accessibility to Naas, Kilcock and Dublin by car. The R403 is subject to a speed limit of 50 kph where the roads border the 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, which is an irregular shape due to a number of plots that have been developed along this local road. A map of the road network may be seen in **Figure 2.1**.

2.3 PROPOSED TRANSPORT INFRASTRUCTURE

Proposed Link Street

2.3.1 A link street connecting the R403 and R407 regional roads has been proposed in the Clane Local Area Plan, as seen in **Figure 2.5**, which offers connectivity between the two regional roads whilst reducing the flow through the current prioirty controlled junction located in Clane Town Centre. This proposed Link Street, referred to as Capdoo Link Road, proposes a 7.0m wide carriageway

with a 2.0m wide cycleway and 2.0m wide footpath to be provided running adjacent to the link street.

Cycle Network Proposals

2.3.2 In December 2013, the NTA published the report entitled ***Greater Dublin Area Cycle Network Plan***. The report summarises the findings of a comprehensive body of work detailing a proposed Cycle Network incorporating Urban, Inter-urban and Greenroute networks covering the six county council areas that together form the defined Greater Dublin Area (GDA).

2.3.3 The subject site is located within the GDA Cycle Network sector designated as the "*Clane & Prosperous Sector*". **Figure 2.6** (which is an extract of the Cycle Network Plan) illustrates the cycle network proposals in the vicinity of the subject site. The cycle network proposals include the provision of:

- Rural Route K3: "Celbridge to Clane via Straffan",
- Rural Route K7: "Clane to Naas via Millicent North and Grand Canal (K10 & K13)"
- Rural Route CP1: "R403 Dublin Road through Clane and west to Prosperous" and;
- Rural Route CP2: "R407 Naas Road to southern edge of the town"

Figure 2.6: GDA Cycle Network Plan Proposals (Extract of Sheet N17)

2.3.4 The above listed routes are all part of the Greater Dublin Area Cycle Network Plan which connect Clane to the surrounding areas of Naas, Dublin and Celbridge. These proposed networks show that this area has potential to support future cycling networks.

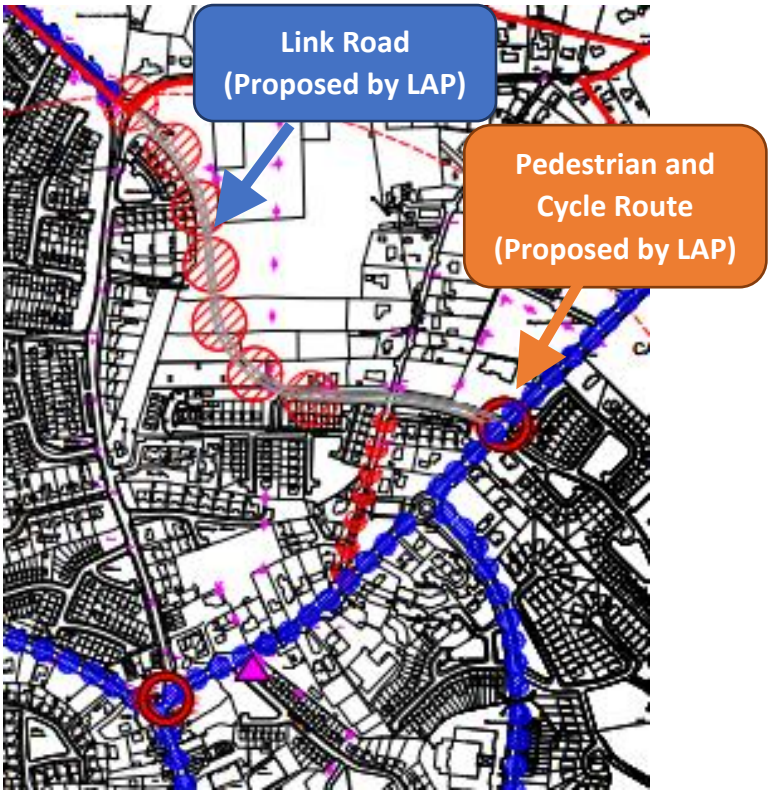


Figure 2.7: Clane local Area Plan Proposed road segment

2.3.5 **Figure 2.7** shows a section of the Clane Local Area Plan highlighting the proposed transportation infrastructure upgrades that have been designated for improvements and upgrades throughout the course of this Local Area Plan. Within this drawing, the provision of dedicated Pedestrian and Cycle infrastructure along R403 Celbridge Road has been proposed, running along the R403 Celbridge Road and providing a link towards Clane Town. Junction Upgrades have been proposed within this LAP for both the junction between R403, Capdoo Park and Brooklands, and the Junction Between R403 and R407, as well as further upgrades within Clane Town. These upgrades and infrastructre provisions will aim to support and encourage sustainable transport modes to be adopted more frequently, with routes leading to/from residential areas towards local amenities, schools and local commerce.

2.4 SITE PLANNING HISTORY

2.4.1 The subject site has not been subjected to any sustantive previous planning permissions, however the areas surrounding the site have received, and had accepted, various planning applications for similar scope residential developments.

3.0 CHARACTERISTICS OF PROPOSAL

3.1 INTRODUCTION

3.1.1 In reference to McCrossan O'Rourke Manning Architects scheme drawings, the development proposals include the construction of 366 residential units and a crèche, with a mixture of 2-bed, 3-bed, 4-bed and 5-bed houses, 1 bed and 2 bed apartments, and 2 bed and 3 bed duplex units. Overall this residential development proposes 605 car parking spaces, with 2 parking spaces per house, and 1.2 spaces per apartment. These standards have been outlined in Kildare County Development Plan as maximum standards. **Table 3.1** below summarises the proposed residential development schedule:

Unit Type	Quantity
2-Bed House	20
3-Bed House	75
4-Bed House	77
5-Bed House	12
1-Bed Own Door Apartment	12
1-Bed Apartment	16
2-Bed Apartment	82
2-Bed Apartment Own Door Under Duplex	36
3-Bed Own Door Duplex	36
Total no of Units	**366**

Table 3.1: Schedule of Housing

3.1.2 Further details of the above proposed residential development are illustrated in McCrossan O'Rourke Manning Architects scheme drawings as submitted with this planning application.

3.2 SITE ACCESS

3.2.1 The site will mainly be accessed via a number of junctions that tie in with the proposed link street, which runs between the R403 and R407 regional roads and provides accessibility to Pedestrians, cyclists and vehicular traffic. There will also be accessibility to the site from the L5078 Local road which runs along the north and East of the site, and a link to Capdoo Court to tie into the proposed Capdoo Link Road.

3.2.2 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.

Figure 3.1 – Architect Site Layout Drawing

3.3 PARKING PROVISION

Car Parking

3.3.1 With reference to McCrossan O'Rourke Manning Architects design, a total of 605 parking spaces have been proposed for this residential development. This is in line with guidance from Kildare County Development plans 2017-2023 standards for housing car parking, which lists a standard of 2 spaces per unit of housing, and 1.2 total spaces per apartment which is complaint with 'Sustainable Urban Housing: Design Standards for New Apartments' (SUHDS guidance 2018), for which this site may fall under the *'Peripheral and/or Less Accessible Urban Locations'*.

3.3.2 In relation to car parking, within 'Peripheral and/or Less Accessible Urban Locations', the DHPLG document states:

> *'Such locations are generally suitable for limited, very small-scale (will vary subject to location), higher density development that may wholly comprise apartments, or residential development of any scale that will include a minority of apartments at low-medium densities (will also vary, but broadly <45 dwellings per hectare net), including:*
>
> - *Sites in suburban development areas that do not meet proximity or accessibility criteria;*
> - *Sites in small towns or villages.*
>
> *The range of locations outlined above is not exhaustive and will require local assessment that further considers these and other relevant planning factors.'*

3.3.3 A breakdown of the maximum parking standards applicable to this site have been provided in **Table 3.2**, whilst a breakdown of how car parking is provided has been provided in **Table 3.3** below:

Unit Type	Development Standard		No. of Units / GFA	Quantum Permitted/ Required	
	KCC	DHPLG		KCC	DHPLG
Apartment & Duplex	1.5 / unit + 1 visitor space / 4 units	1 / unit plus 1 visitor / 3-4 units	182	273 resident, 46 visitor	182 resident, 46-61 visitor
House	2 / unit	As KCC	184	368	As KCC
Crèche (663.7m²)	1 / staff, 1set down / 5 children	As KCC	11 staff, 49 children	11 staff, 9 set down	As KCC
Total				**707**	**616-631**

Table 3.2 – Car Parking Standards

Unit Type	No. of Units	Parking Standard	Parking Provision
Houses	184	2 Spaces per Unit	368
Apartments	182	1.2 Spaces per Unit	219
Crèche	-	Per No. of Children	18
Total Parking Provision			**605**

Table 3.3 – Car Parking Provision

Cycle Parking

3.3.4 This Residential development offers no purpose-built Bicycle parking spaces for Housing units. Kildare county development plan indicates no standards for bicycle parking in residential housing schemes; however, it has been suggested in Kildare County Development Plan that "Terraced/townhouse schemes shall include appropriate design measures for bicycle storage, details of which should be clearly shown at planning application stage." These measures are in place to ensure futureproof design for sustainable transportation links, so bicycles can be parked within the lands of each housing unit.

3.3.5 The Apartment and Duplex units being proposed would include for cycle parking provisions, with a total of 704 cycle parking spaces proposed for the apartments, duplex units and crèche, which exceeds the *Kildare County Development Plan* minimum standards.

Site	Unit	KCC Standard		DHPLG Standard		KCC Requirement		DHPLG Requirement	
		Long Stay	Short Stay	Long Stay	Short Stay	Long Stay	Short Stay	Long Stay	Short Stay
Southern Site	Apartment	1 / Unit + 1 Visitor /2 Units		1 / bed	1/2 apts	182	91	372	91
	House	-		As KCC	As KCC	-		As KCC	
	Crèche	1 / 5 Staff + 1 / 10 Children		As KCC	As KCC	4	3	As KCC	
	Total Southern Site					**280**		**470**	

Table 3.4 – Cycle Parking Standards

3.3.6 The Kildare County Development Plan (2017 – 2023) states that it is both a policy and an objective of the Kildare County Development Plan to promote bicycle travel as a viable option of transport, with "a target of 10% of all commuter trips to be made by bicycle by 2020". The council aims to achieve this by offering more bicycle parking spaces, as well as Park & Ride incentives to promote public transport use and integration of cycle networks.

3.4 CONSTRUCTION TRAFFIC MANAGEMENT PLAN

3.4.1 It is critical to ensure that appropriate measures are implemented to minimise and control any potential issues relating to traffic management and road

safety, to deliver a smooth and problem-free construction phase. To achieve this goal, it is necessary that the appointed contractor prepares and follows a Construction Traffic Management Plan, which they must also submit to Kildare County Council for review and approval prior to the commencement of any construction works on-site.

4.0 POLICY FRAMEWORK

4.1 DEVELOPMENT POLICY

Transport Strategy for the Greater Dublin Area 2016-2035

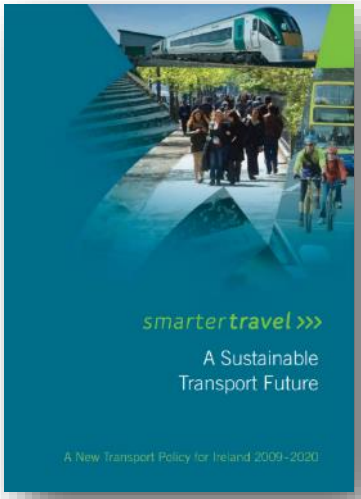
4.1.1 The Transport Strategy for the Greater Dublin Area 2016-2035 is a document compiled by the National Transport Authority which sets out the Strategic Transport Plan for the Greater Dublin Area for the period up to 2035.

4.1.2 This document will influence transport planning across the region until 2035 and replaces 'A Platform for Change – An Integrated Transportation Strategy for the Greater Dublin Area 2000 to 2016'. It thereby underpins all transportation strategies, traffic management schemes and development plans prepared by Kildare County Council during this timeframe.

4.1.3 The Strategy sets out a clear hierarchy of transport users, commencing with the sustainable modes of travel such as walking, cycling and public transport users at the very top of the hierarchy. The Strategy adopts the general principle that these users should have their safety and convenience needs considered first and that the hierarchy is applied where a large share of travel is (or could be) made by walking, cycling and public transport.

4.1.4 In addition to guiding the development of specific Strategy measures, the NTA encourages that the "transport user hierarchy should guide engineers, planners and urban designers on the order in which the needs of transport users should be considered in designing new developments or traffic schemes in the Greater Dublin Area."

Smarter Travel – A Sustainable Transport Future



4.1.5 *Smarter Travel* was published in 2009 by the Department of Transport which represents the national policy documentation outlining a broad vision for the future and establishes objectives and targets for transport. The document examines past trends in population and economic growth and transport concluding that legacy transport trends, such as the reliance upon private car, are considered unsustainable for continued use going forward.

4.1.6 In order to address the unsustainable nature of current travel behaviour, *Smarter Travel* sets down a number of key goals and targets for 2020 - including:

- *Total vehicle km travelled by car will not significantly increase;*
- *Work-related commuting by car will be reduced from 65% to 45%;*
- *10% of all trips will be by cycling;*
- *The efficiency of the transport system will be significantly improved.*

4.1.7 The document recognises that these are ambitious targets, and outlines a suite of 49 actions required to achieve these targets – summarised under the following four main headings:

- *Actions aimed at reducing distances travelled by car and the use of fiscal measures to discourage use of the car;*
- *Actions aimed at ensuring that alternatives to the car are more widely available;*
- *Actions aimed at improving fuel efficiency of motorised travel; and*
- *Actions aimed at strengthening institutional arrangements to deliver the targets.*

SUSTAINABLE URBAN HOUSING: DESIGN STANDARDS FOR NEW APARTMENTS – MARCH 2018

4.1.8 This guideline document was produced by the Department of Housing, Planning and Local Government and was updated with the latest version in March 2018. The purpose of this document is to set out standards for apartment development, mainly in response to circumstances that had arisen whereby some local authority standards were at odds with national guidance.

4.1.9 These Guidelines apply to all housing developments that include apartments that may be made available for sale, whether for owner occupation or for individual lease. They also apply to housing developments that include apartments that are built specifically for rental purposes, whether as 'build to rent' or as 'shared accommodation'.

4.1.10 Cycling provides a flexible, efficient and attractive transport option for urban living and these guidelines require that this transport mode is fully integrated into the design and operation of all new apartment development schemes.

4.1.11 The quantum of car parking or the requirement for any such provision for apartment developments will vary, having regard to the types of location in cities and towns that may be suitable for apartment development, broadly based on proximity and accessibility criteria. For all types of location, where it is sought to eliminate or reduce car parking provision, it is necessary to ensure, where possible, the provision of an appropriate number of drop off, service, visitor parking spaces and parking for the mobility impaired. Provision is also to be made for alternative mobility solutions including facilities for car sharing club vehicles and cycle parking and secure storage.

Kildare County Council Development Plan 2017-2023

4.1.12 The Kildare County Council Development Plan sets out to change the way that developments consider transportation to and from a site to promote sustainable transport within County Kildare. A new approach to design facilitates communities to freely travel in ways which have significantly lower impacts on future generations' health. This approach is based on the principles of short and long-term sustainability, achieved on the basis of social, economic and environmental considerations.

4.1.13 The Kildare County Council Development Plan 2017-2023 states that it is the policy of Kildare County Council:

- *"To Promote the sustainable development of the county through the creation of an appropriately phased integrated transport network that services the needs of communities and businesses."*
- *"To Support sustainable modes of transport by spatially arranging activities around existing and planned high quality public transport systems."*
- *"To Influence people's travel behaviour and choices towards more sustainable options by working closely with relevant organisations in improving and accessing public transport facilities."*
- *"To Develop sustainable transport solutions within and around the major towns in the county that encourage a transition towards more sustainable modes of transport, whilst also ensuring sufficient road capacity for trips which continue to be taken by private vehicles.*
- *"To Promote the sustainable development of the county by supporting and guiding national agencies including the National Transport Authority in delivering major improvements to the public transport network and to encourage public transport providers to provide an attractive and convenient alternative to the car."*
- *"To Prioritise sustainable modes of travel by the development of high quality walking and cycling facilities within a safe street environment." "To Promote the development of safe and convenient walking and cycling routes."*
- *"To Ensure that connectivity for pedestrians and cyclists is maximised in new communities and improved within the existing areas in order to maximise access to town centres, local shops, schools, public transport services and other amenities."*
- *"To Ensure that all new roads and cycle routes implement the National Cycle Manual, with a focus on a high level of service for cyclists and encouraging a modal shift from car to cycling."*

- *"To Promote the development of safe and convenient walking and cycling routes."*

4.1.14 The Kildare County Council Development Plan 2017-2023 states the following objectives:

- *"To Provide secure cycle parking facilities in public areas in towns and at public service destinations."*
- *"To Examine existing public transport links within the county with a view to promoting and facilitating improvements where feasible.*

Clane Local Area Plan 2017-2023

4.1.15 Clane Local Area Plan 2017-2023 states that it is the policy of the Council:

- *"To provide an enhanced pedestrian and cycle network in Clane, and secure filtered/full permeability in all new housing areas and in existing areas where possible."*
- *"To support and facilitate the provision of public transport infrastructure in collaboration with the National Transport Authority under the National Transport Authority's funding programmes."*
- *"To support improvements to the road and street network in Clane in order to provide connectivity and permeability throughout the town, enable access to new communities and to reduce through-traffic in the town centre."*

4.1.16 Clane Local Area plan also lists a series of Objectives of the council. Clane LAP 2017-2023 lists the following objectives:

- *"To improve connectivity between the outer areas of the town through the planning and delivery of orbital connections between the existing radial road network."*
- *"To apply the principles of the Design Manual for Urban Roads and Streets, DECLG & DTTS (2013) in the planning, design and construction of all roads and streets within the town."*

- *"To support and facilitate the provision of public transport infrastructure in collaboration with the National Transport Authority under the National Transport Authority's funding programmes."*
- *"To support and facilitate the provision of public transport infrastructure in collaboration with the National Transport Authority under the National Transport Authority's funding programmes."*
- *"To maximise direct cycle and pedestrian access to local shops and services, health facilities, schools, supermarkets, sports grounds and leisure facilities and places of work in all new developments."*
- *"To require new housing developments to deliver filtered permeability to adjoining development in so far as is possible and, in the case of adjoining greenfield sites, to ensure the potential for such provision is addressed."*

5.0 TRAFFIC ASSESSMENT

5.1 TRAFFIC SURVEYS

5.1.1 The lands surrounding the site were surveyed on Wednesday 20th September 2017 in order to establish a baseline for existing traffic levels of the road network servicing the site, allowing for calculations to determine the impacts that the proposed site would have on the surrounding road network.

5.1.2 Traffic levels were calculated, and a traffic flow diagram was developed to establish the baseline traffic flows. The baseline flows were then developed to growth traffic levels with respect to Transport Infrastructure Ireland (TII) Project Appraisal Guideline standards, for the Greater Dublin Area. From this established baseline, "Do Nothing" and "Do Something" scenarios were adopted going forward.

5.1.3 The modelled 'Do Nothing' and 'Do Something' scearios above indicate the conditions experienced within the traffic network for each design scenario. The 'Do Nothing' scenario is comprised of the surveyed traffic flows and junction movements with a growth factor applied, which is determined according to TII project appraisal guideline standards. The 'Do Something' scenario takes the 'Do Nothing' scenario and applies the impacts of the proposed development. As this development proposes a Link Street through the development, a number of trips have been diverted between the R403 and R407 along this link. Accordingly, this 'Do Something' scenario includes for the proposed residential development, diversion of trips along the Link Road and junction redesign along the R407 regional road by the site's western entrance from a 3 arm priority controlled junction into a 4 armed Roundabout junction.

5.1.4 The following scenarios were modelled throughout the transport network:

- 2017 Base;
- 2020 Opening Year Do Nothing;
- 2020 Opening Year Do Something – 100 units occupied;
- 2025 Interim Year Do Nothing;
- 2025 Interim Year Do Something – completed development;
- 2035 Horizon Year Do Nothing; and
- 2035 Horizon Year Do Something.

5.2 TRIP GENERATION

5.2.1 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.

5.2.2 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.

5.2.3 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.

Land Use	Unit	AM Peak Hour (07:30 - 08:30)		PM Peak Hour (17:15 – 18:15)	
		Arr	Dep	Arr	Dep
Houses	Per Unit	0.120	0.348	0.415	0.274
Apartments	Per Unit	0.062	0.143	0.219	0.130

Table 6.1: Proposed Residential Development Trip Rates

5.2.4 **Table 6.1** summarises the TRICS generated trip rates for site, whilst **Table 6.2** summarises total number of anticipated trips for the development during the weekday morning and evening peak hour periods. The TRICS database output files may be observed in **APPENDIX C**.

Land Use	Unit	AM Peak Hour (07:30 - 08:30)		PM Peak Hour (17:15 – 18:15)	
		Arr	Dep	Arr	Dep
Houses	Total Trips	22	64	76	50
Apartments	Total Trips	11	26	40	24
Total		33	90	116	74

Table 5.1: Calculated Trip Rates, based on total housing units

5.3 TRIP DISTRIBUTION AND ASSIGNMENT

5.3.1 A proposed Link Street, as previously shown in **Figure 2.6** and **Figure 5.1** below, has been planned to reduce traffic travelling between the R403 to R407, and will act to connect the development lands to Clane town. This link road will reduce the traffic currently manoeuvring through the priority controlled junction between the R407 and R403, as this junction currently has a high volume of traffic turning from one regional road onto the other.

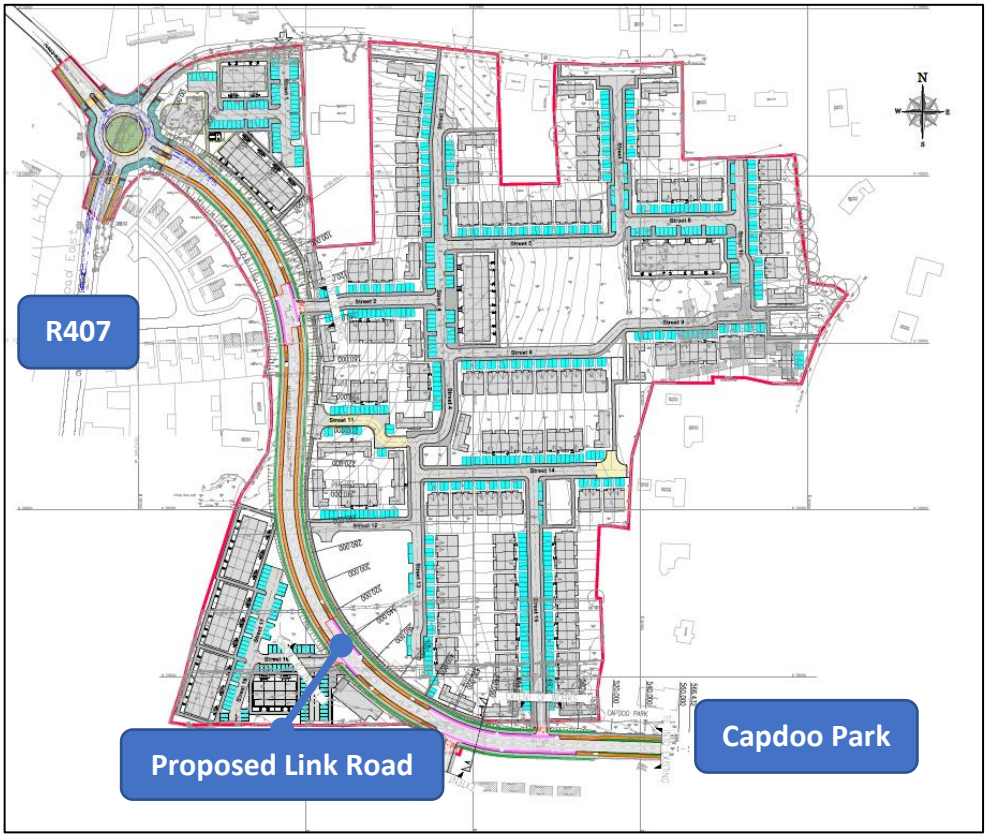


Figure 5.1 – Capdoo Link Road

5.3.2 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 and other local amenities, and thus these local trips would still be made regardless of the development of the new Capdoo Link Road.

Network Redistribution

5.3.3 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.

5.3.4 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.

5.3.5 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.

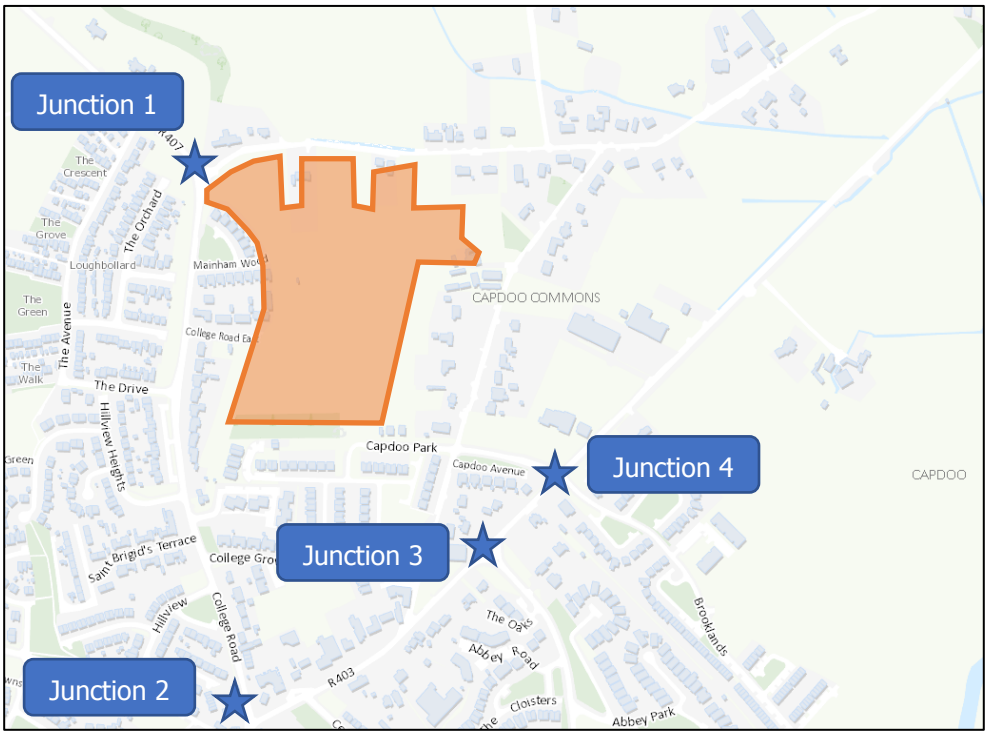


Figure 6.2: Junction Network Diagram

Junction		% Impact
AM	1 - New Roundabout	13%
	2 - R403/R407 Priority-Controlled Junction	-5%
	3 - R403 Roundabout	-6%
	4 - Site Entrance East	5%
PM	1 - New Roundabout	17%
	2 - R403/R407 Priority-Controlled Junction	-6%
	3 - R403 Roundabout	-6%
	4 - Site Entrance East	6%

Table 5.2: Impact of development on surrounding Traffic Network

6.0 NETWORK ANALYSIS

6.1 INTRODUCTION

6.1.1 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.

6.1.2 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.

6.1.3 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.

6.1.4 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.

6.1.5 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 6.1** 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.

6.1.6 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.

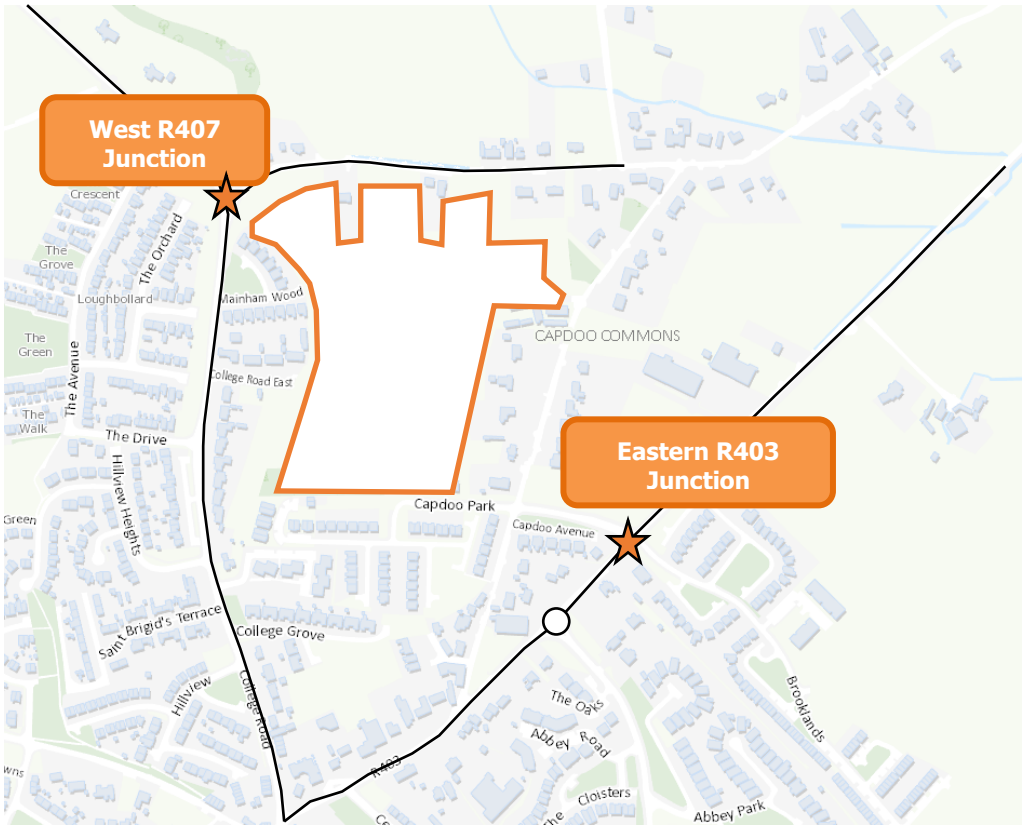


Figure 6.1: Map of Site and Junctions Analysed (Source: www.osi.ie)

6.1.7 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 site entrance to the west of the site has been proposed to have a 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.

6.1.8 The relevant ARCADY and PICADY results are observed in **Table 6.1 - 6.3**, where the 'Do Nothing' and 'Do Something' junction analysis results may be seen. The ARCADY and PICADY output files may be observed in **APPENDIX D** and **APPENDIX E**.

6.1.9 The Eastern R403 Junction has been modelled as a priority controlled crossroads, with 4 arms. This junction connects the R403 regional road to the brooklands development and to Capdoo Park, which further connects to the proposed link road for the 'Do Something' approach.

6.1.10 The arms of the junction, which may be seen in **Figure 6.2**, are labelled as follows:

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

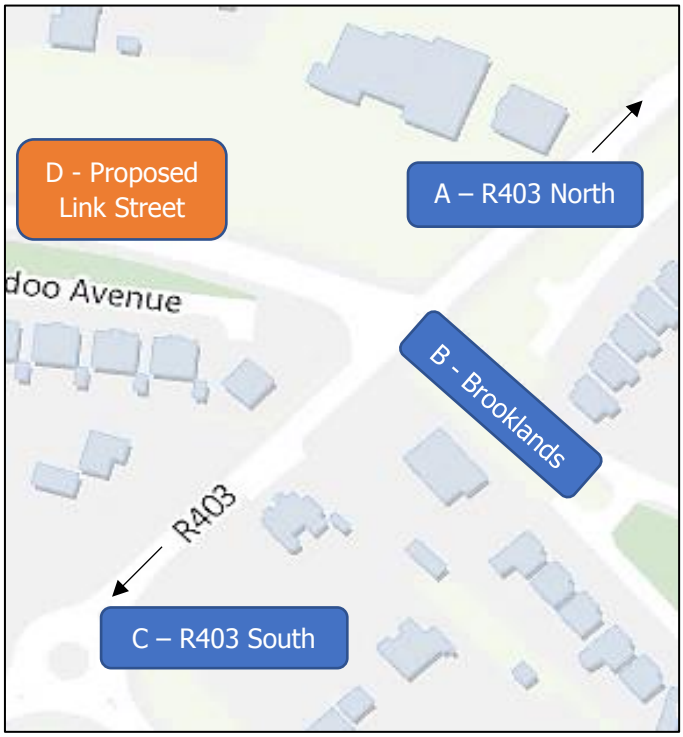


Figure 6.2: Eastern R403 Junction layout

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
	PM PEAK	A	R403 North	0.7	4.73	0.19
		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
2025 DS	**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
		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
		A	R403 North	11.1	21.73	0.83

	PM PEAK	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

Table 6.1: East Junction PICADY Results

6.1.11 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 site despite the increase in vehicles using the road network as a result of the development.

6.1.12 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.

6.1.13 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, which is achieved via a proposed link road offering connectivity to the site.

Figure 6.3: West Junction Existing layout

6.1.14 The 3 arms for the PICADY analysis may be seen above in **Figure 6.3** with the existing road layout and are labelled as follows:

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

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
2020 DN	AM PEAK	A	R407 North			
		B	Capdoo	0.1	13.26	0.08
		C	R407 South	0.1	5.86	0.04
	PM PEAK	A	R407 North			
		B	Capdoo	0.2	15.28	0.16
		C	R407 South	0.1	5.91	0.07
2025 DN	AM PEAK	A	R407 North			
		B	Capdoo	0.1	13.93	0.09
		C	R407 South	0.1	5.77	0.05
	PM PEAK	A	R407 North			
		B	Capdoo	0.2	16.13	0.18
		C	R407 South	0.1	5.85	0.07
2035 DN	AM PEAK	A	R407 North			
		B	Capdoo	0.1	14.61	0.10
		C	R407 South	0.1	5.67	0.05
	PM PEAK	A	R407 North			
		B	Capdoo	0.3	17.65	0.21
		C	R407 South	0.2	5.79	0.08

Table 6.2: Site West entrance PICADY Results

6.1.15 The 4 arms for the ARCADY analysis can be seen in **Figure 6.4** and are labelled as follows:

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

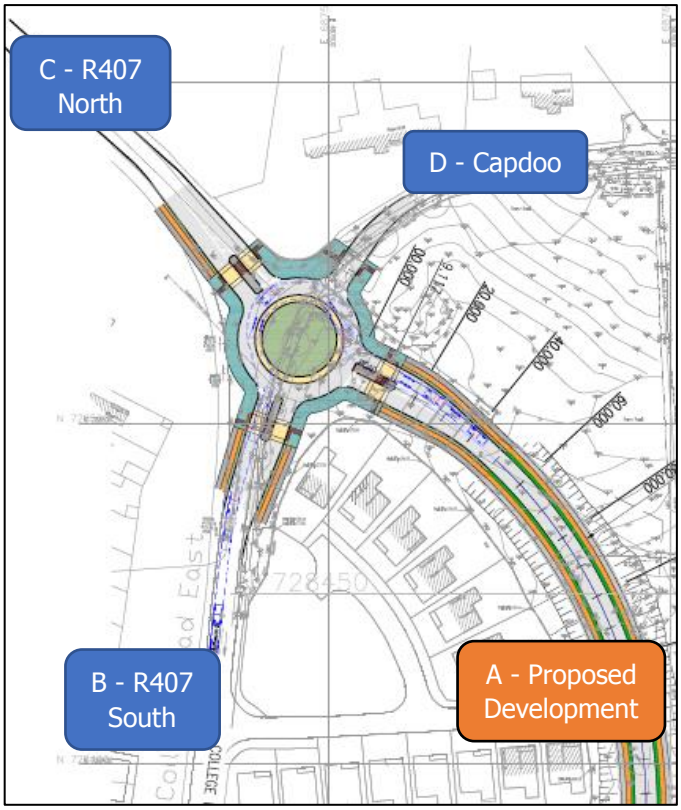


Figure 6.4: Site West entrance Proposed Layout

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
2025 DS	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
		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

Table 6.3: Site West entrance ARCADY Results

6.1.16 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.

6.1.17 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.

6.1.18 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.

6.1.19 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.

6.1.20 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 junctions links.

7.0 SUMMARY AND CONCLUSION

7.1 OVERVIEW

7.1.1 DBFL Consulting Engineers have been commissioned to undertake a Traffic and Transport Assessment (TTA) for a proposed residential development on a Greenfield site at Capdoo, Clane, County Kildare.

7.1.2 The proposal includes the provision for a residential housing development comprising of 366 units, local parks and open green spaces, including a link road network as outlined in Clane's Local Area Plan.

7.1.3 Based upon the information and analysis detailed within this TTA it has been demonstrated that:

- The site of the proposed development, positioned within the outlined small town environment, is ideally located to maximise access to / from the site by sustainable forms of travel including walking, cycling and public transport in line with future development plans for both the county and local area.
- Due to the nature of the proposed development, this site may encourage sustainable methods of transport in the local area, with the potential to act as a driver for the local and county council to act and implement their plans for developments to road networks and links for cycling, as apparent in GDA proposed cycle network, KCC Development plan and Clane Local Area Plan.
- The proposed development will not result in a deterioration of the local transport systems operational performance, instead this site may promote and support public transport links and encourage sustainable travel modes.

7.1.4 Furthermore, it has been established that the predicted journeys to schools for the children of local residents are within reasonable walking and cycling ranges, providing an ideal basis for sustainable transport means. Nevertheless, the presence of the bus services operating along the R403, further enhances the sustainability of the site through the provision of public transport bus connections, as an alternative to private car, to destinations including Dublin and Naas.

7.1.5 Finally, the design of the residential scheme to include a link road for permeability helps reduce congestion and traffic impacts on the R403 and R407 roads, whilst providing cycling and pedestrian links.

7.2 CONCLUSION

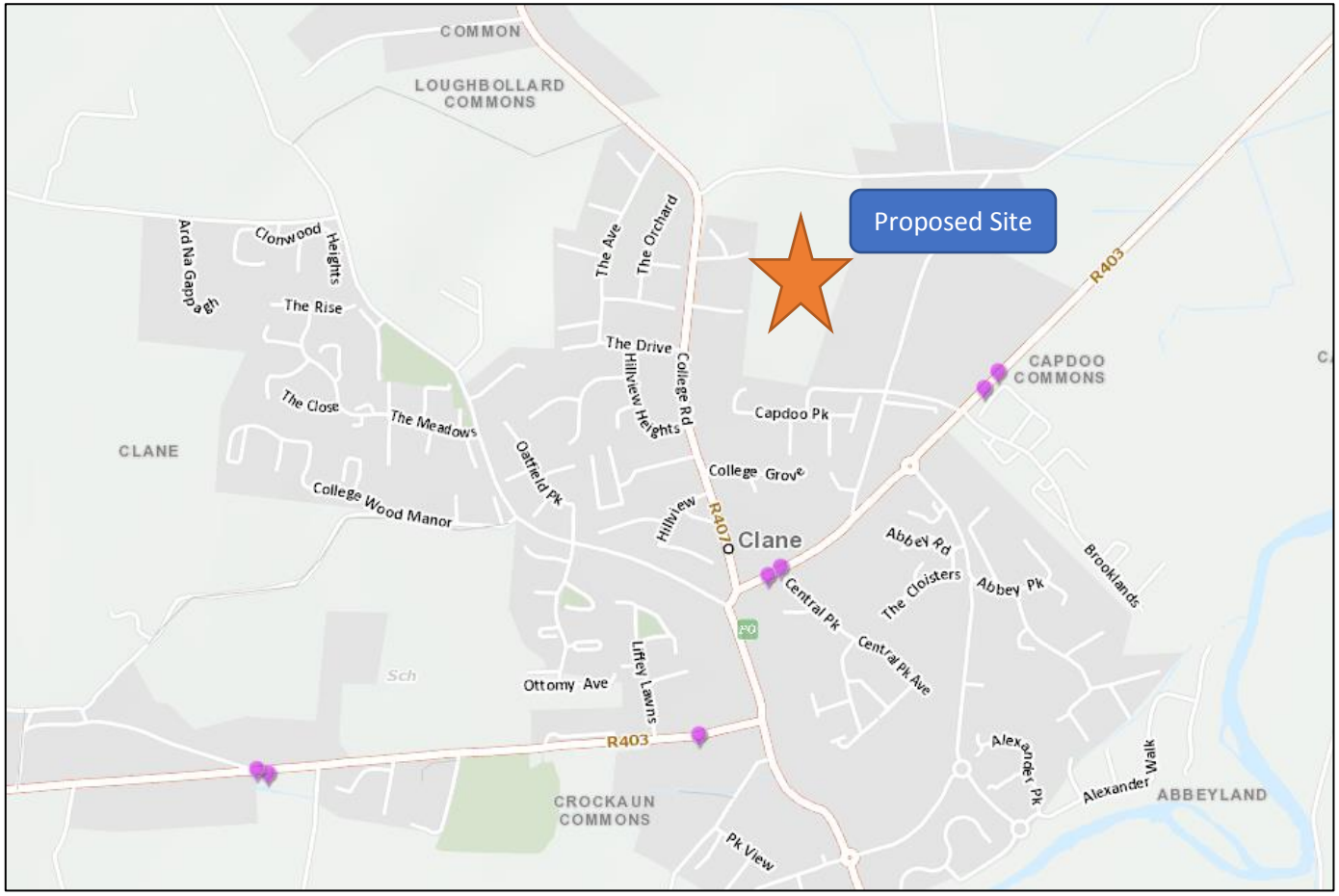
7.2.1 In conclusion, we believe that the opportunity is available, in terms of transport and traffic, for the local authority to consider favourably the proposed residential development on the subject site.

7.2.2 It has been demonstrated within this report that the location of the proposed development and the anticipated travel desire lines to local schools, shops and places of employment help maximise the opportunities for the uptake of sustainable travel practises for residents and visitors travelling to and from the site.

7.2.3 It is concluded that there are no traffic or transportation related reasons that should prevent the granting of planning permission for the proposed development.

Appendix A

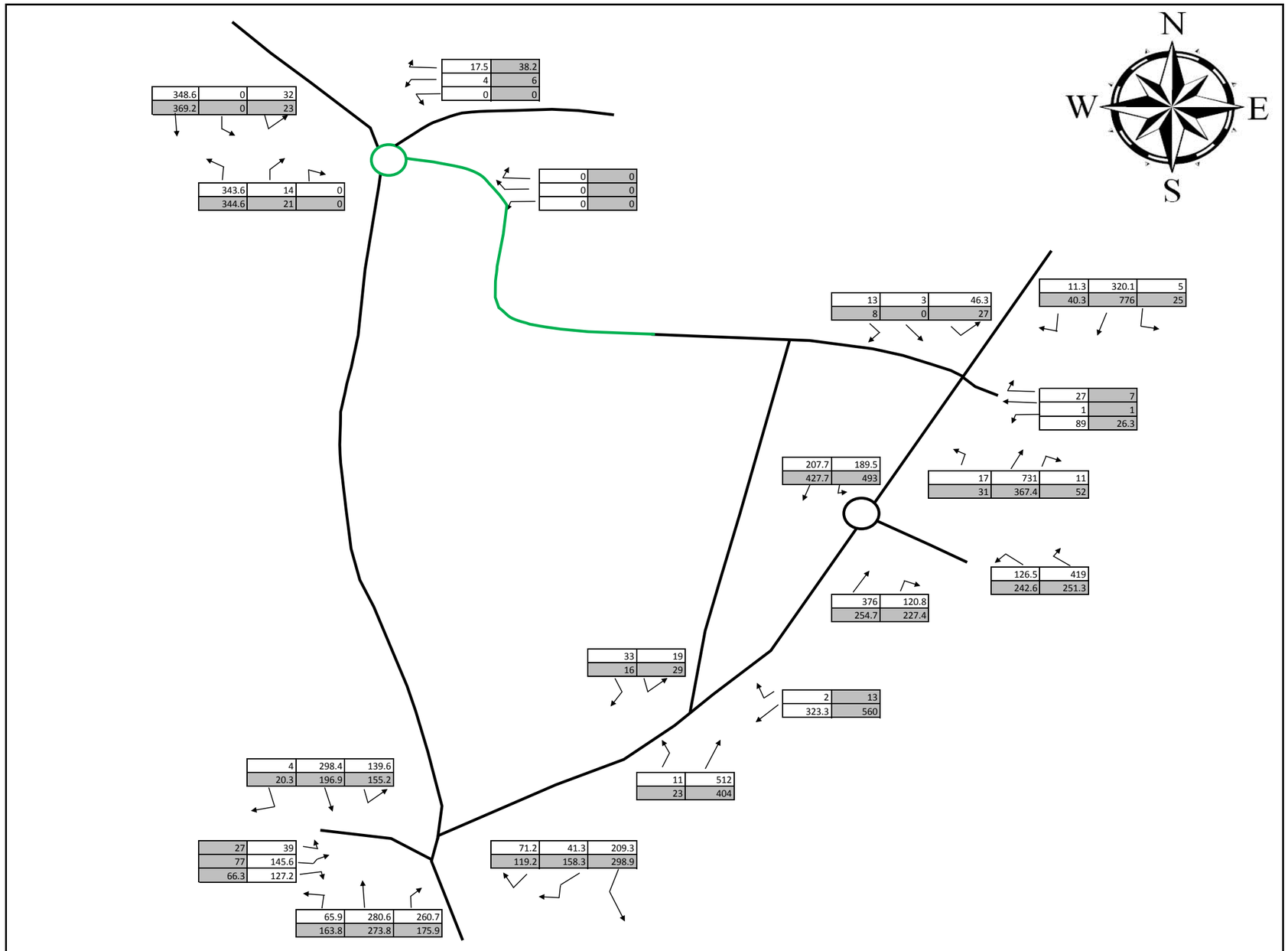
Bus Eireann Routes



Bus Eireann bus stops servicing Clane (From geohive.ie)

Appendix B

Traffic Flow Diagram



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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

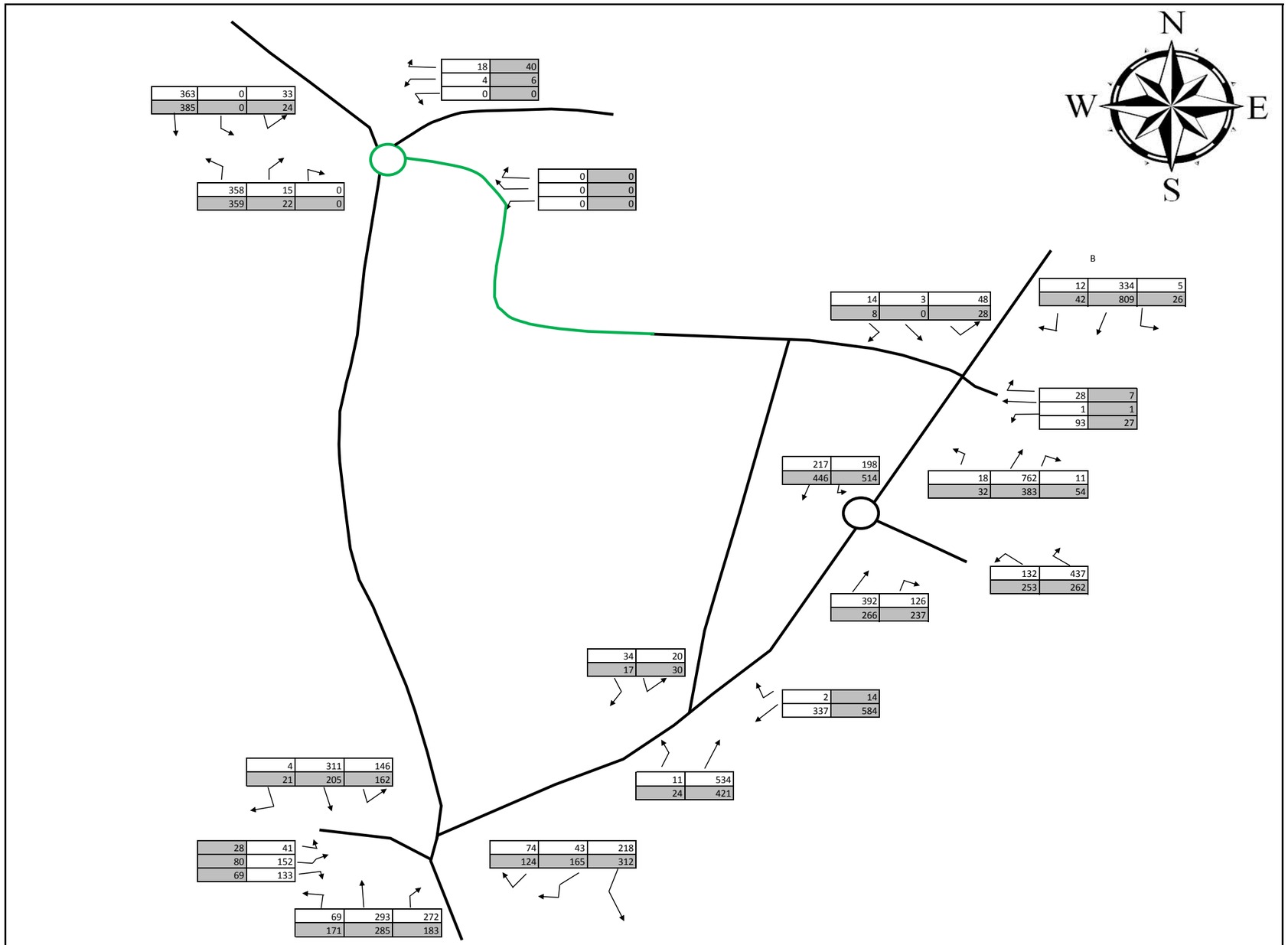
Flows relate to data recorded on Wednesday 20th September 2017

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

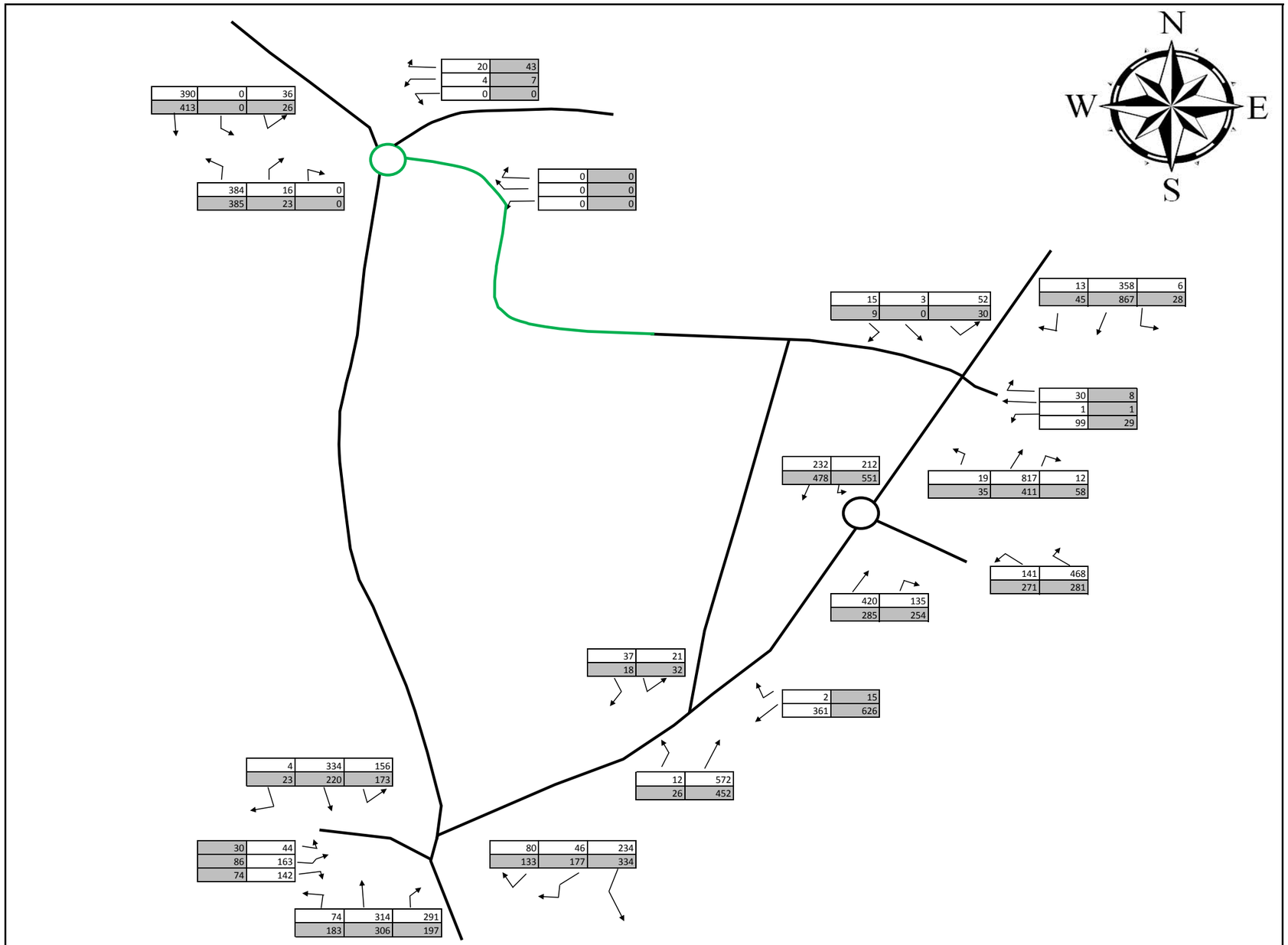
Ref: p162074\calcs\excel\162074 Traffic Model 001

Figure: 1

Rev: -



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 :** Do Nothing 2020Opening 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:** 3; **Rev:** -	



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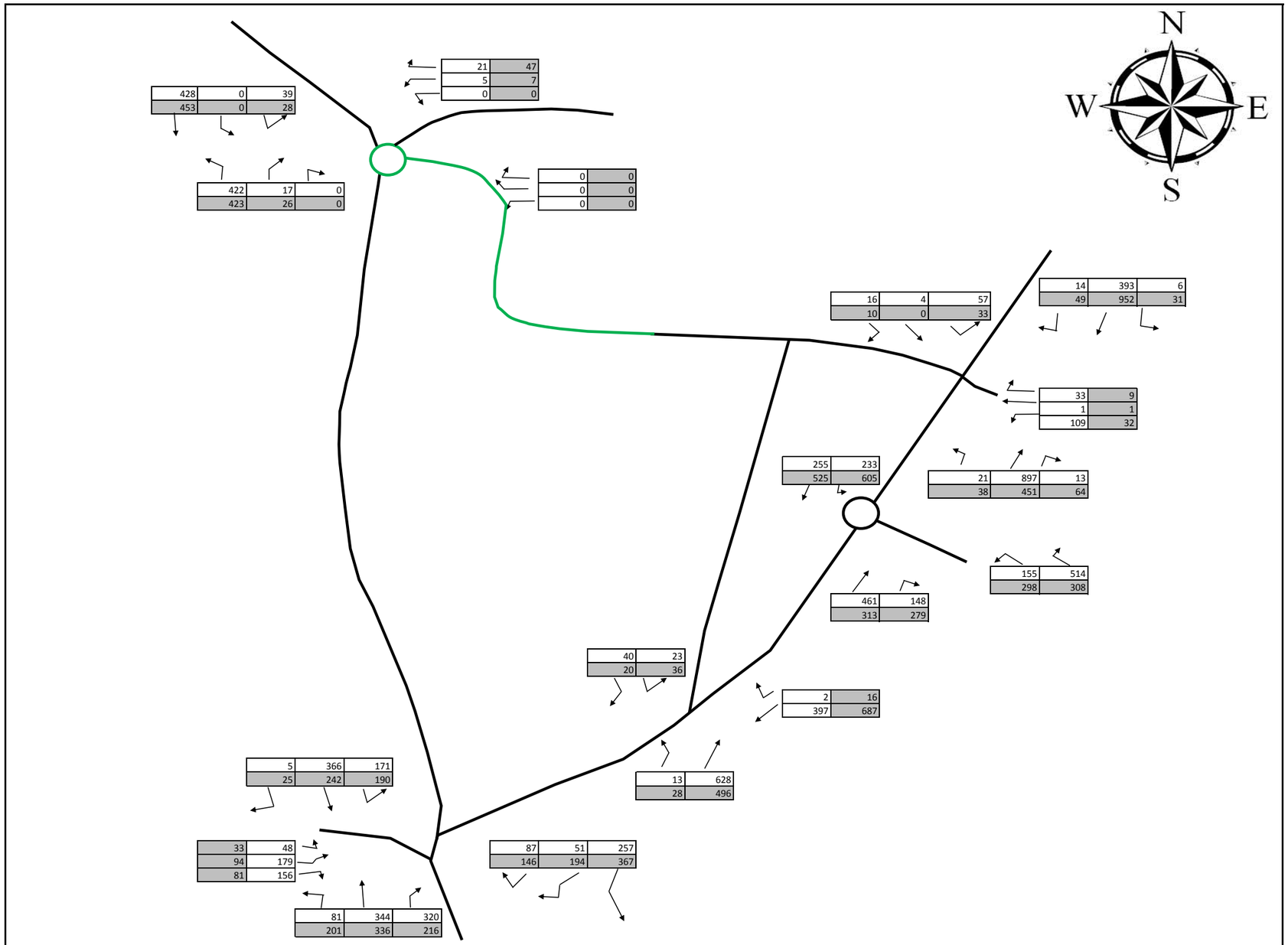

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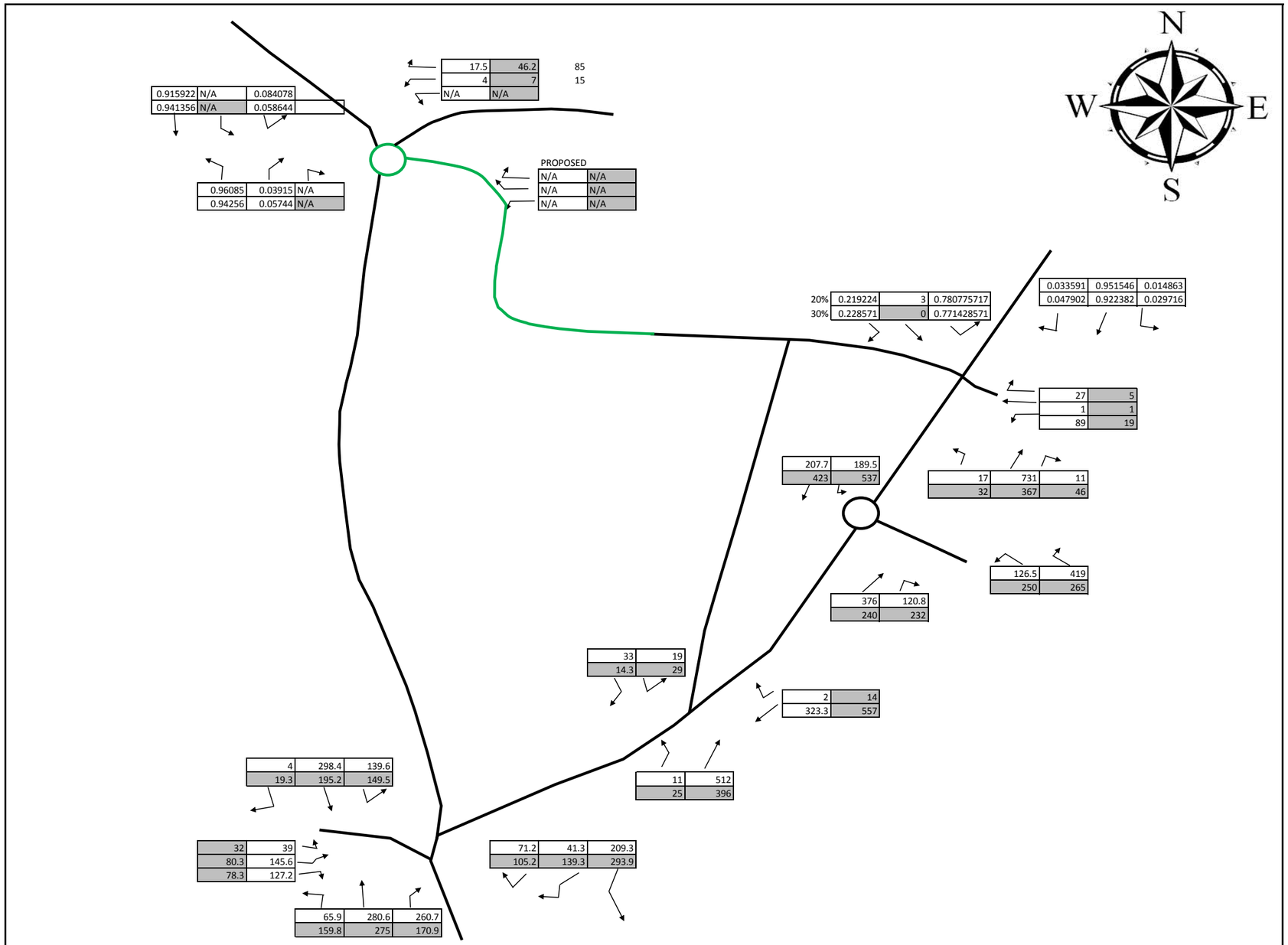

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Project :
Lands at Capdoo, Clane

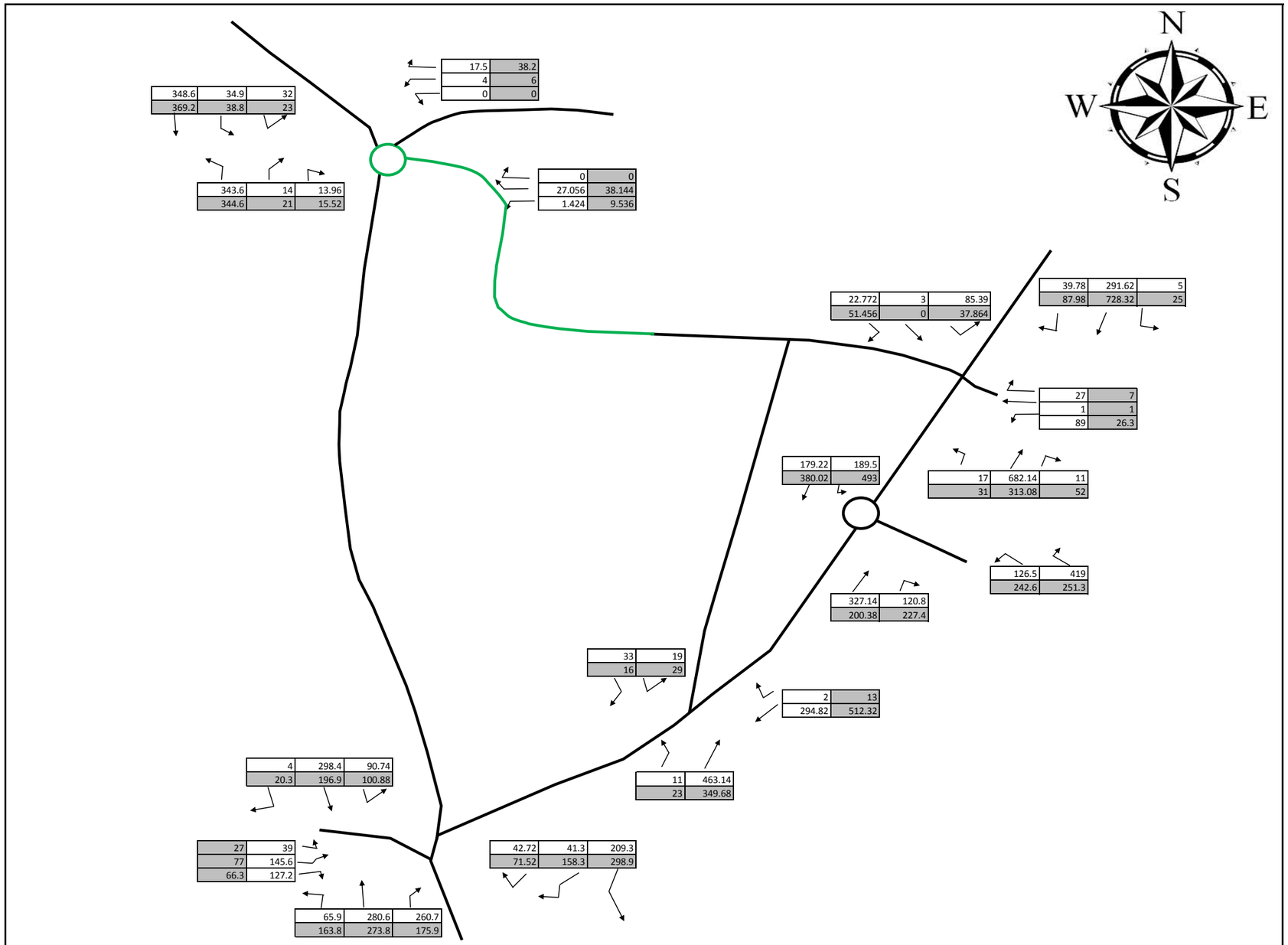
DRG. Title :
Existing Traffic Flows % Distribution

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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email: info@dbfl.ie

website: www.dbfl.ie

Project :
Lands at Capdoo, Clane

DRG. Title :
2017 Adjusted Base Flows

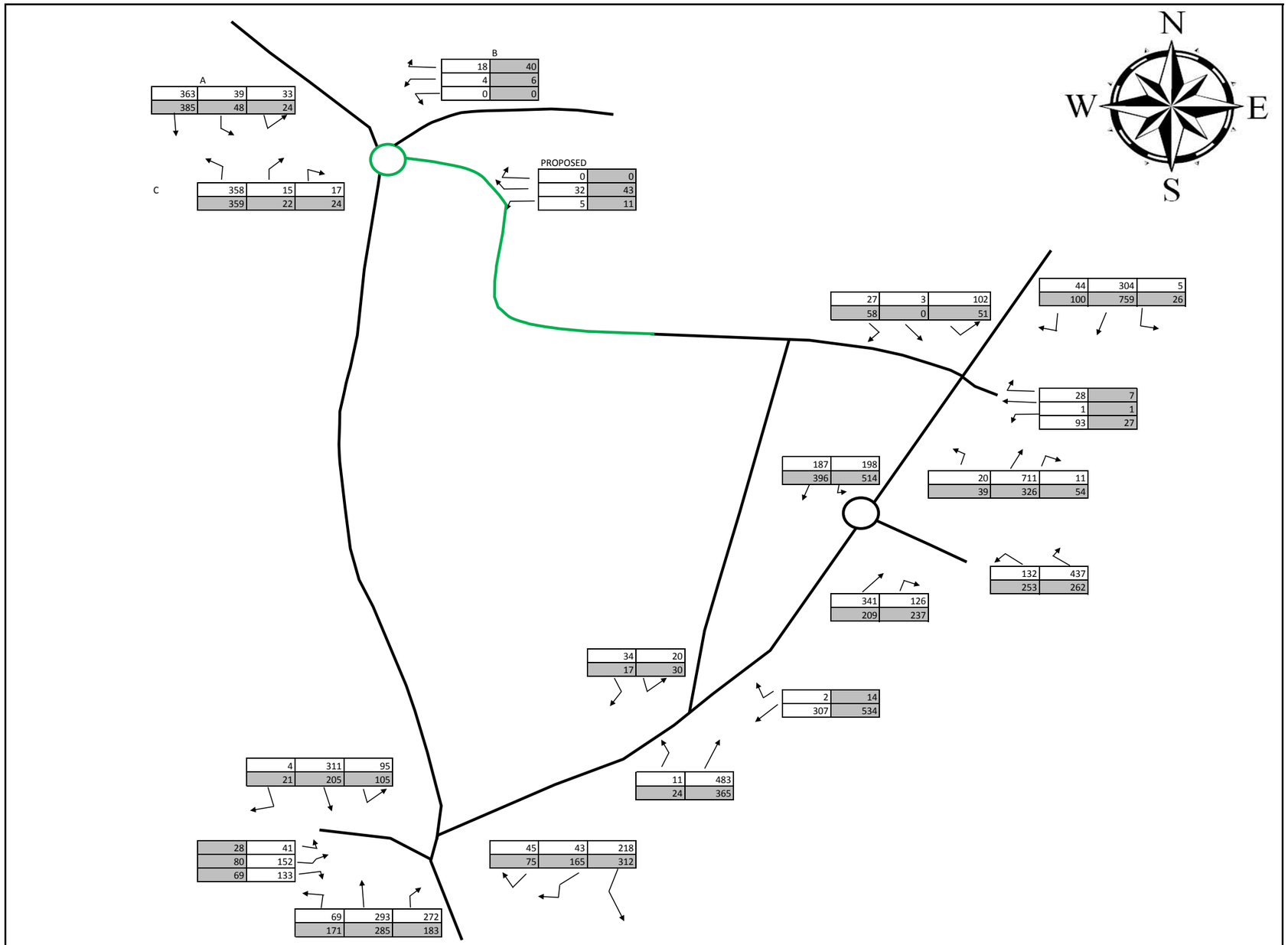
Key:
AM Peak Hour (0730-0830)
PM Peak Hour (1715-1815)
Proposed road
Existing road
Flows relate to data recorded on Wednesday 20th September 2017

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

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

Figure: 8

Rev: -



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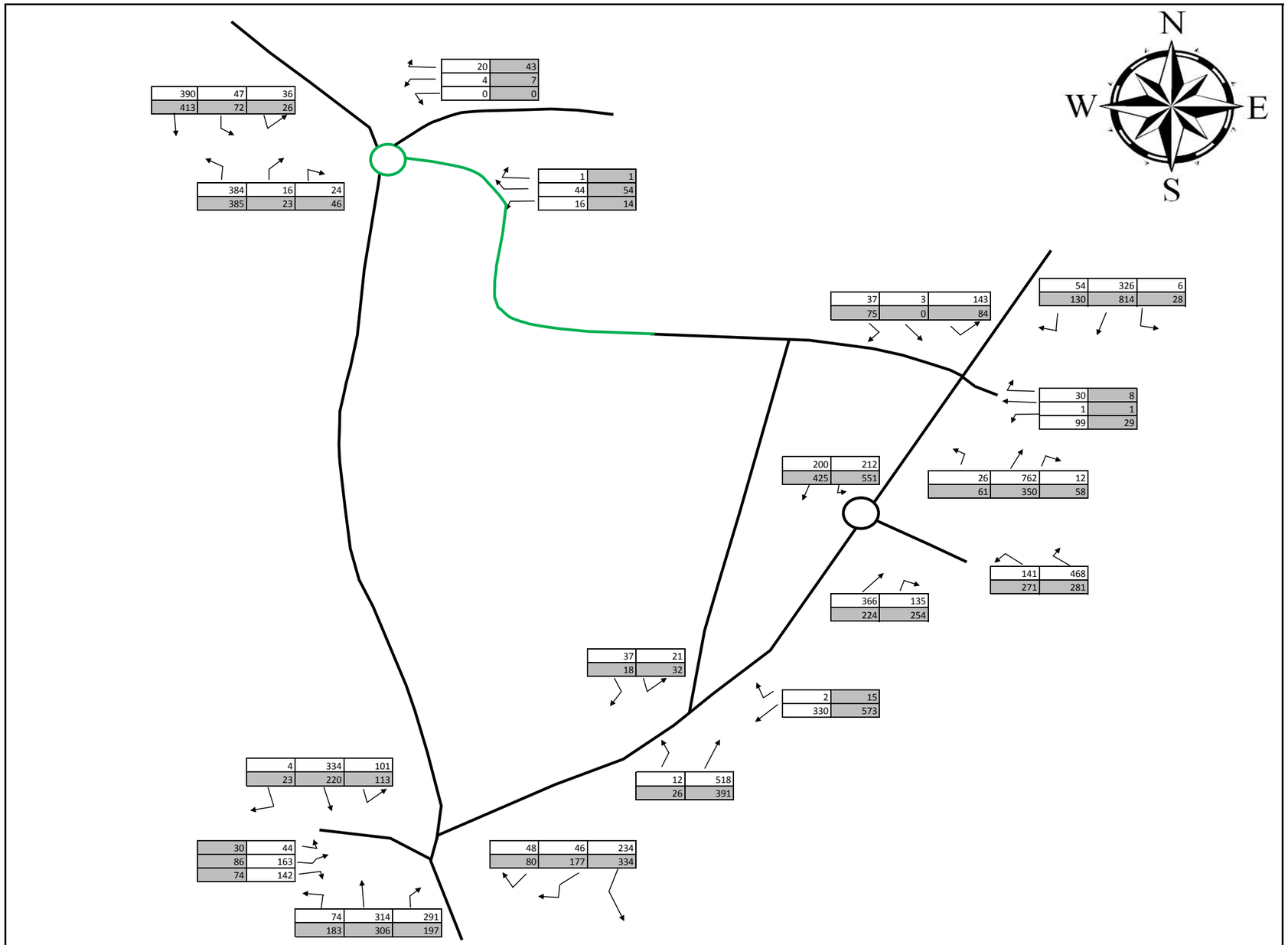

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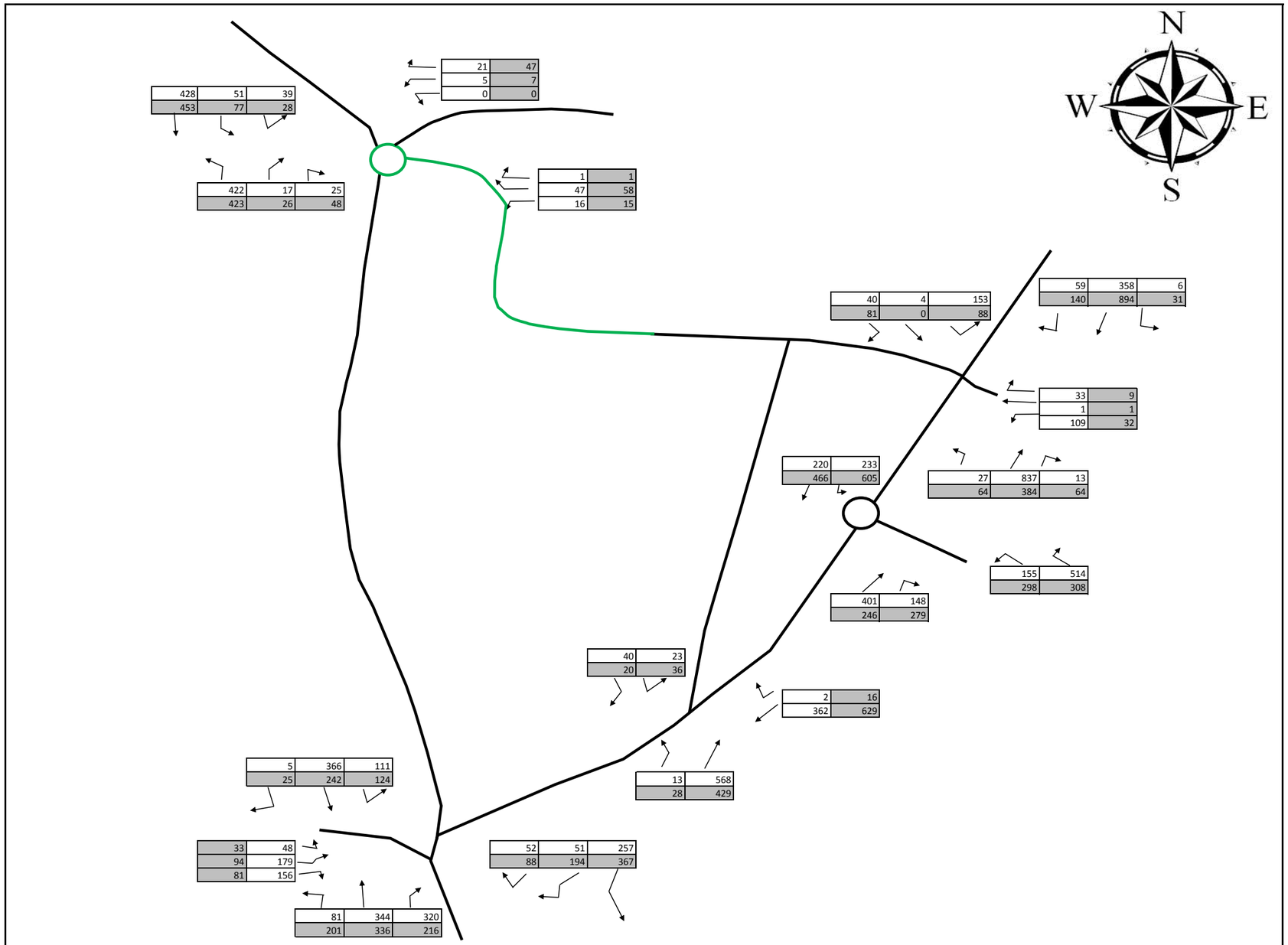

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Appendix C

TRICS Database Output Files

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.*

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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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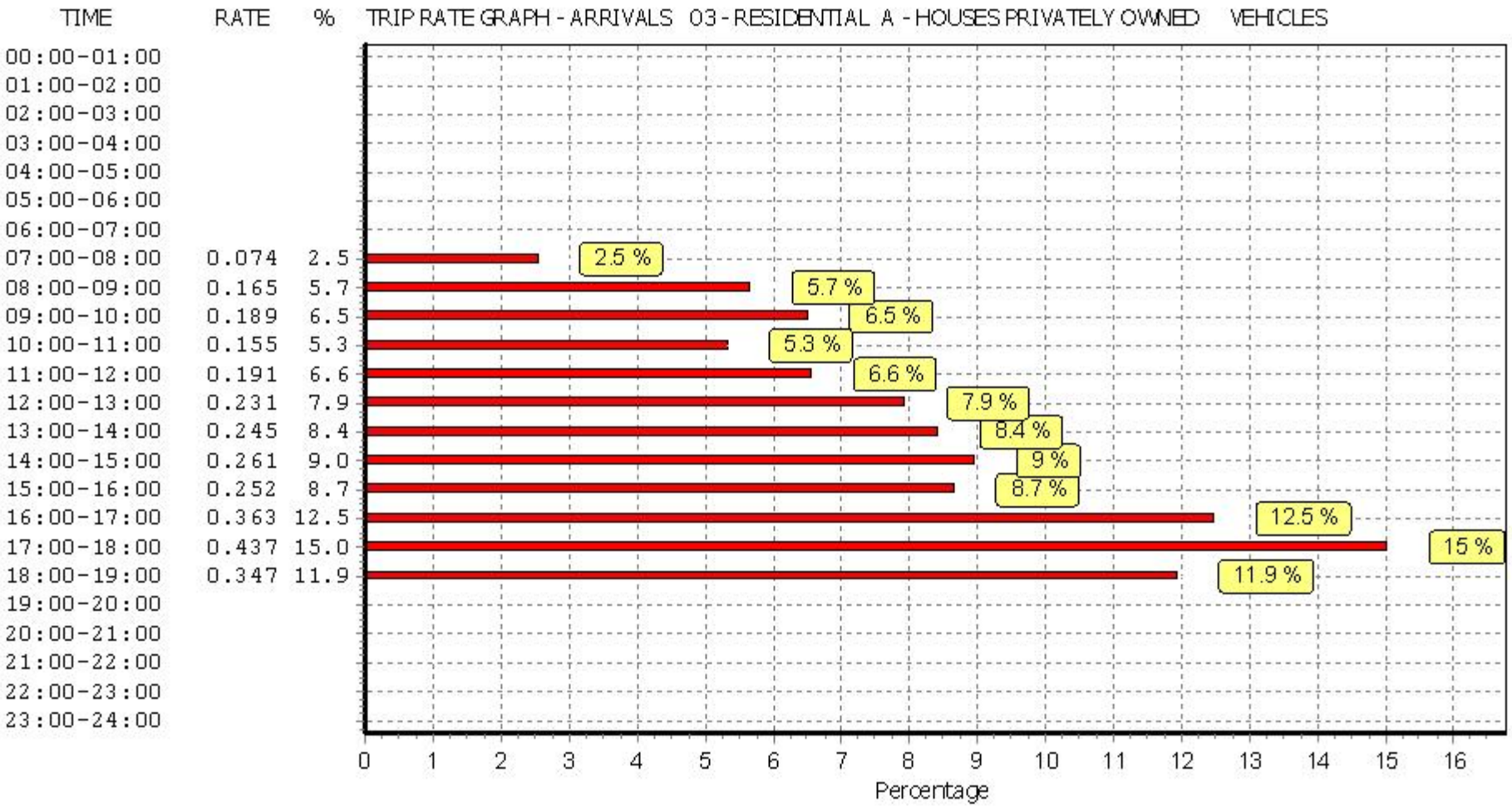

This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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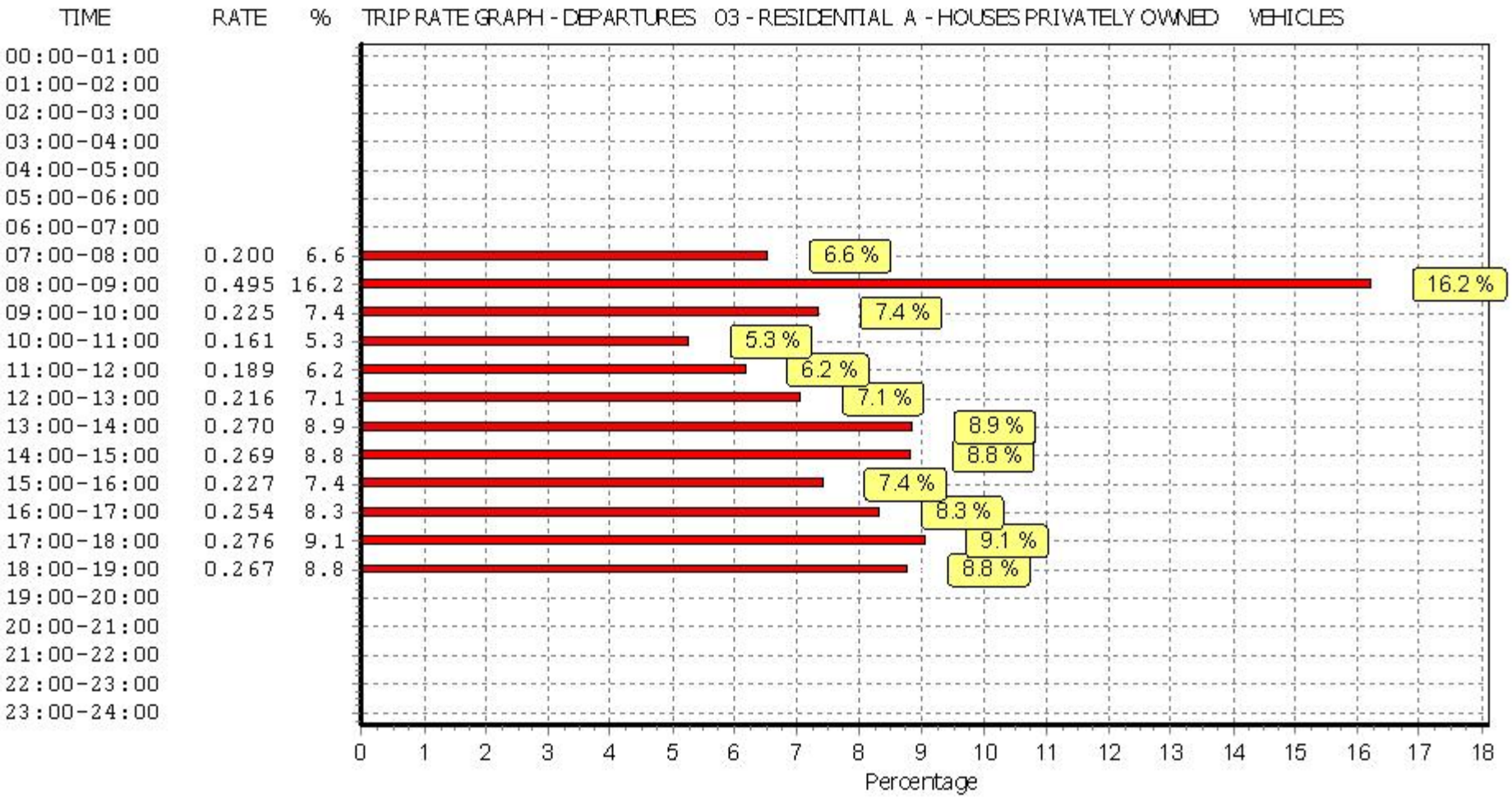

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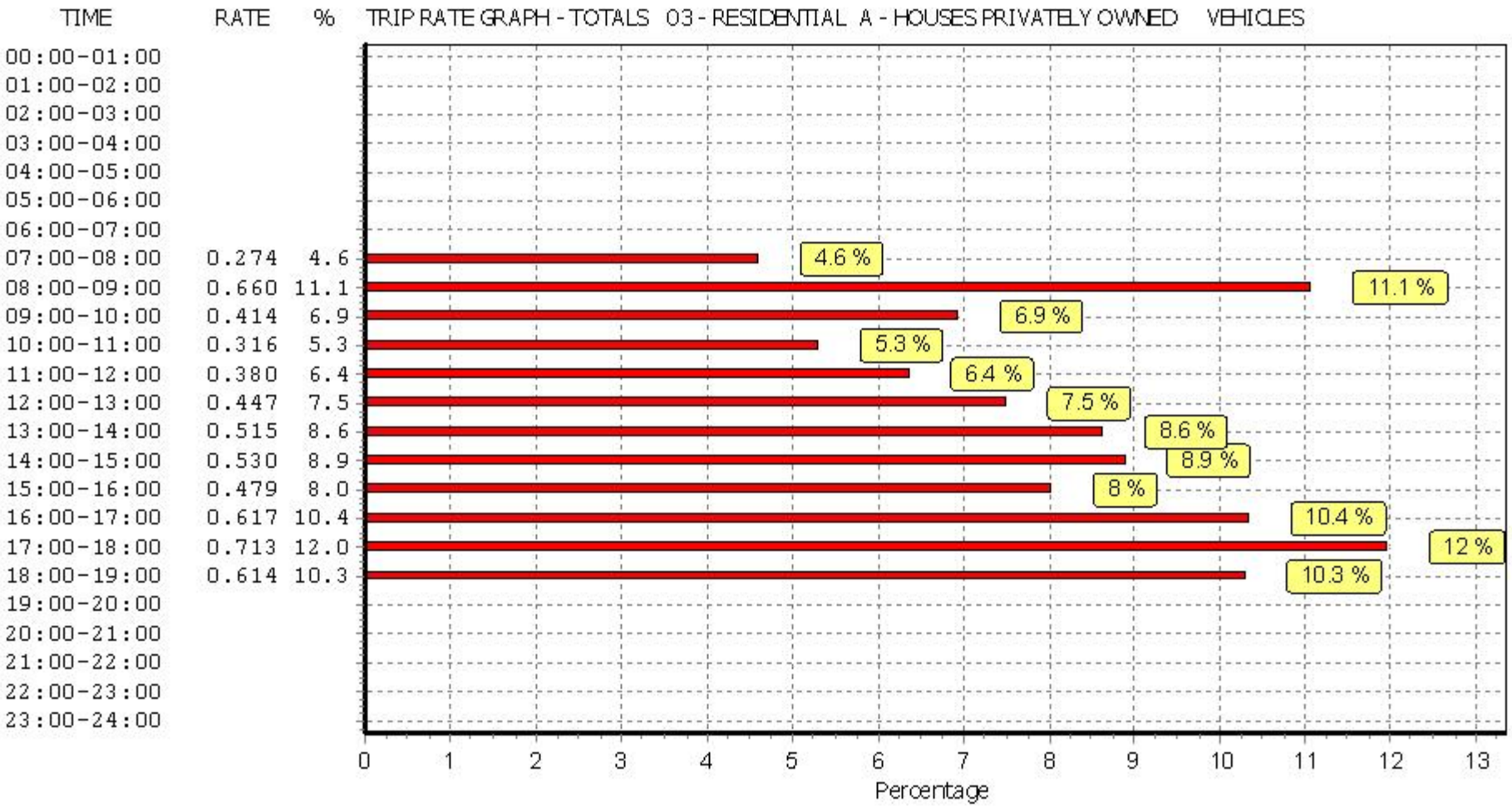

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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

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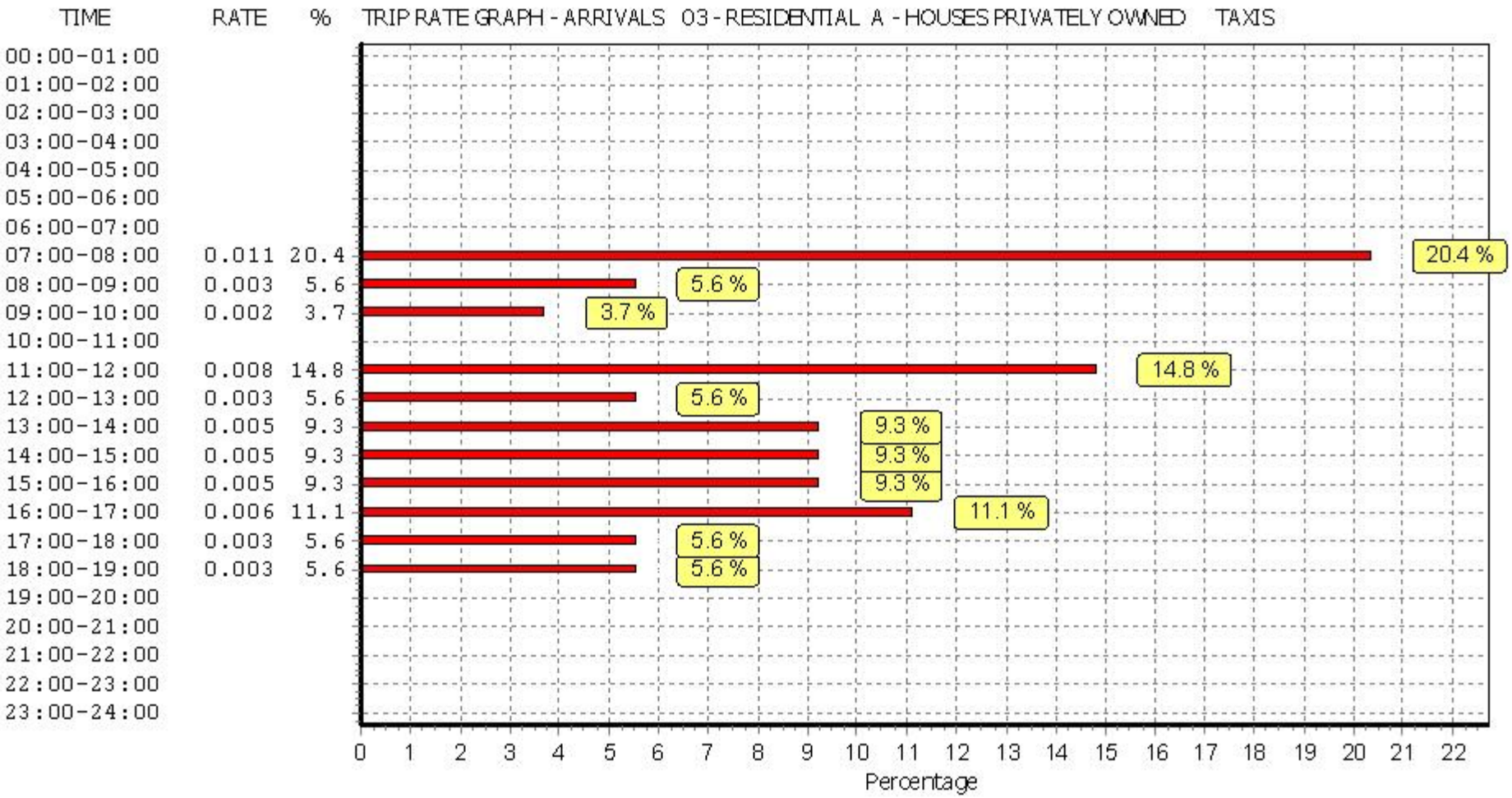

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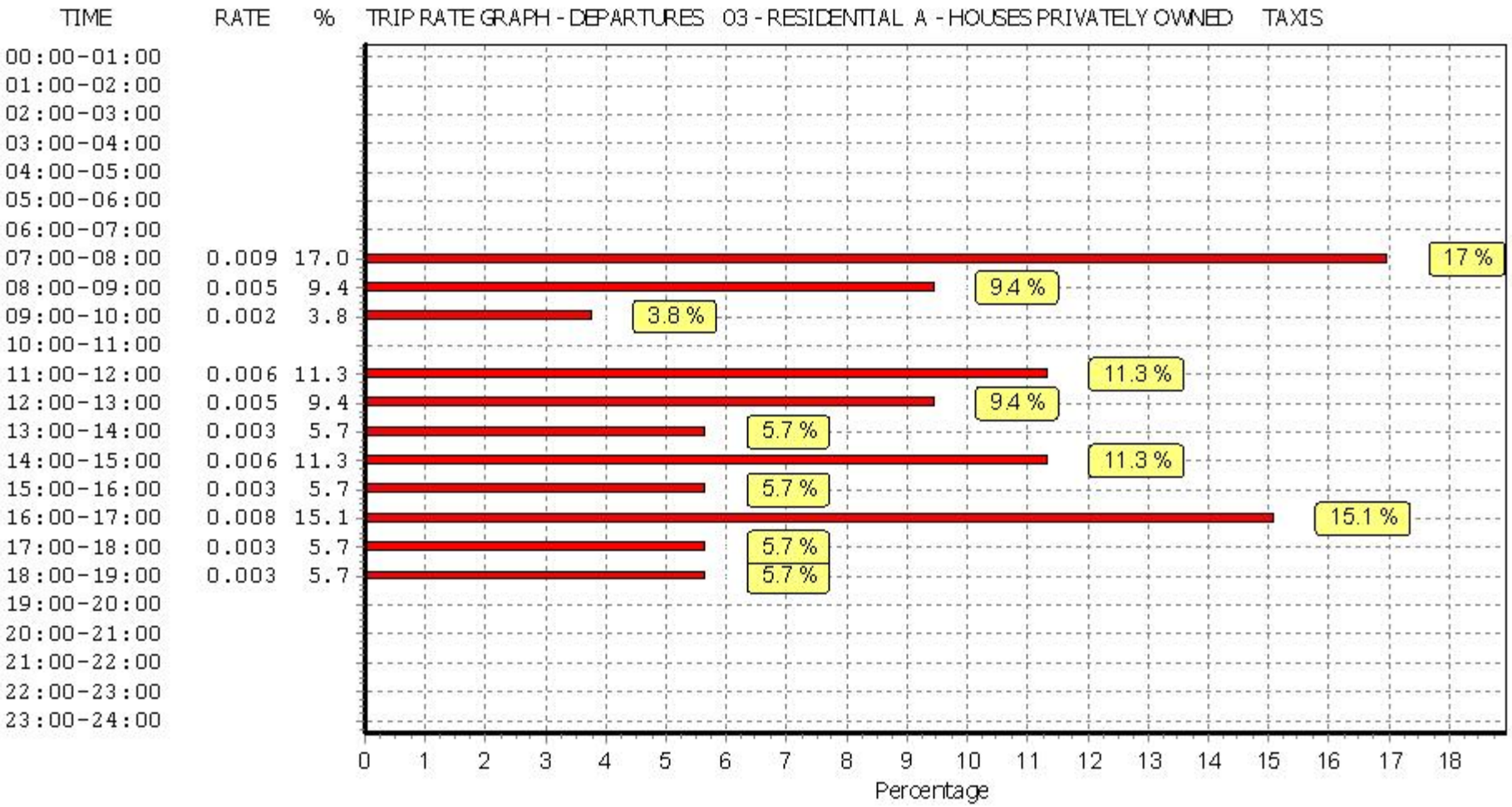
DBFL Ormond House Dublin Licence No: 638801



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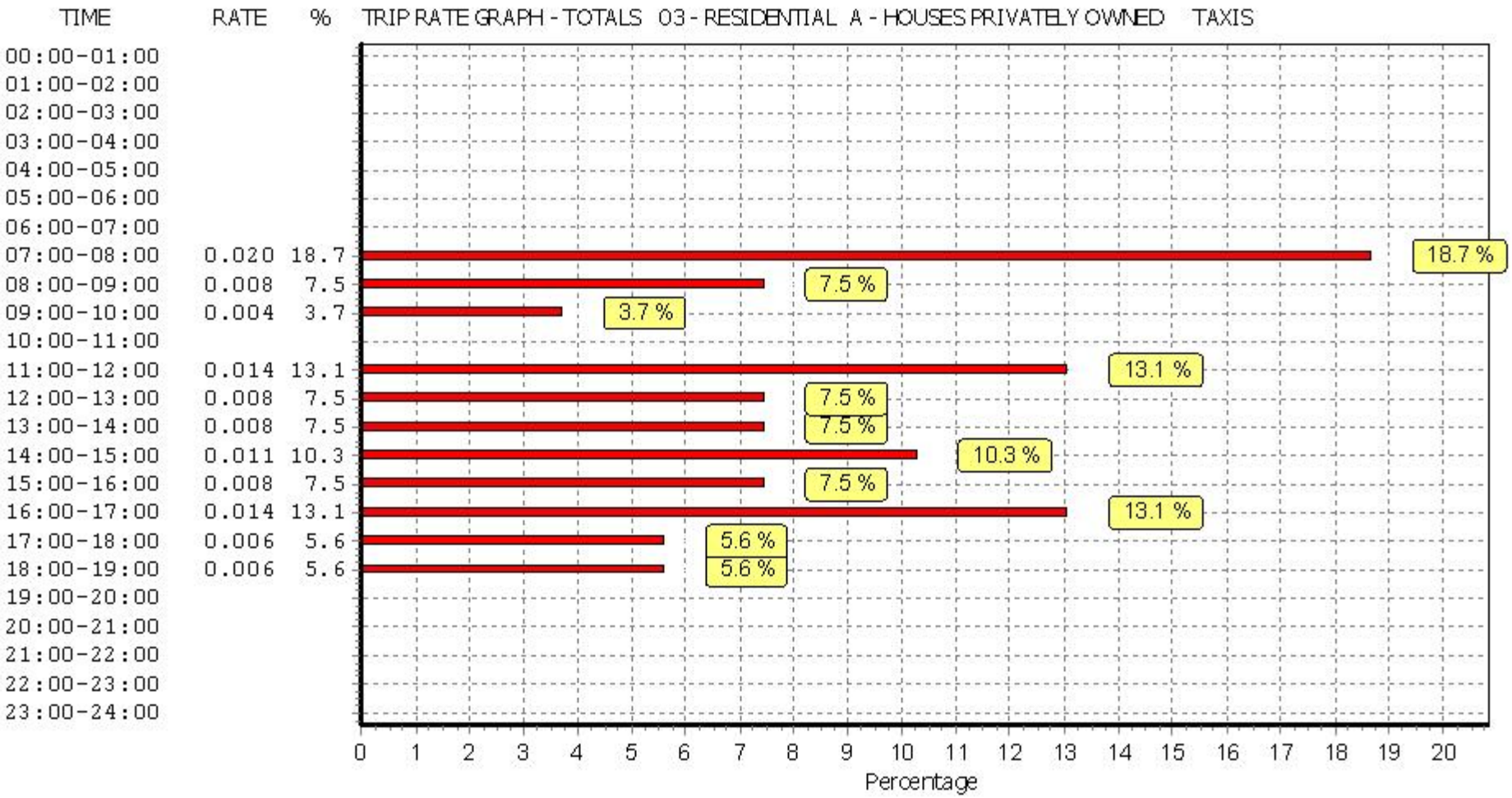

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

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.

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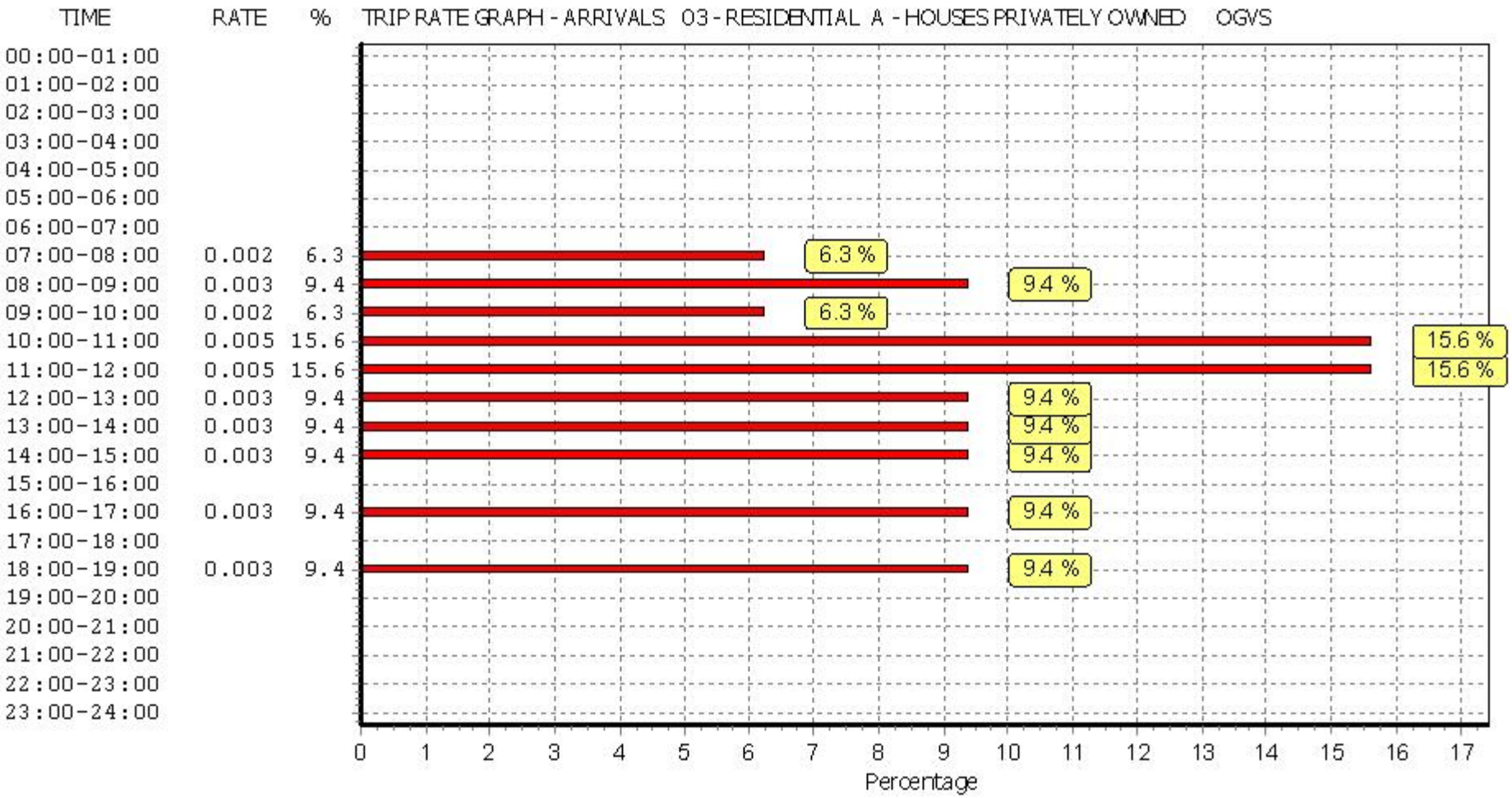
DBFL Ormond House Dublin Licence No: 638801



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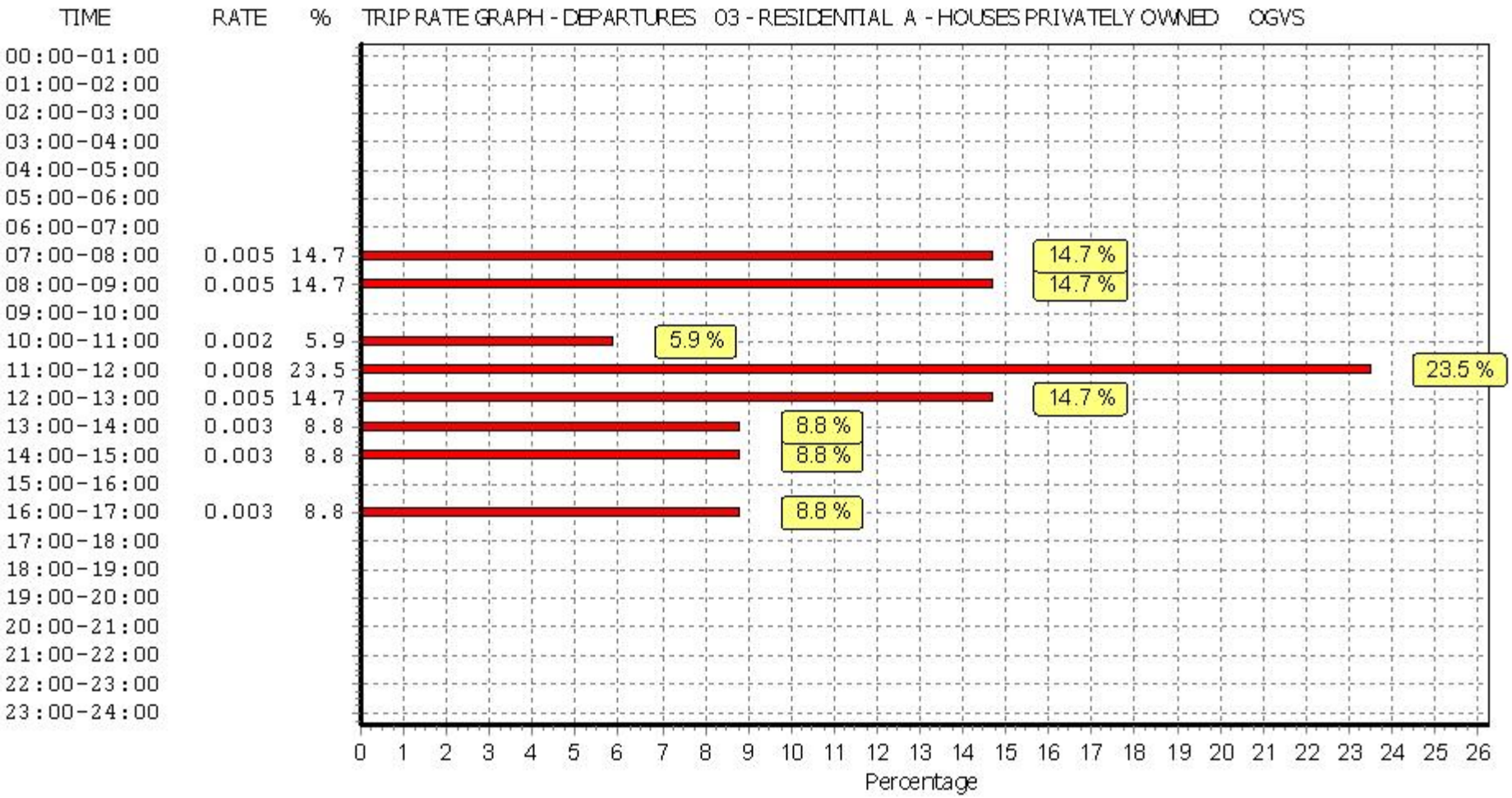

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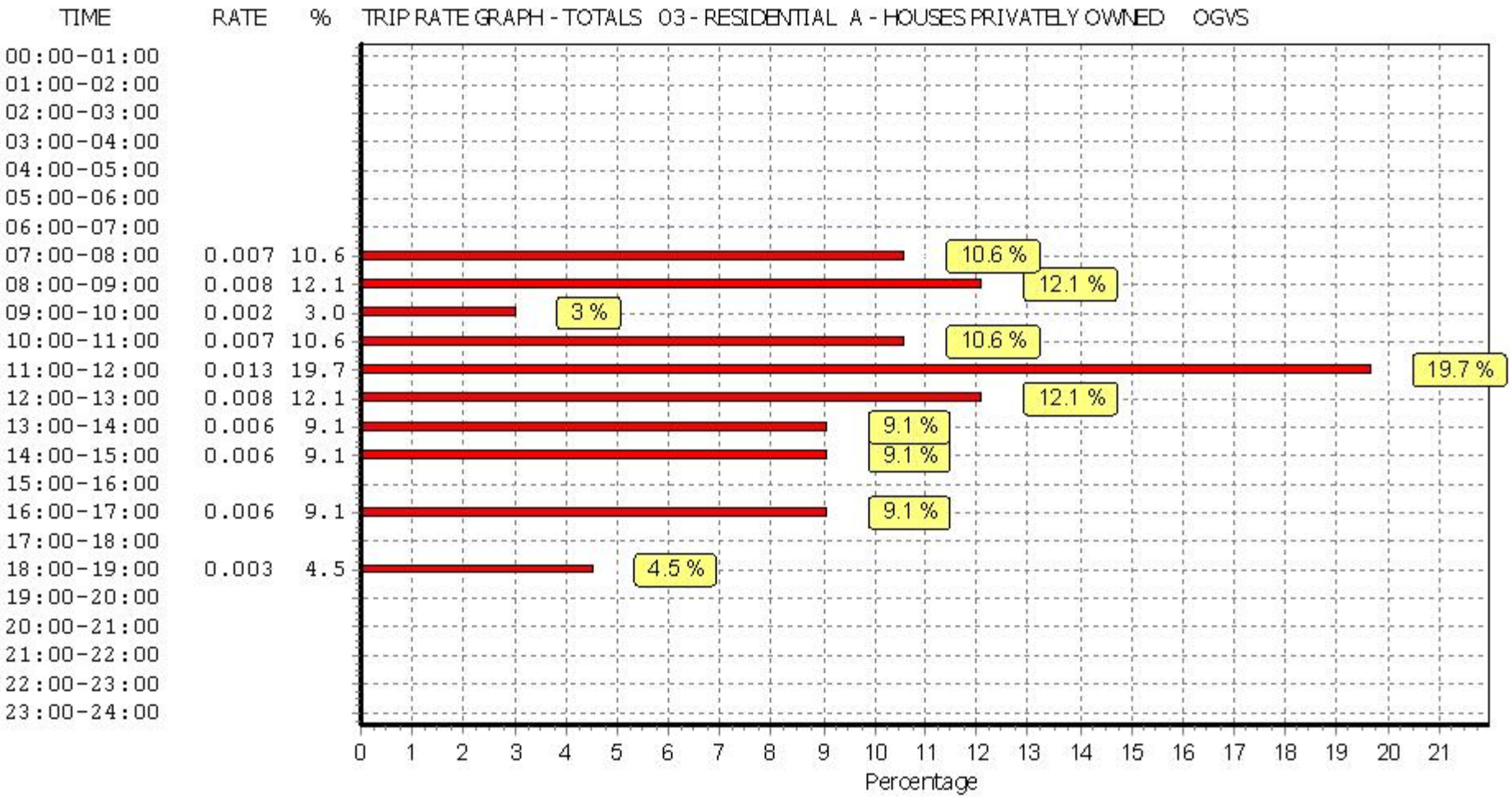

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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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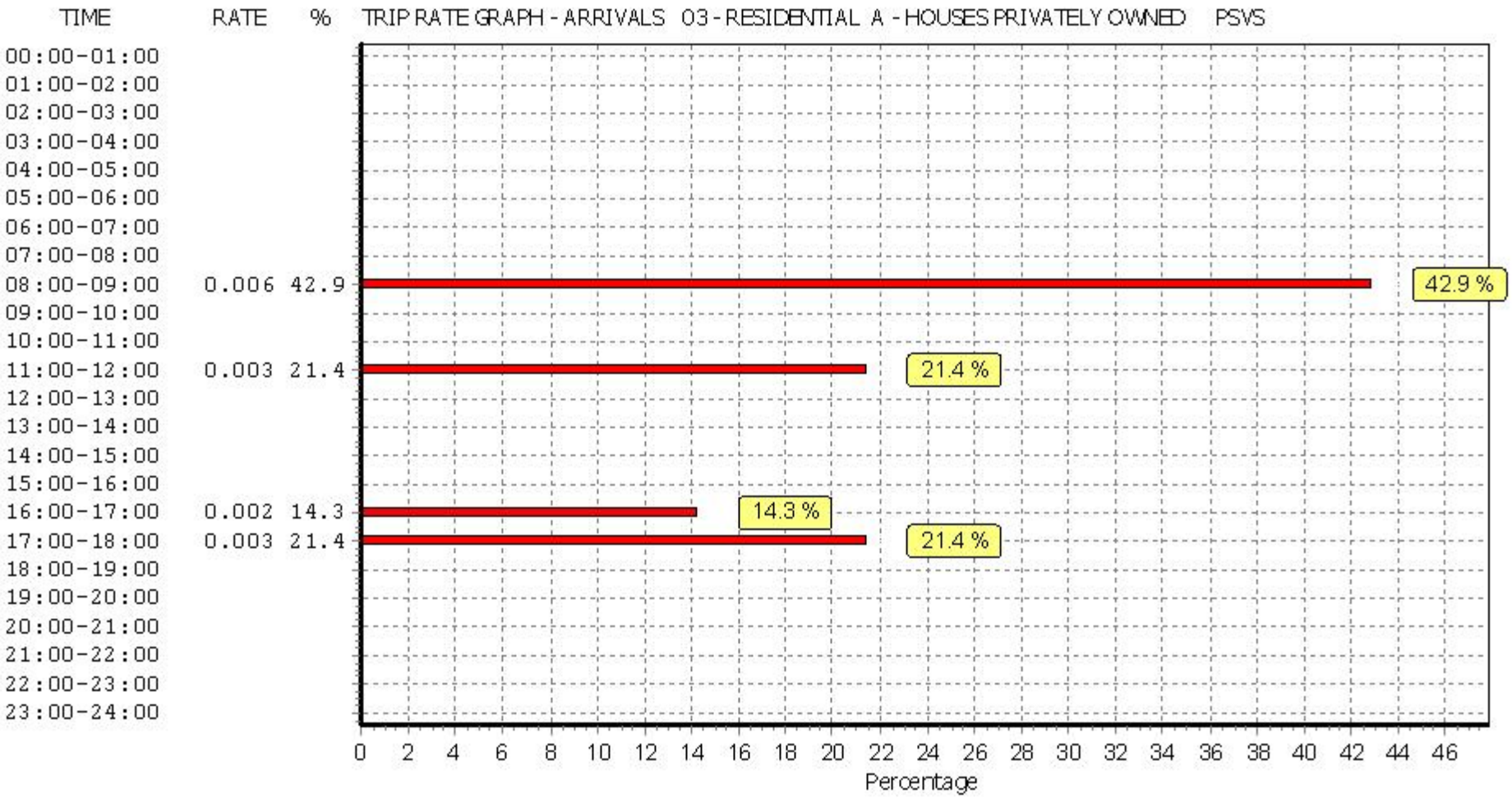

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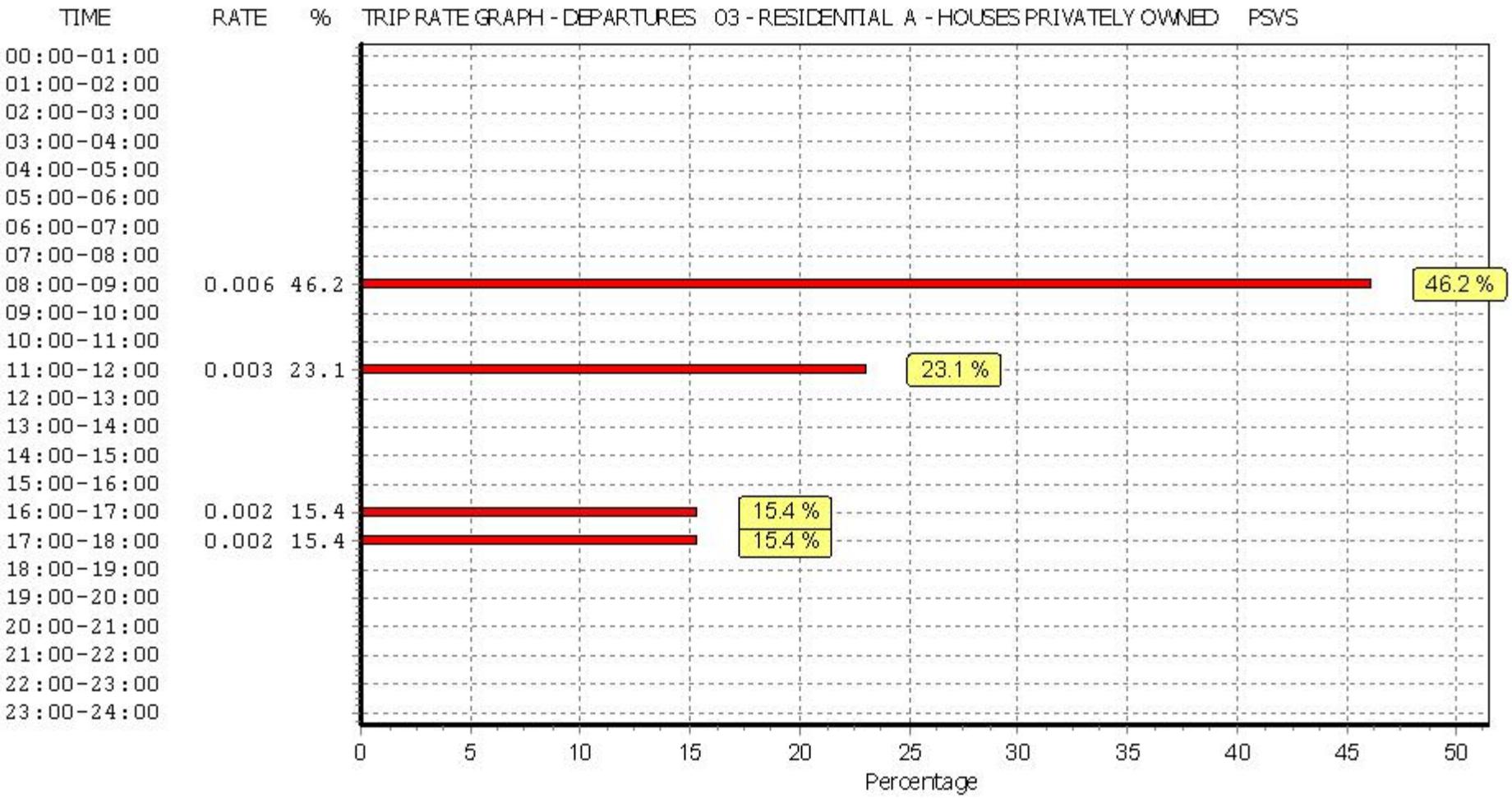
DBFL Ormond House Dublin Licence No: 638801



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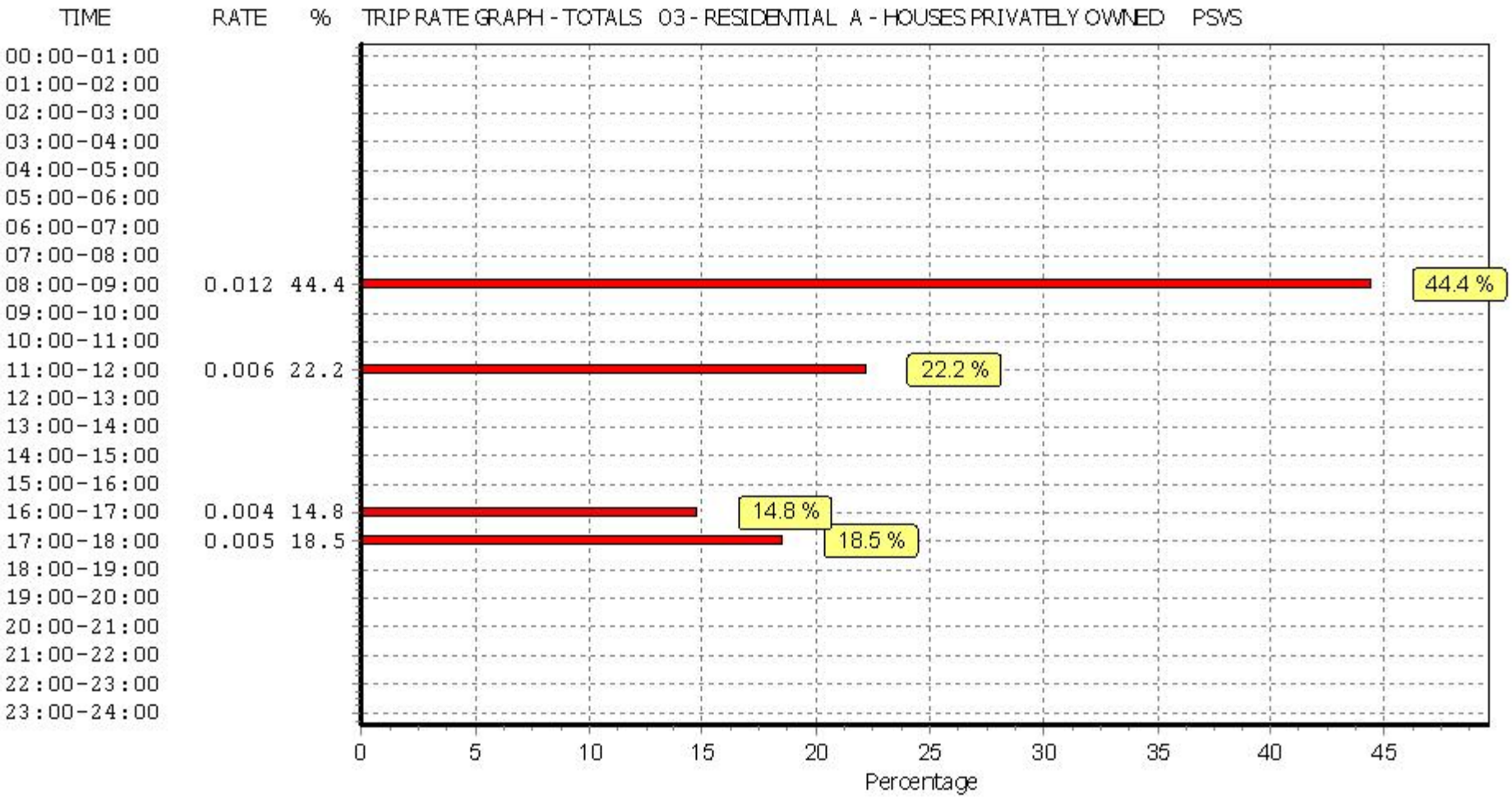

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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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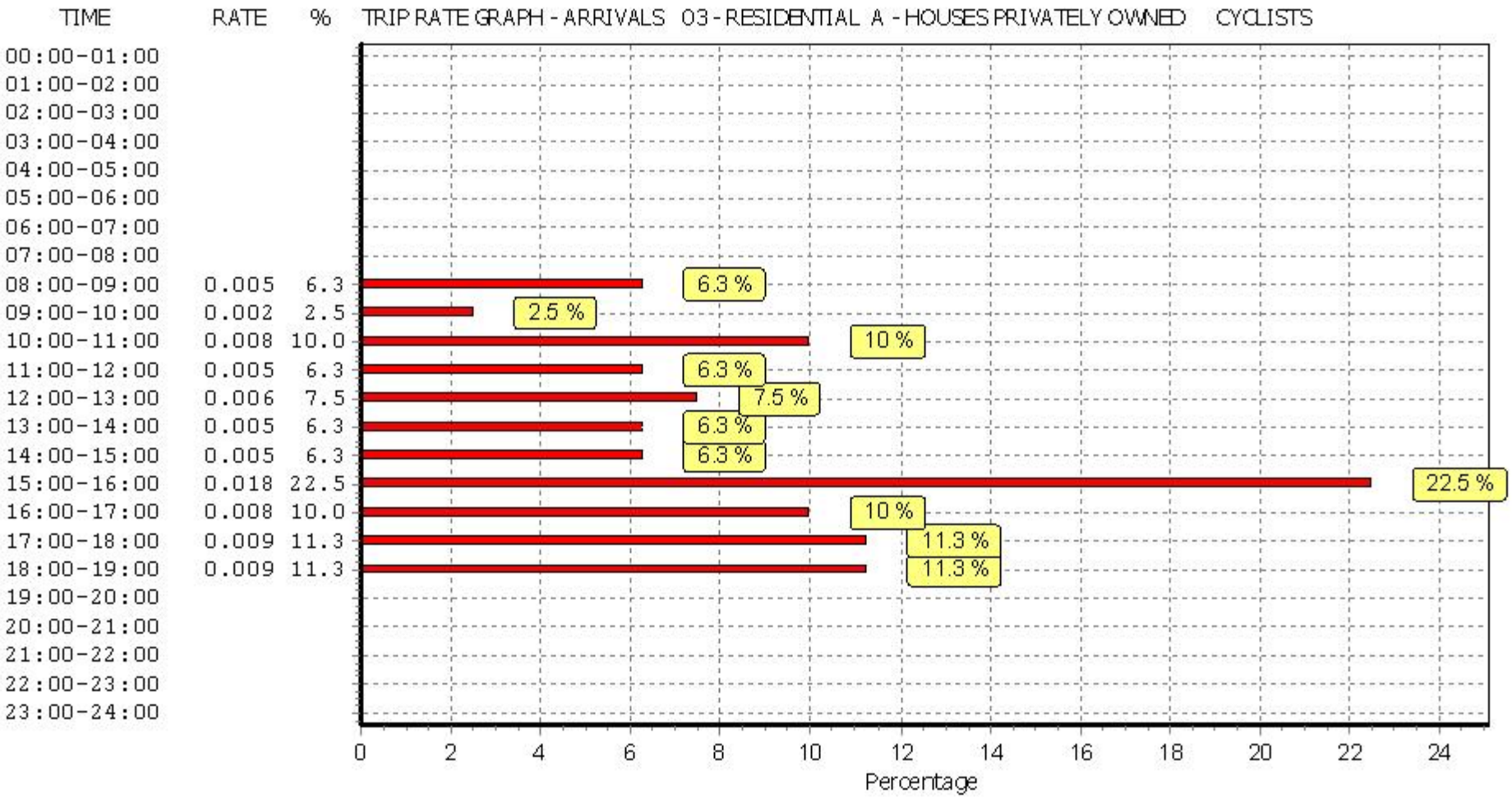

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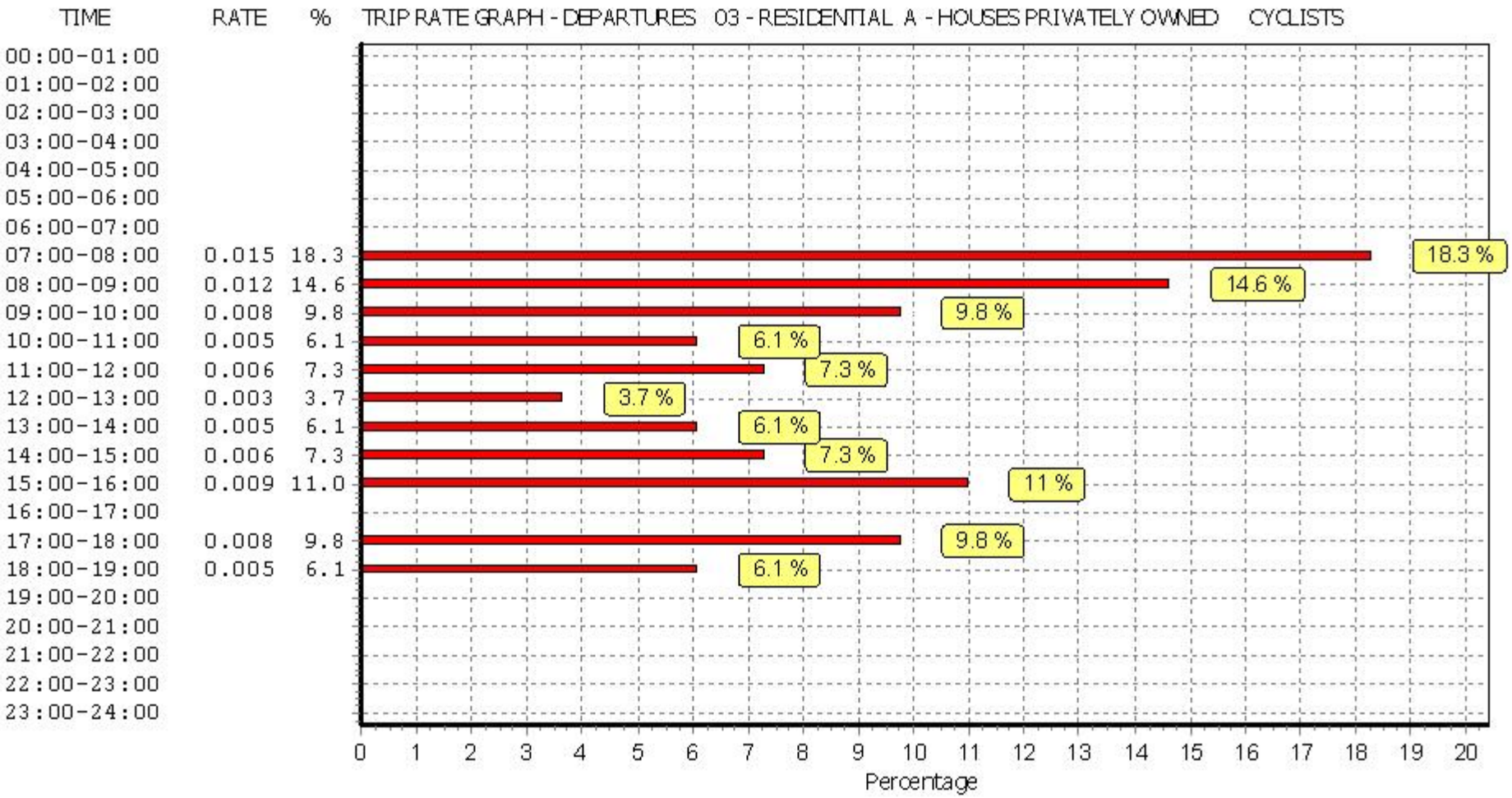

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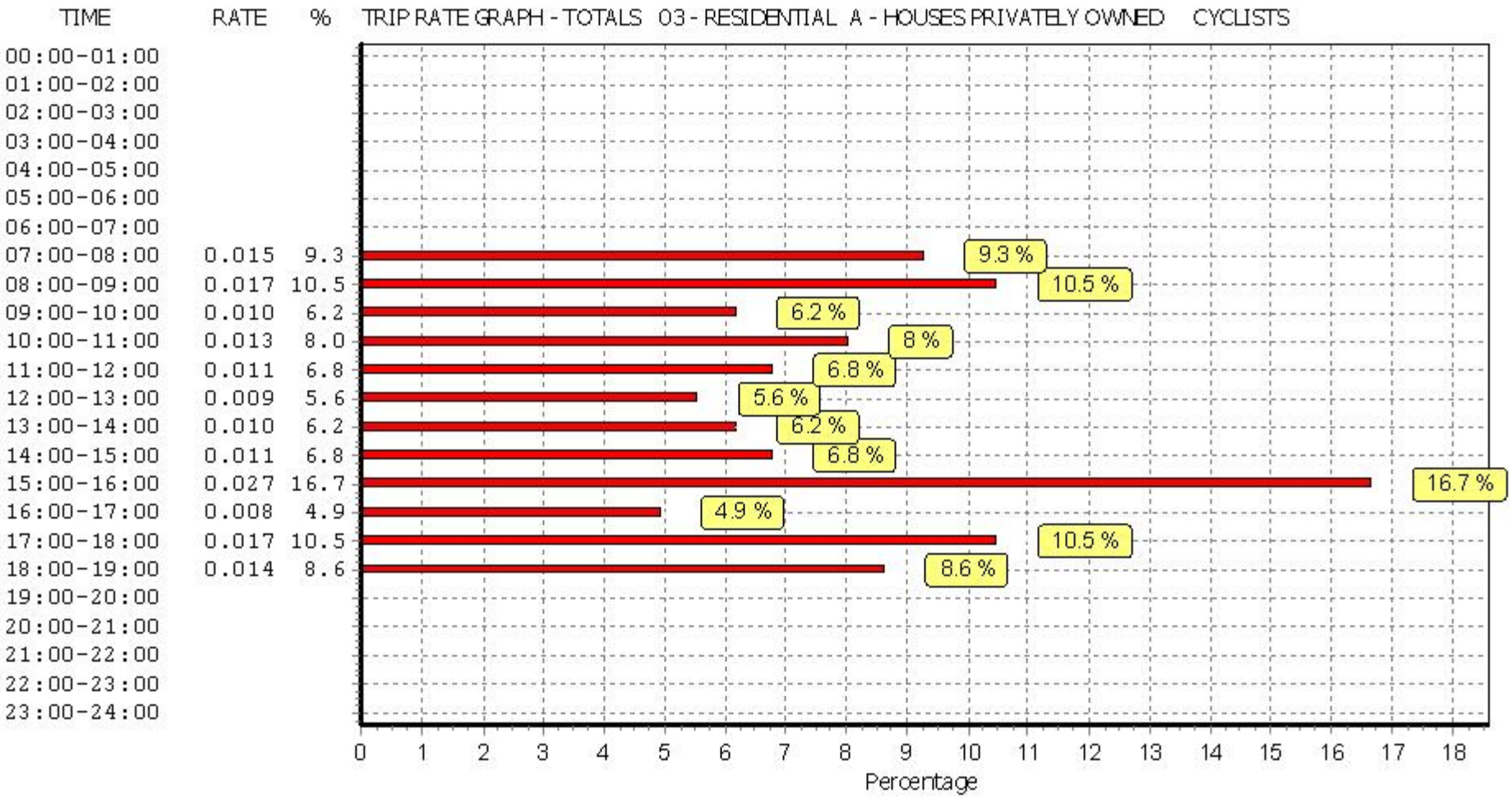

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Calculation Reference: AUDIT-638801-180823-0800

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

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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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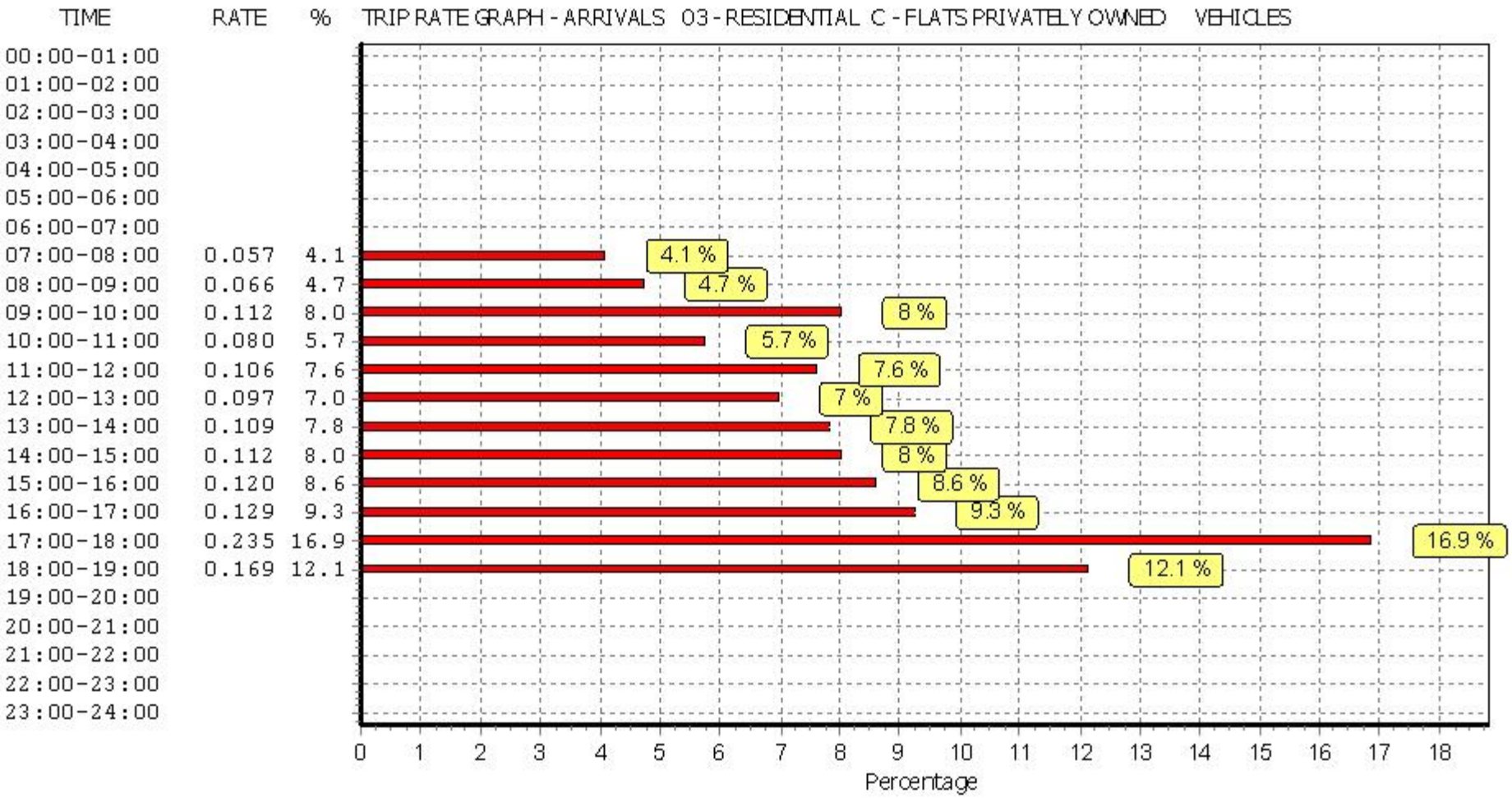

This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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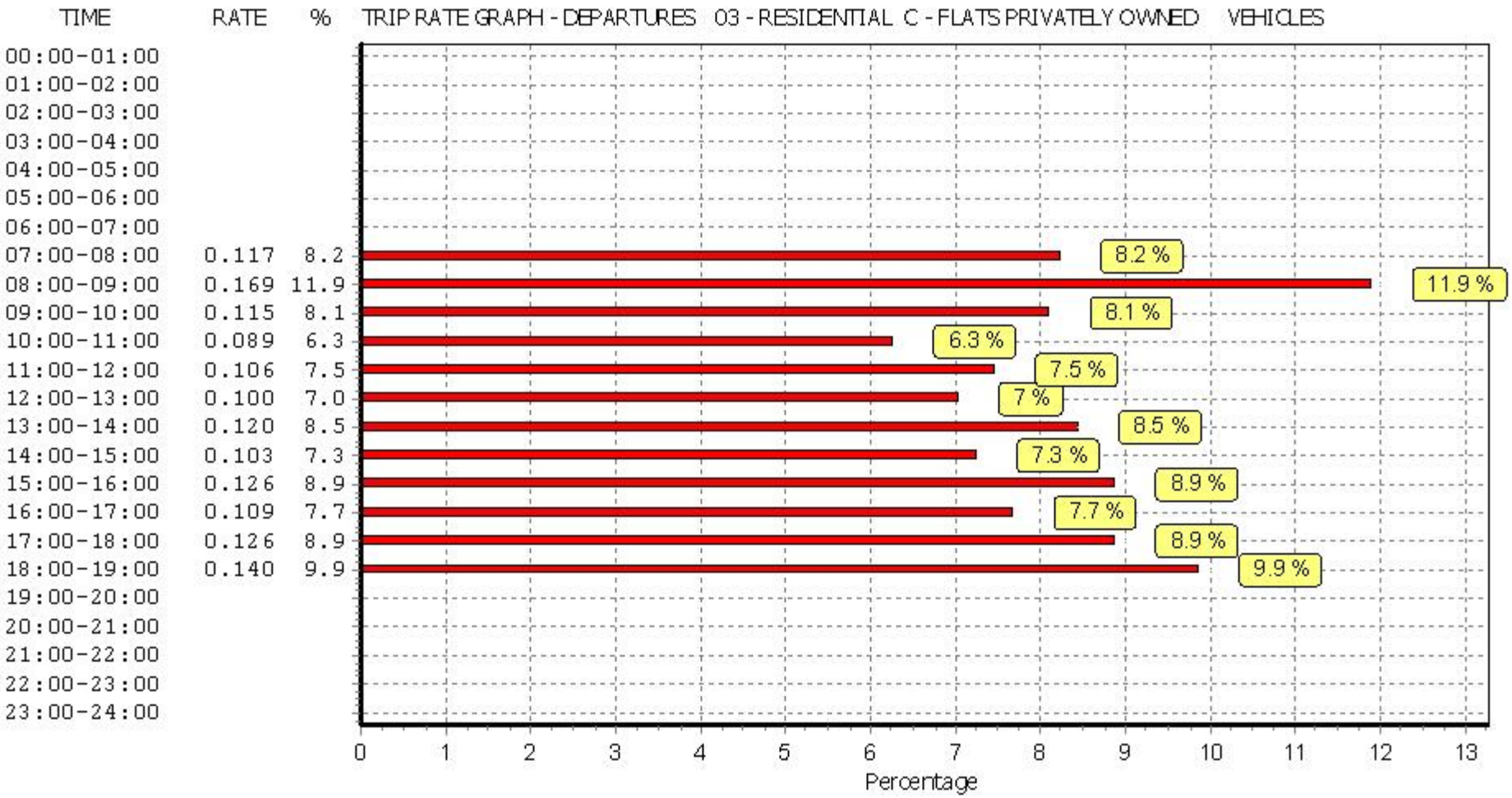

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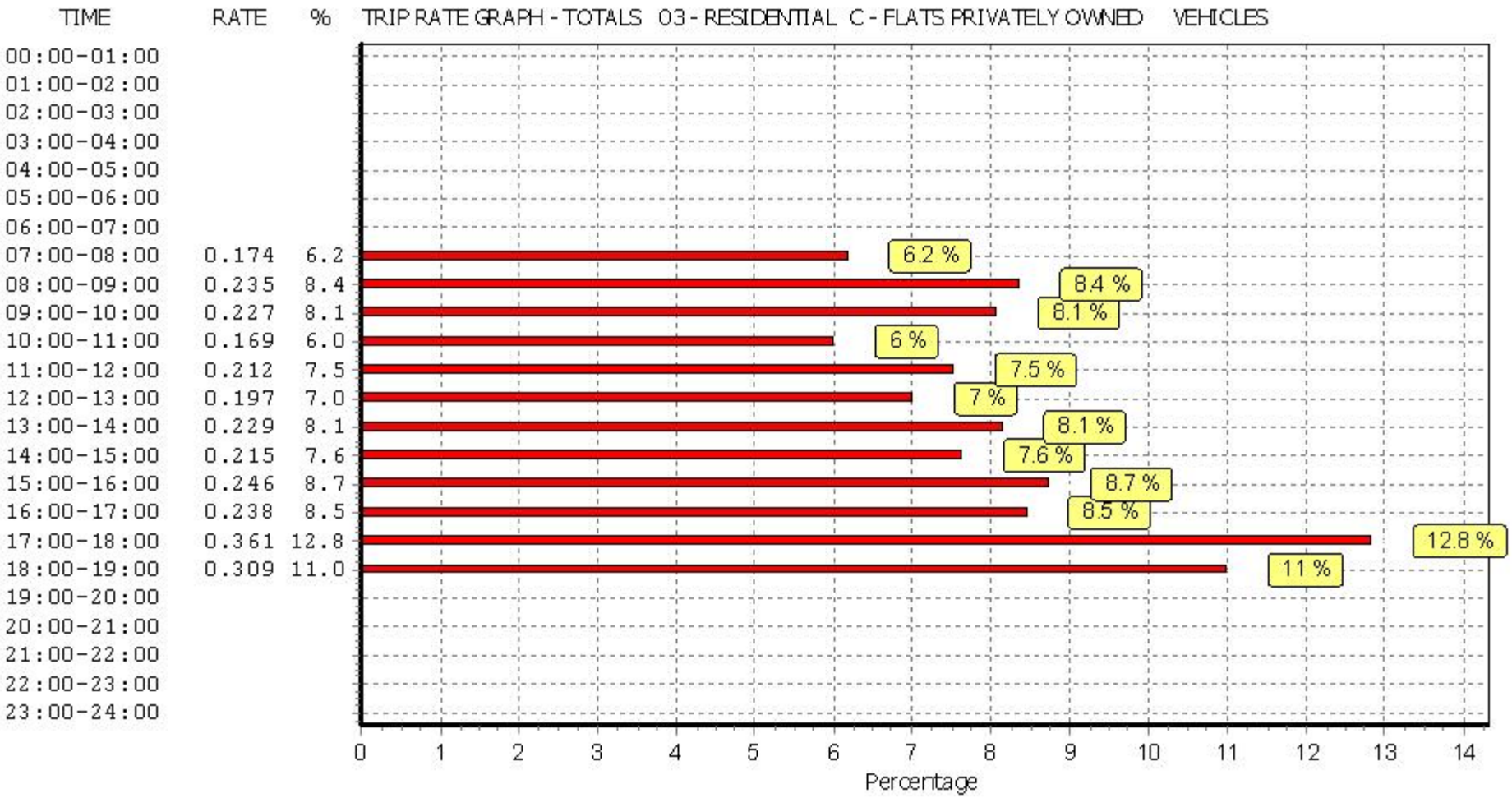

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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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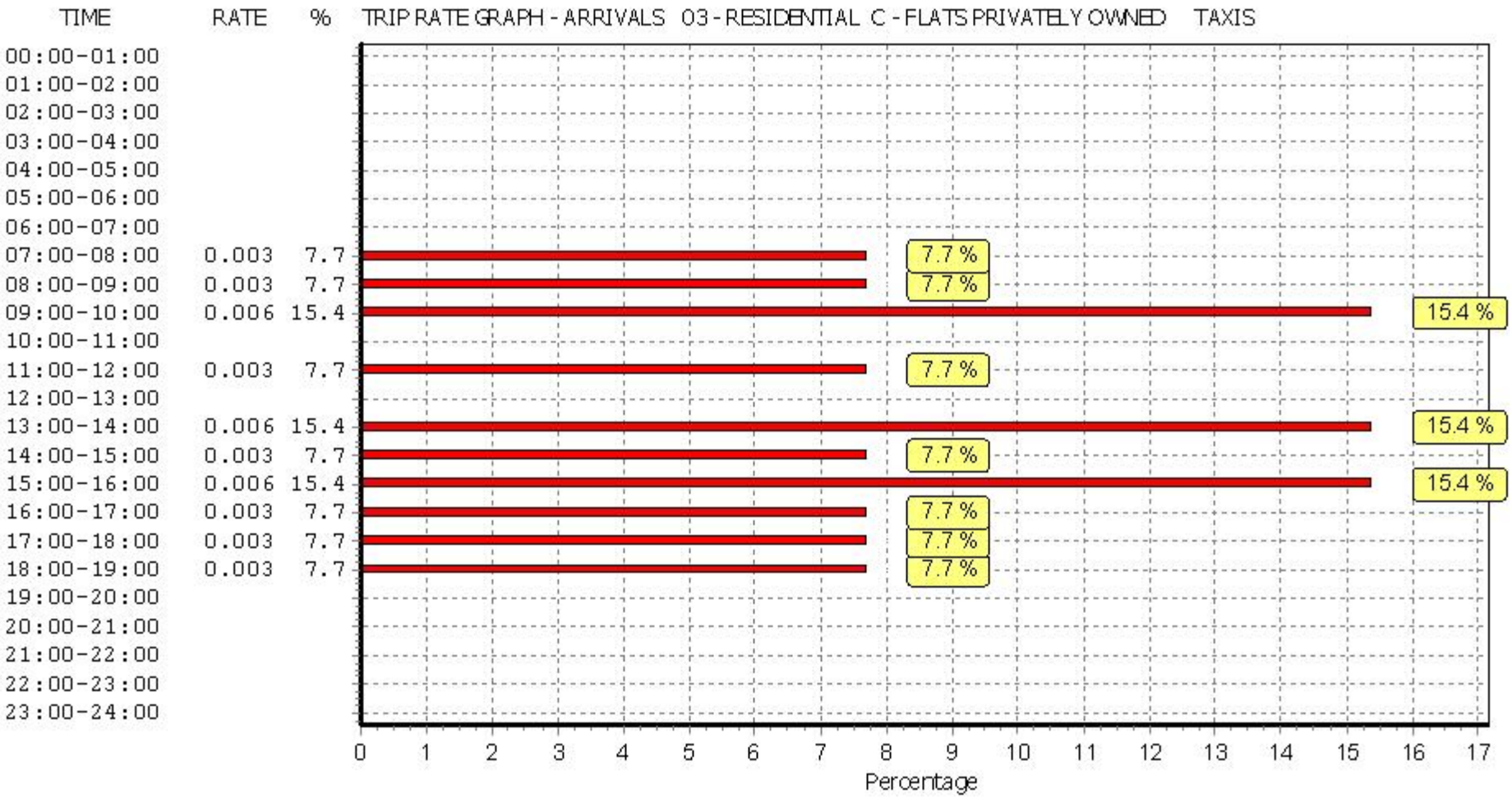

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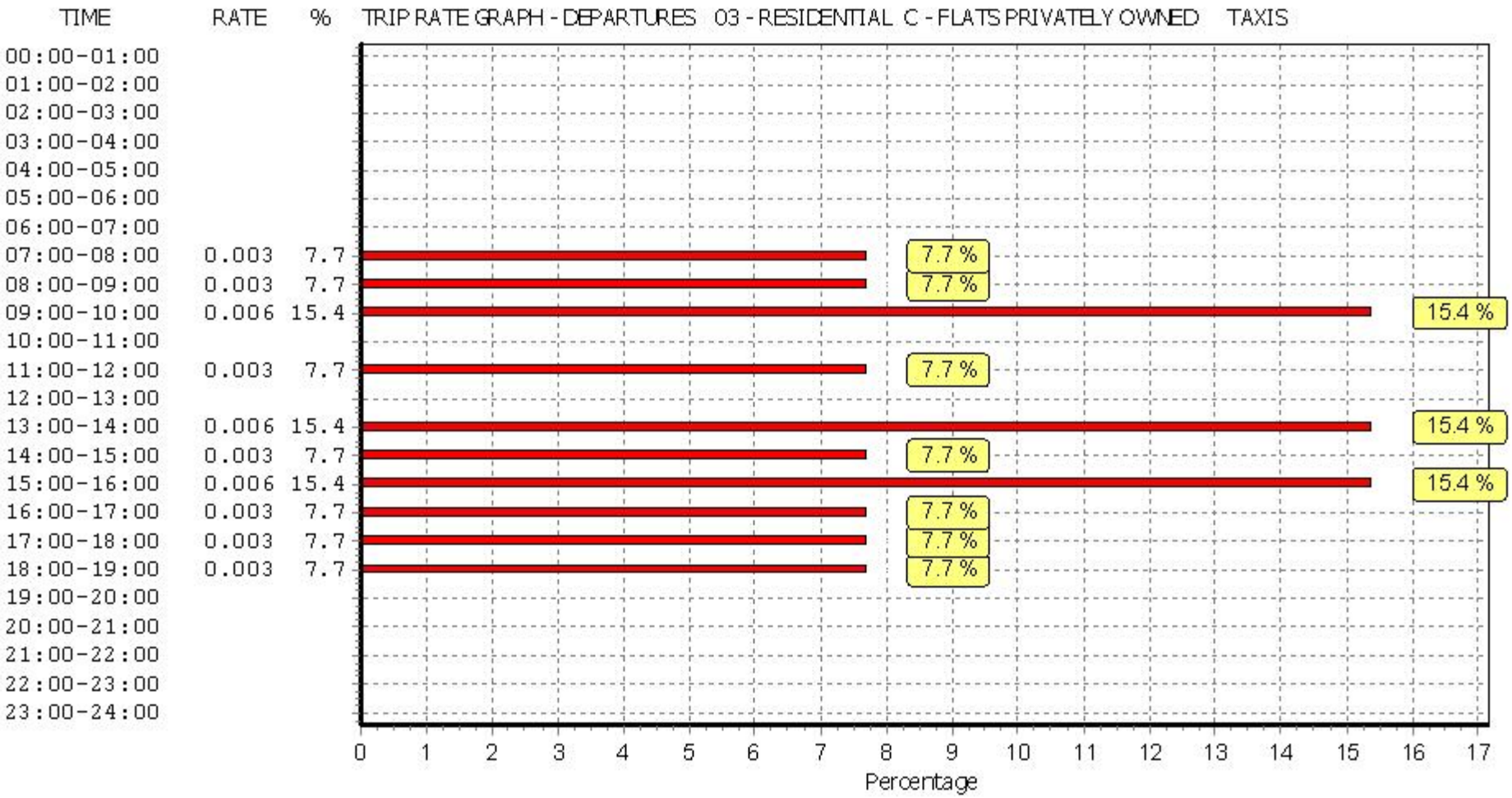

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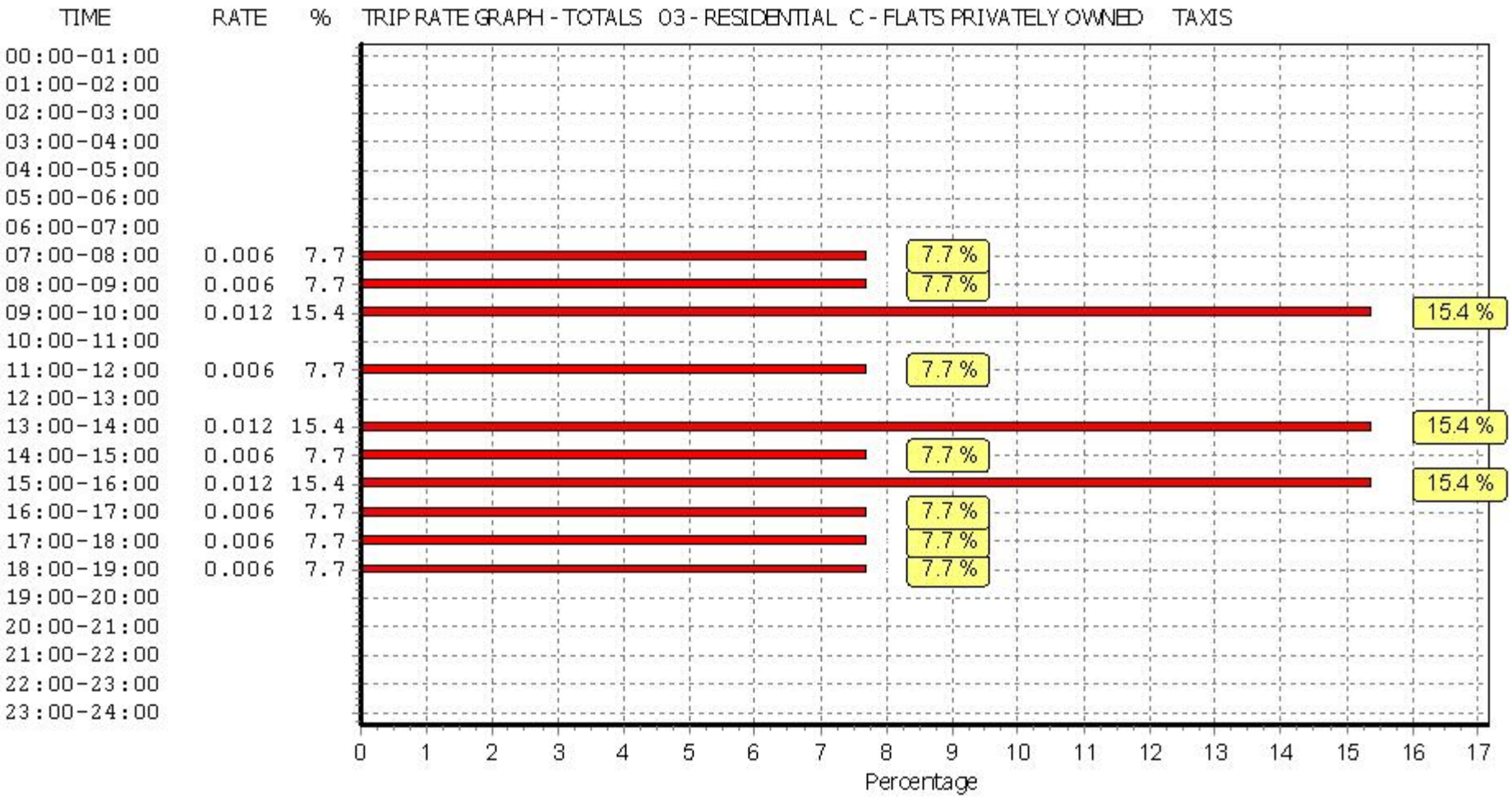

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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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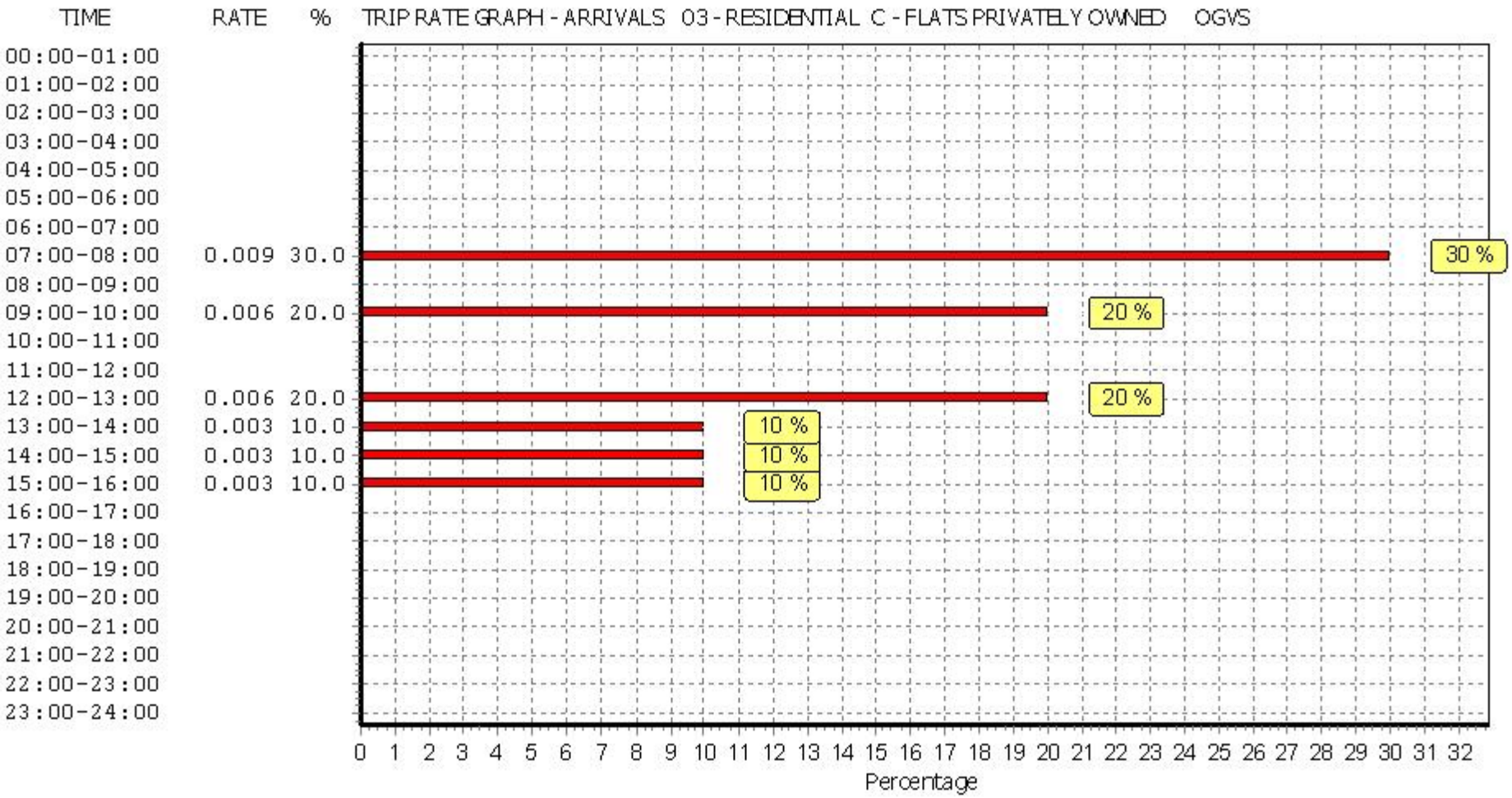

This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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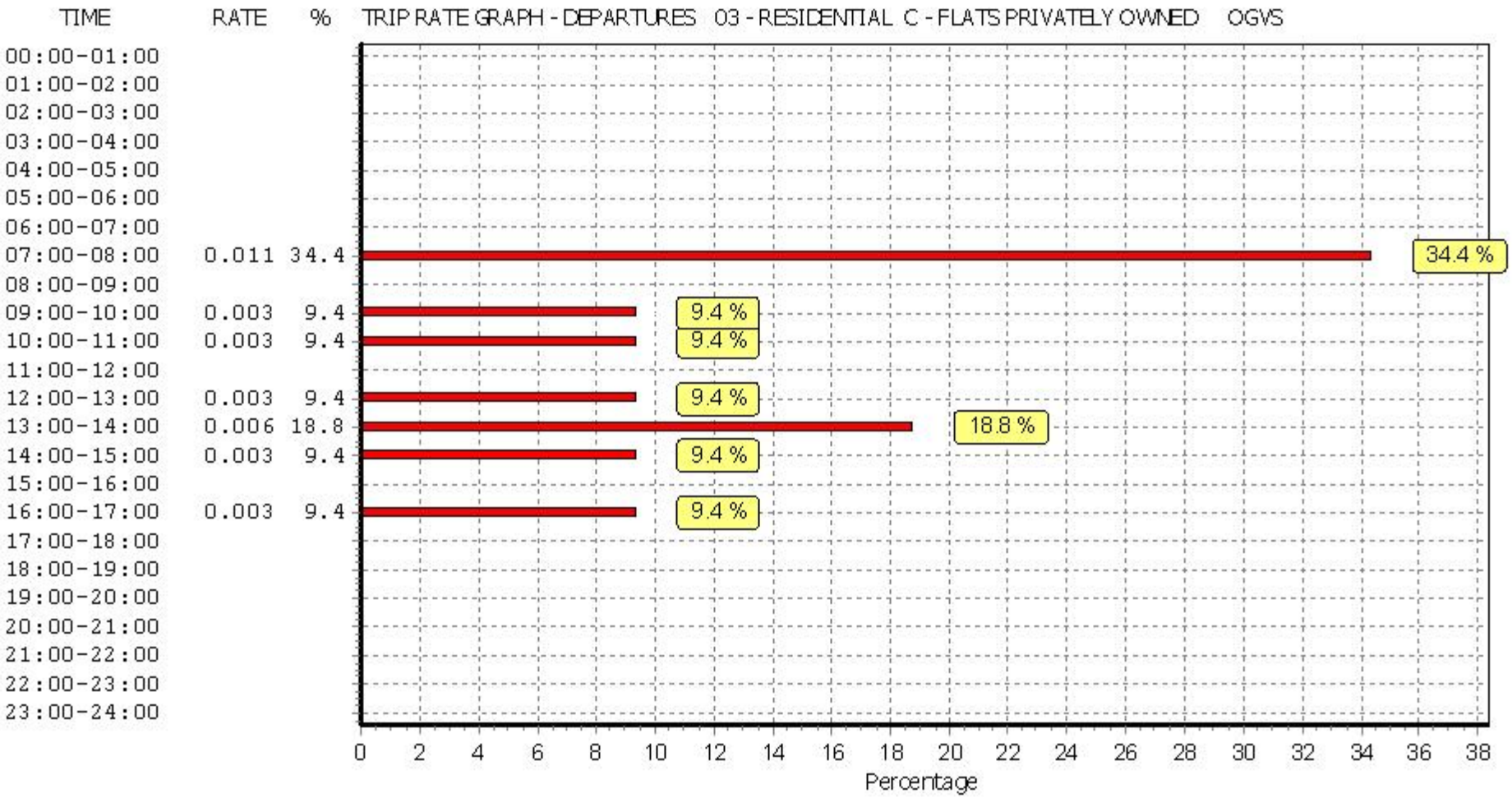

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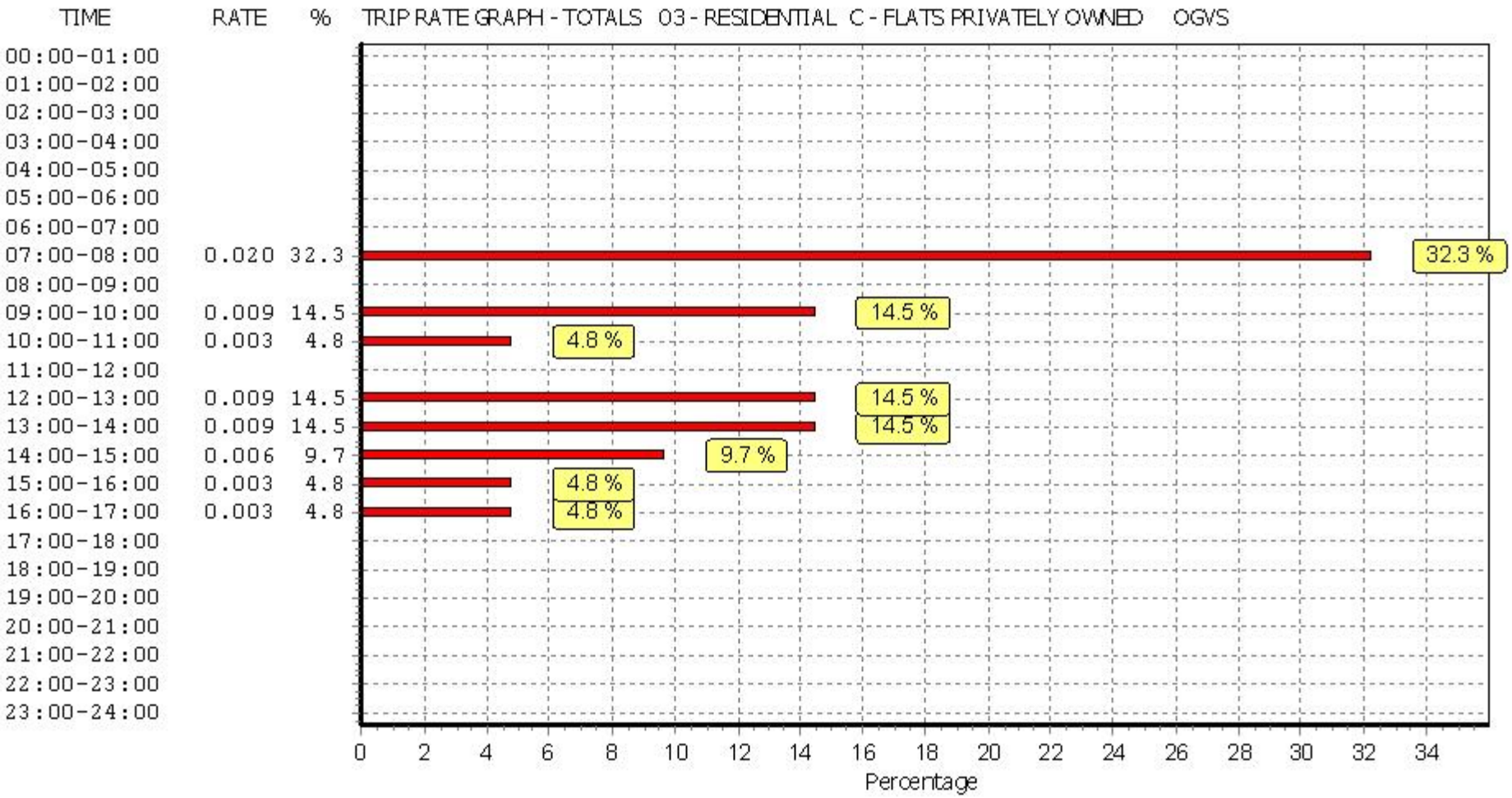

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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

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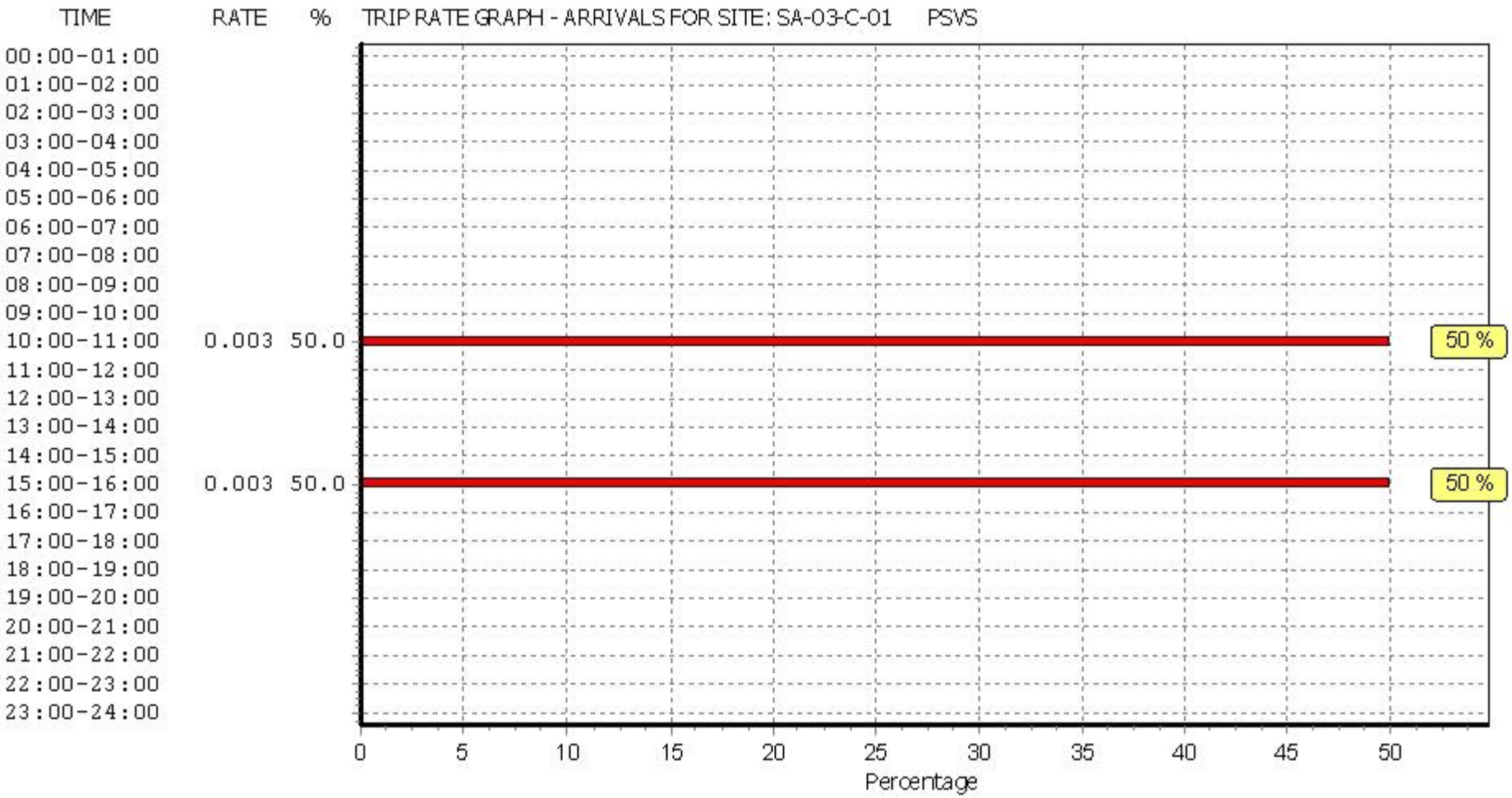

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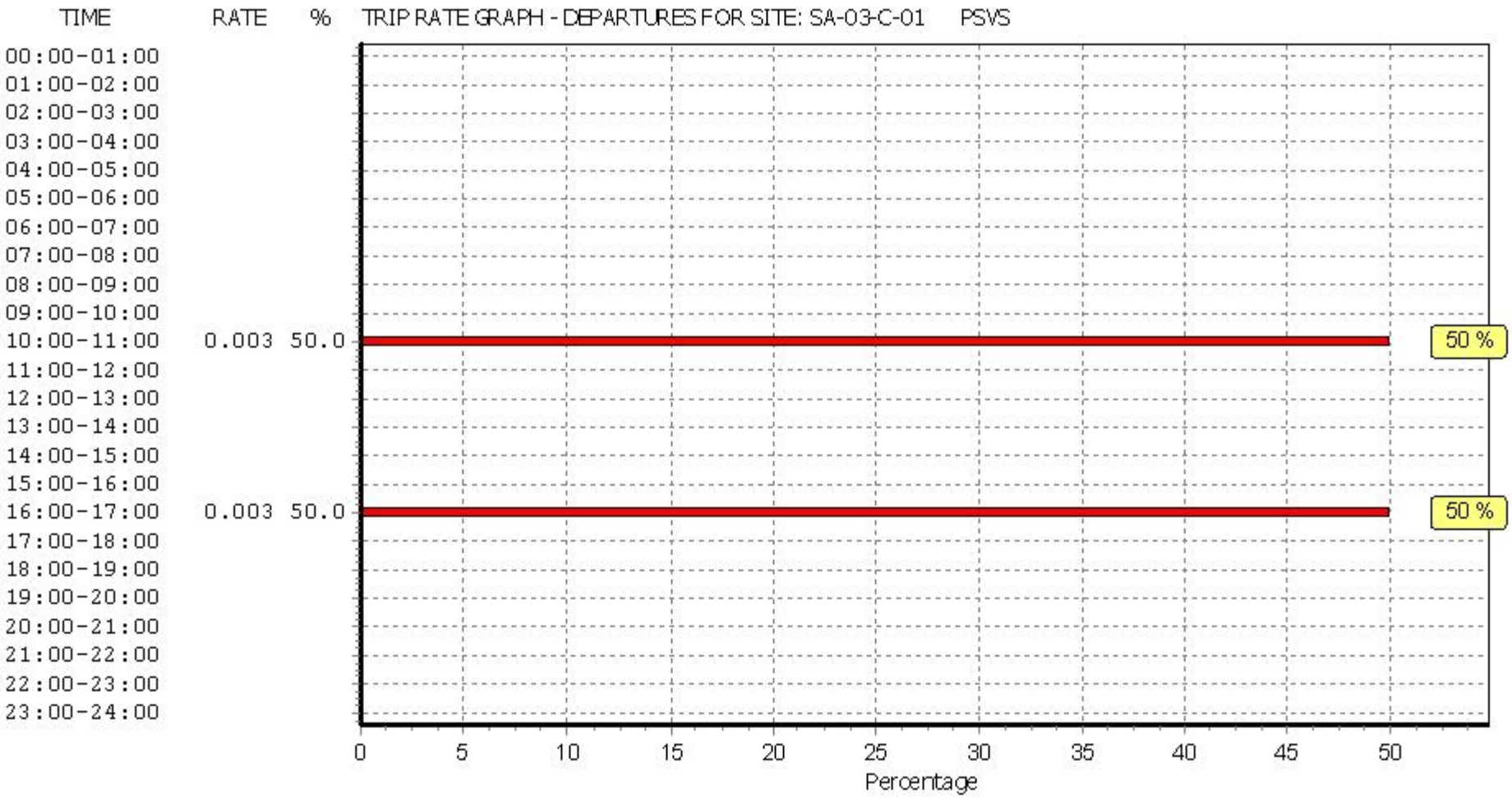

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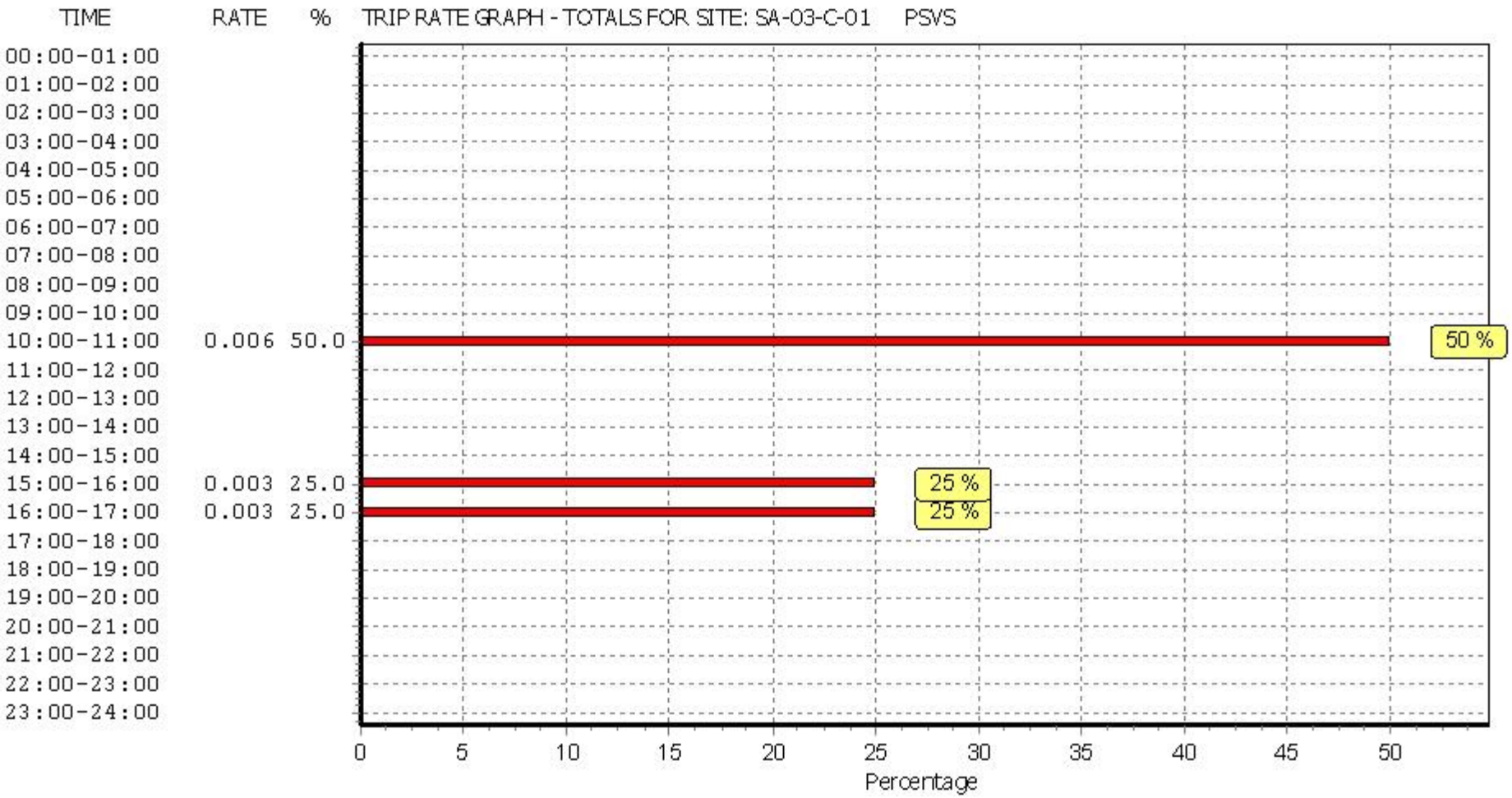

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

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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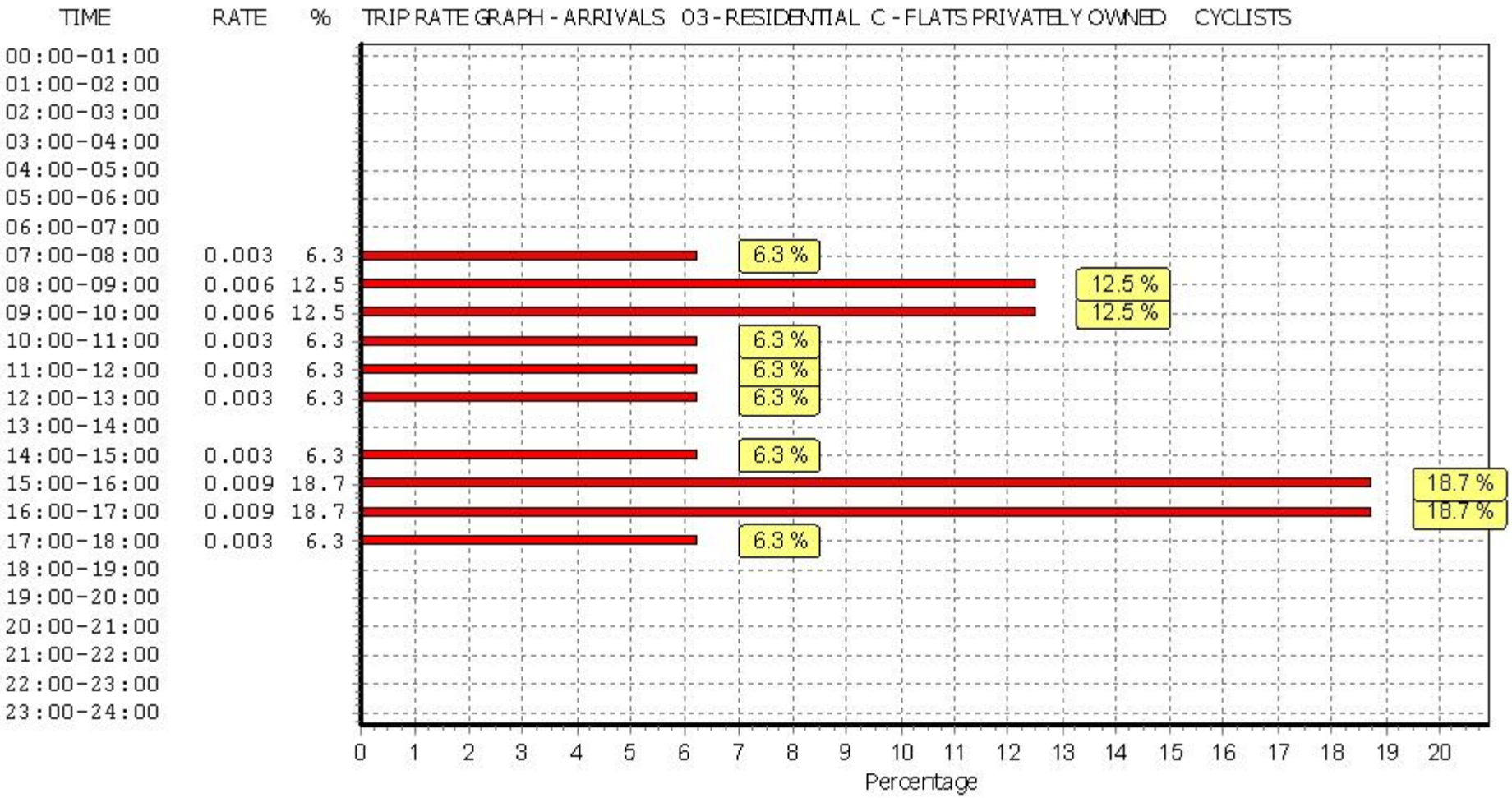

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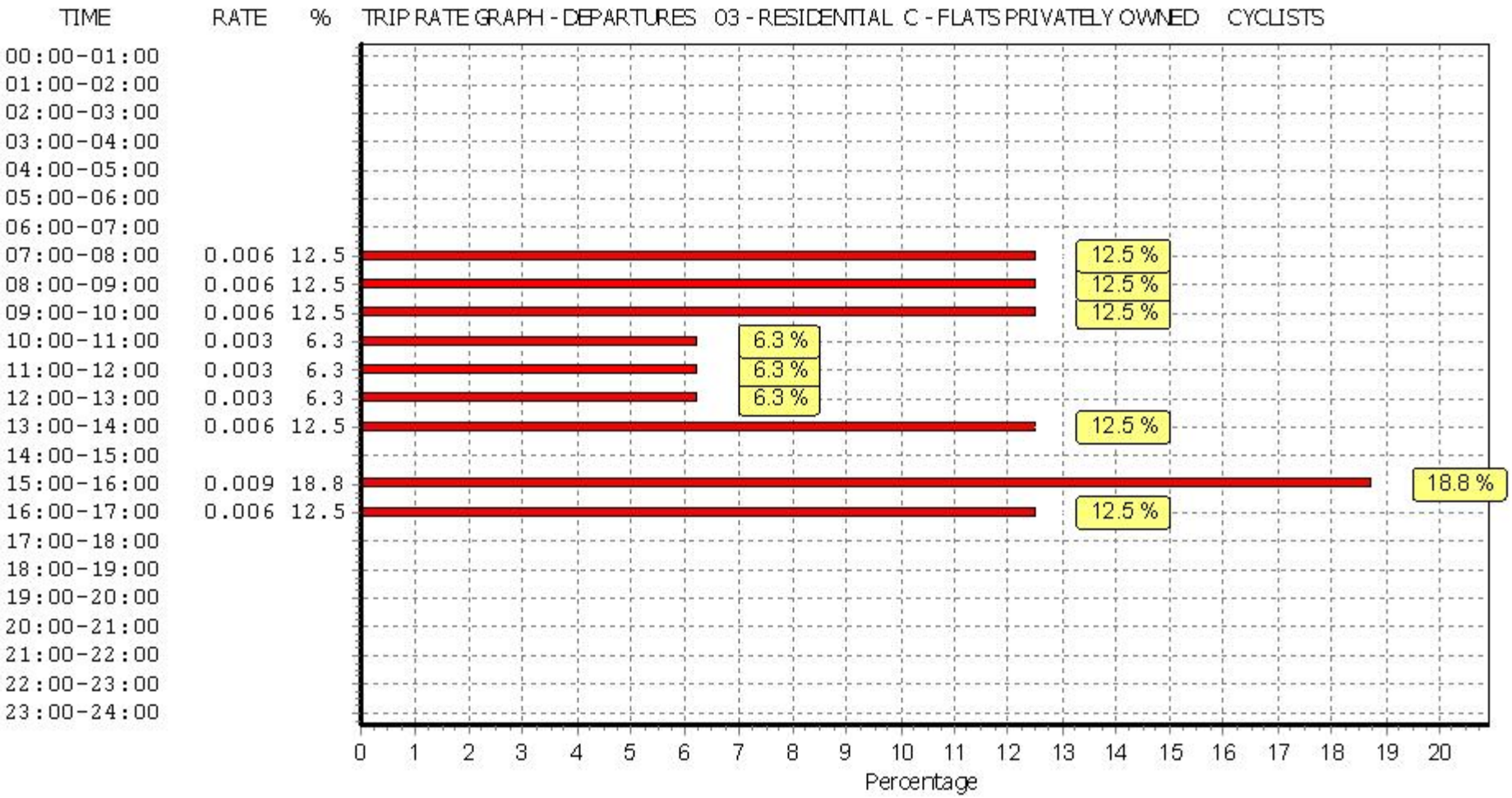

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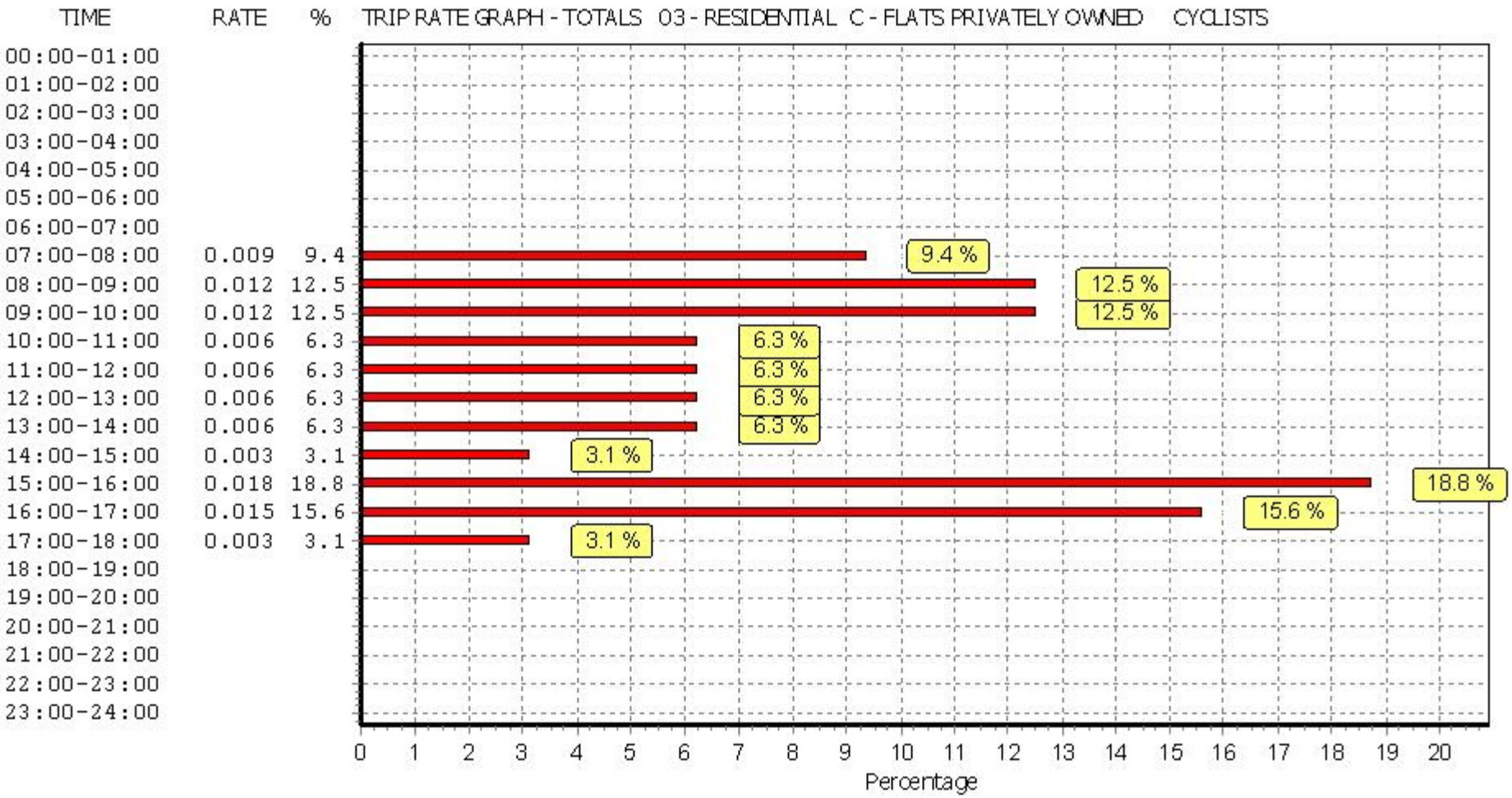

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Calculation Reference: AUDIT-638801-190507-0513

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.

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

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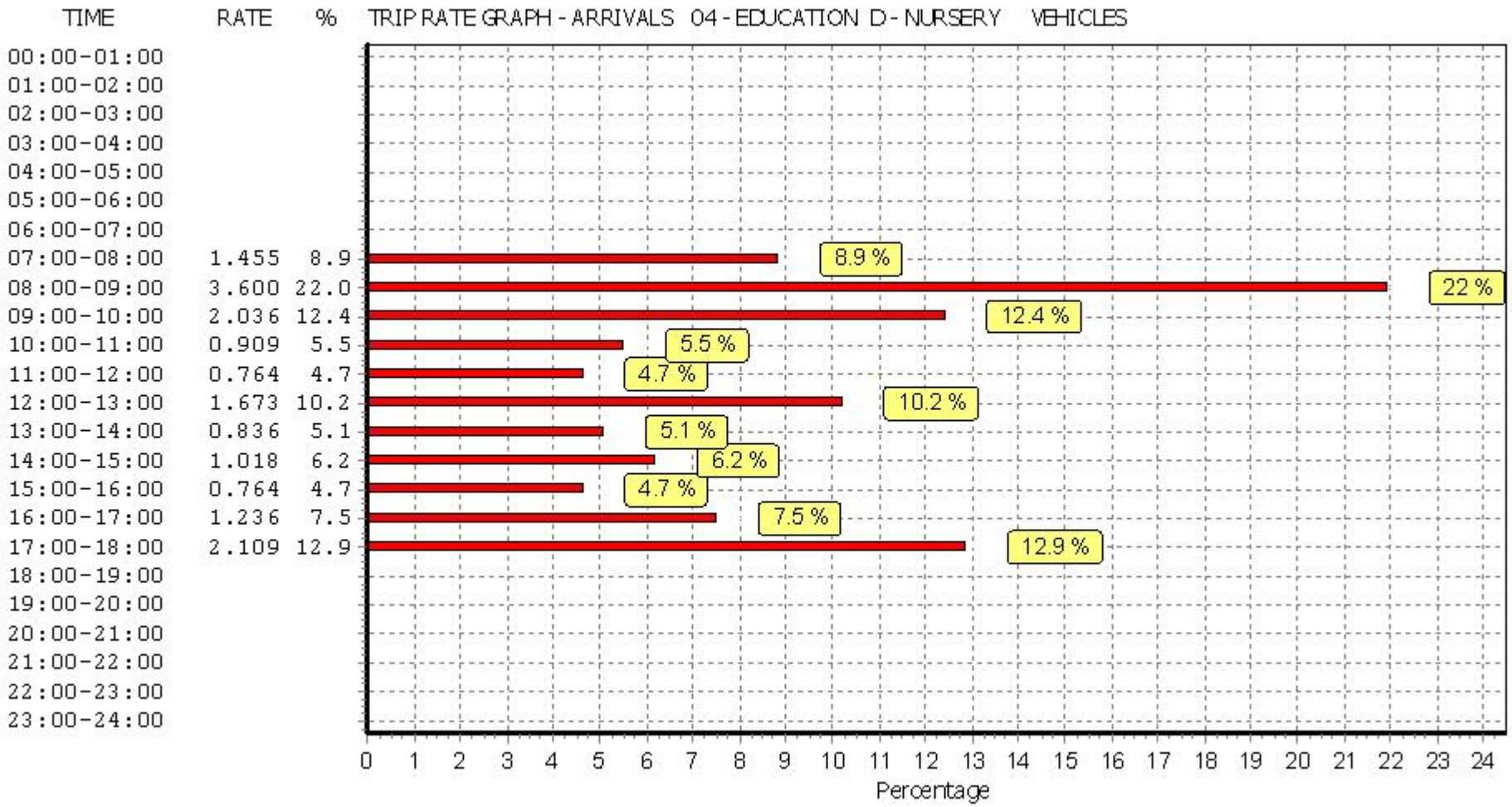
Parameter summary

Trip rate parameter range selected:	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.

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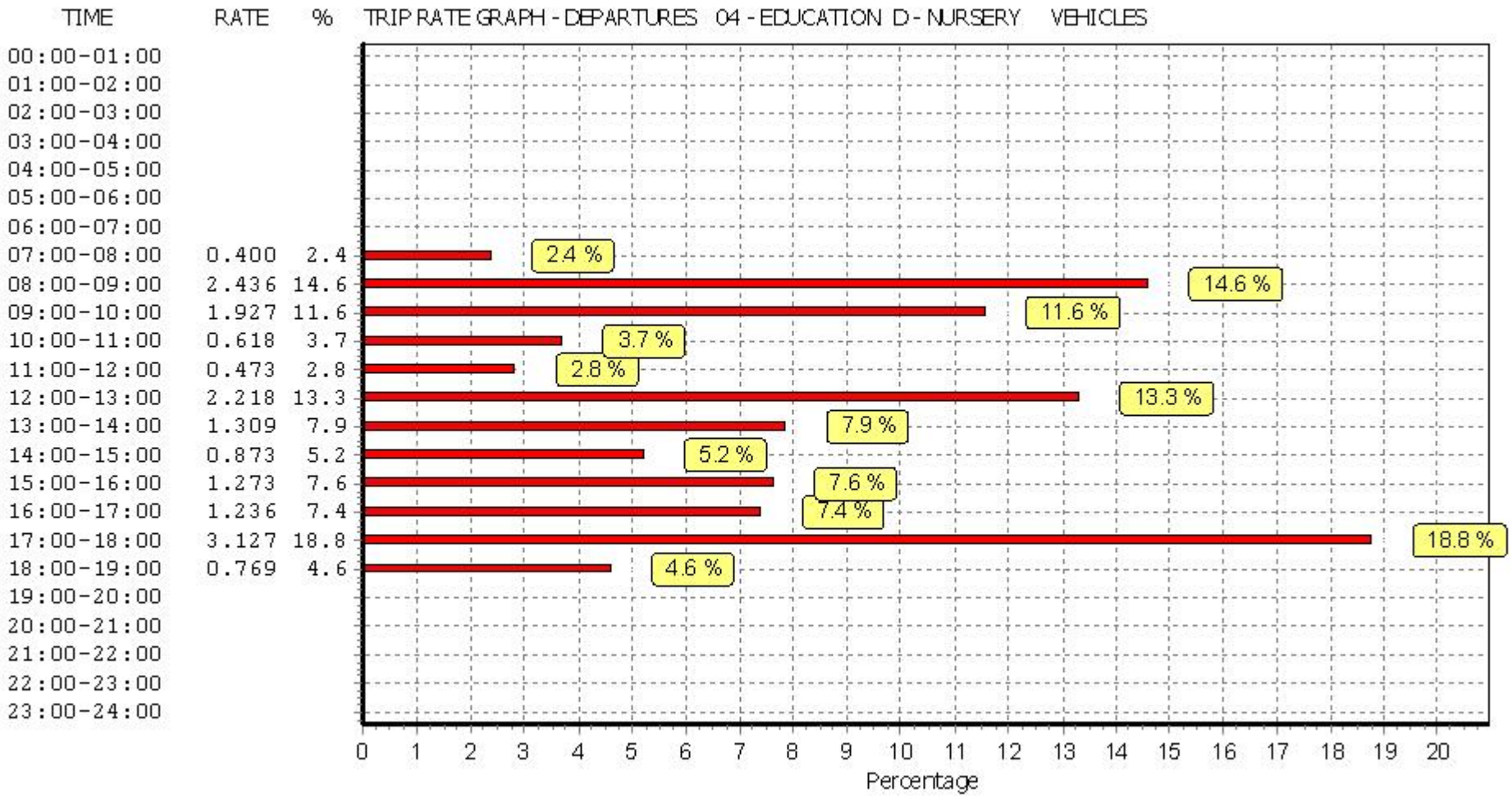

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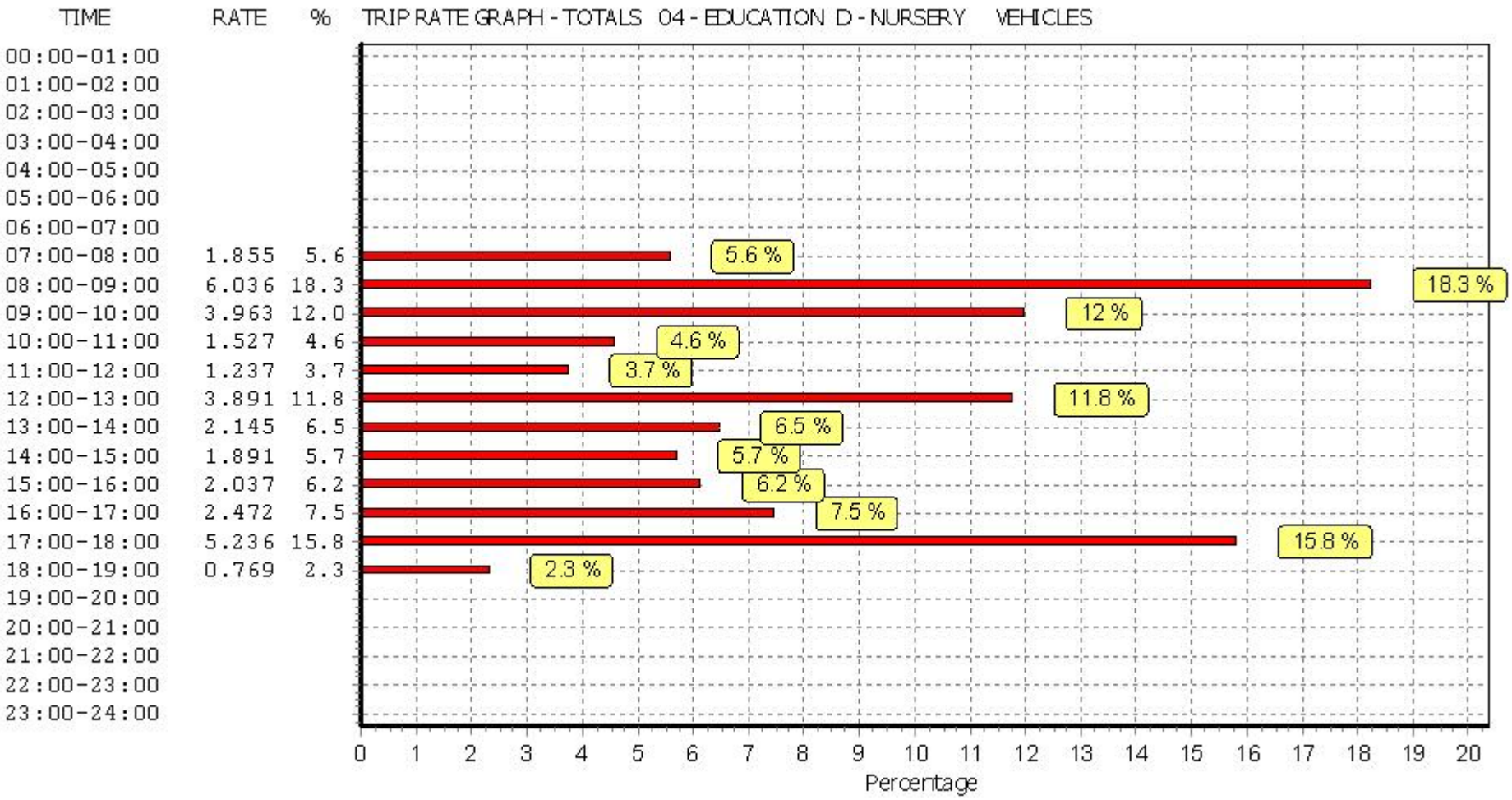


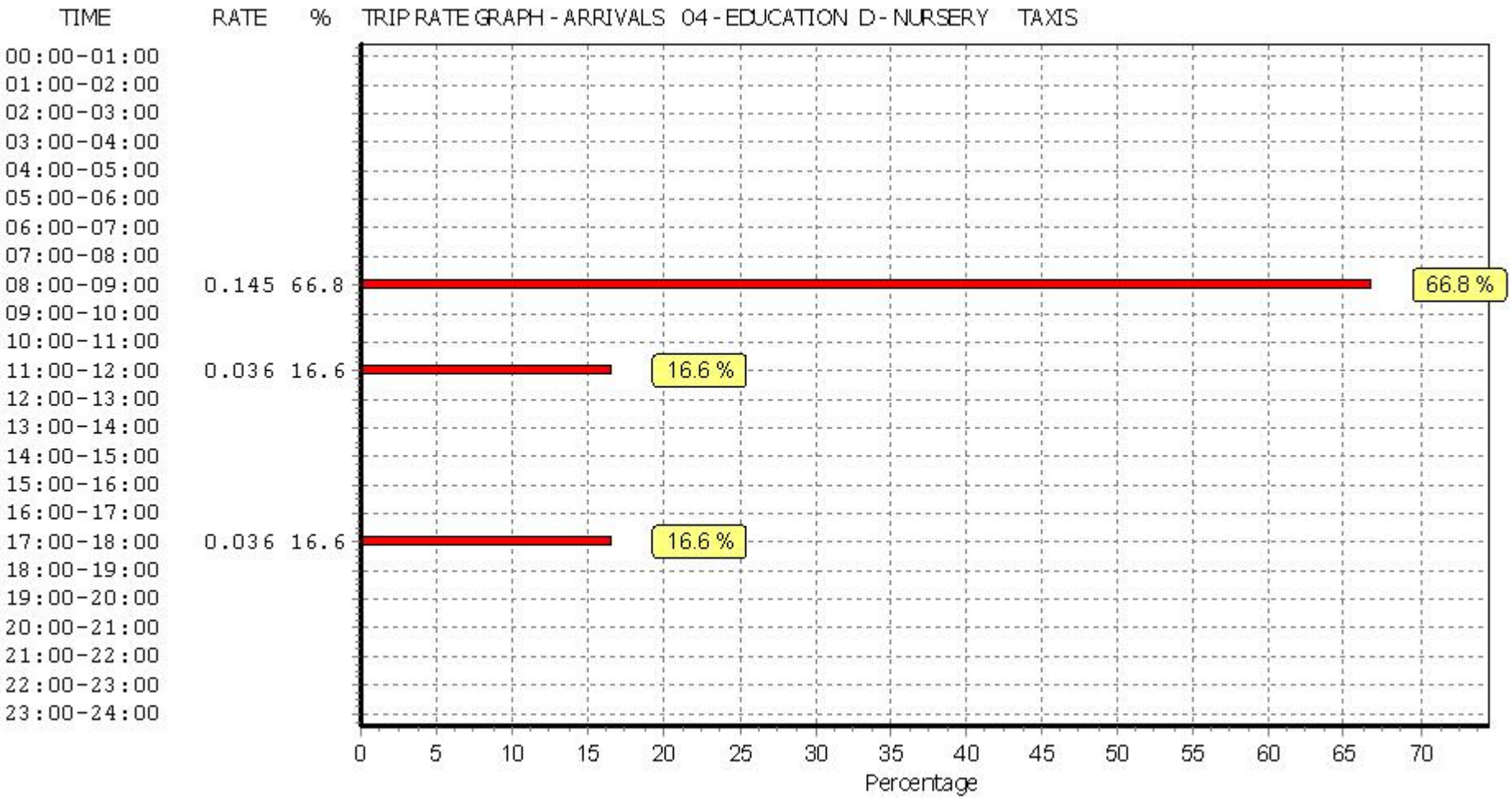
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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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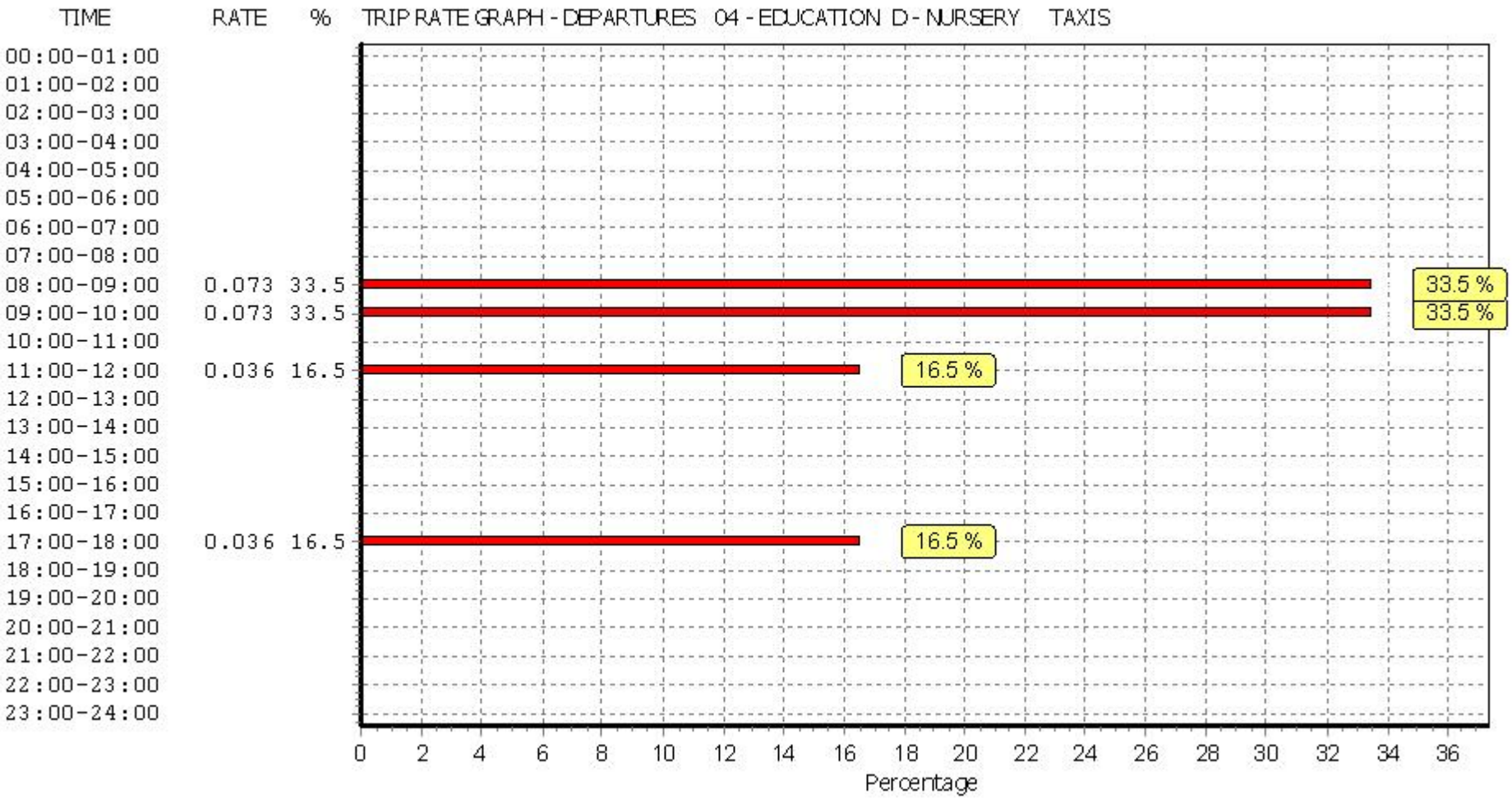
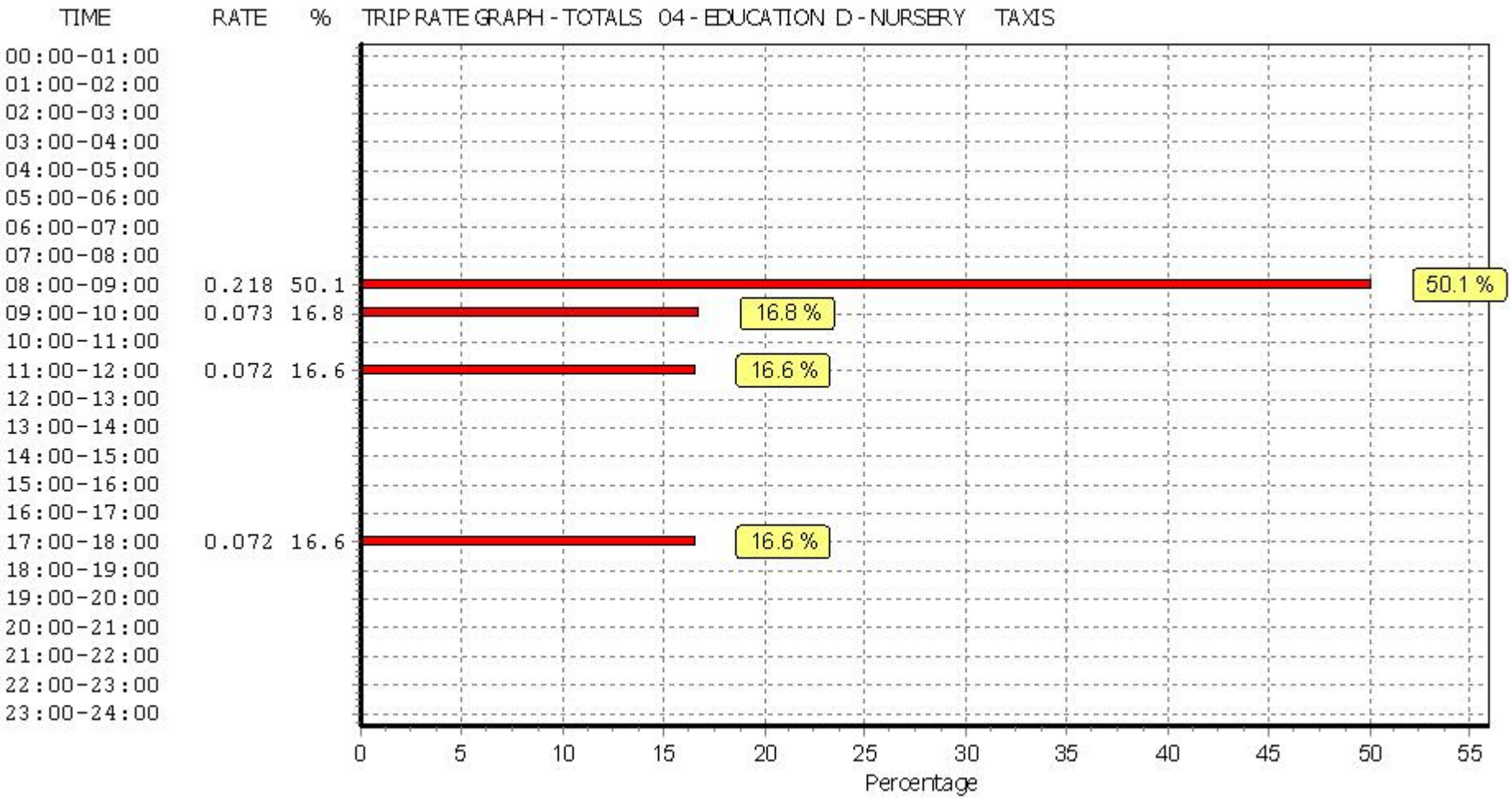


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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



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
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.

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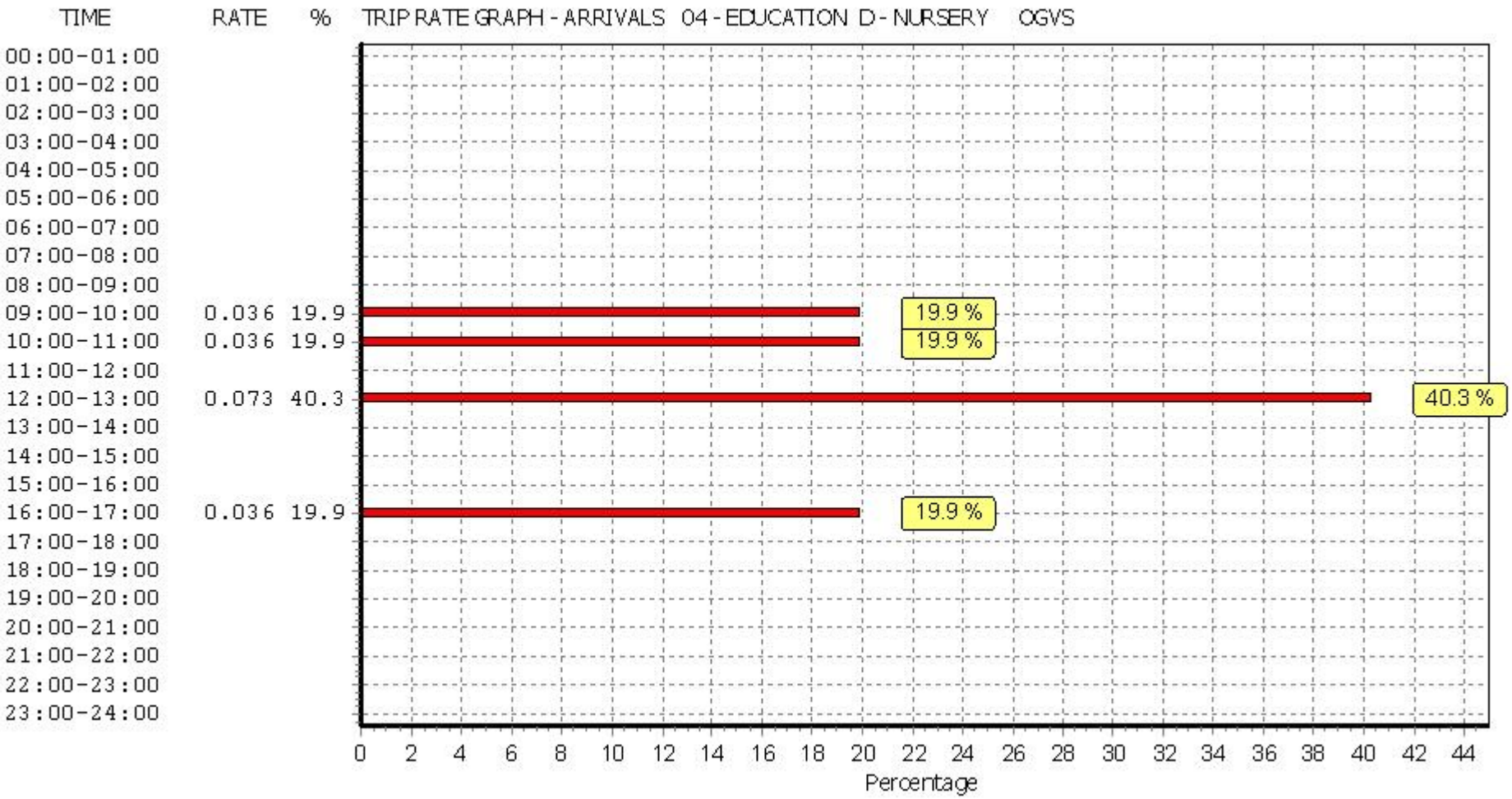

This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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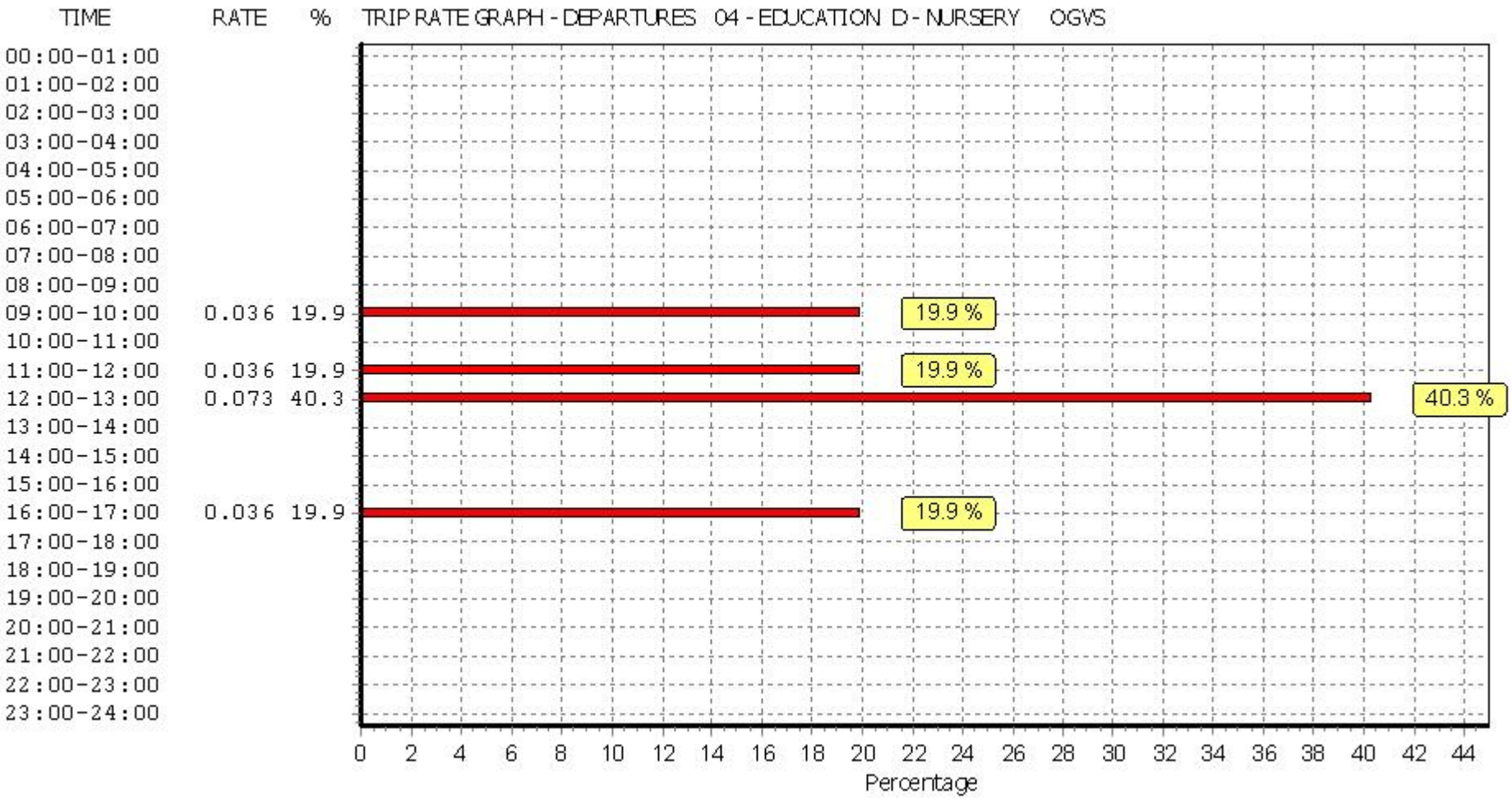
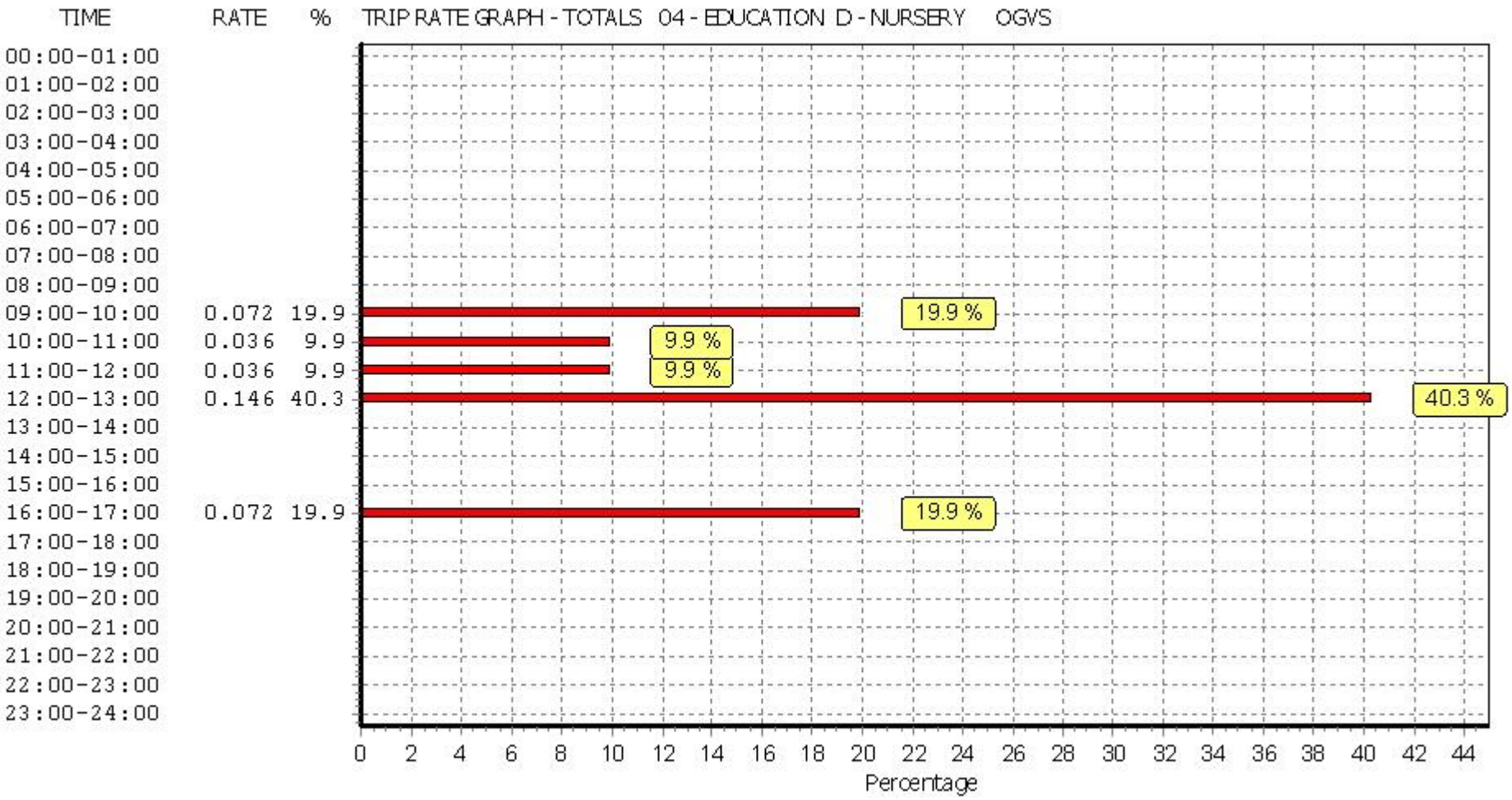


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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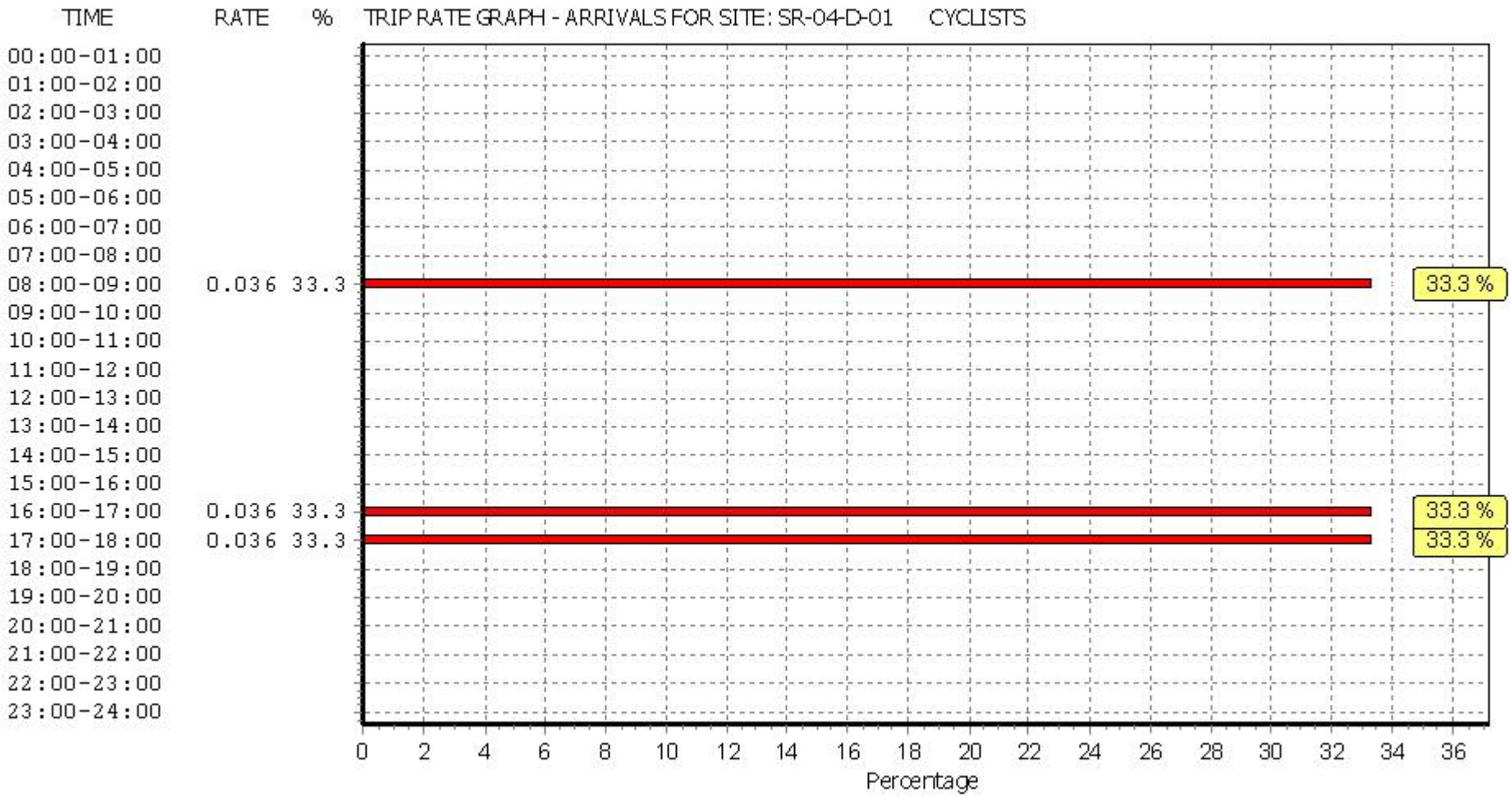
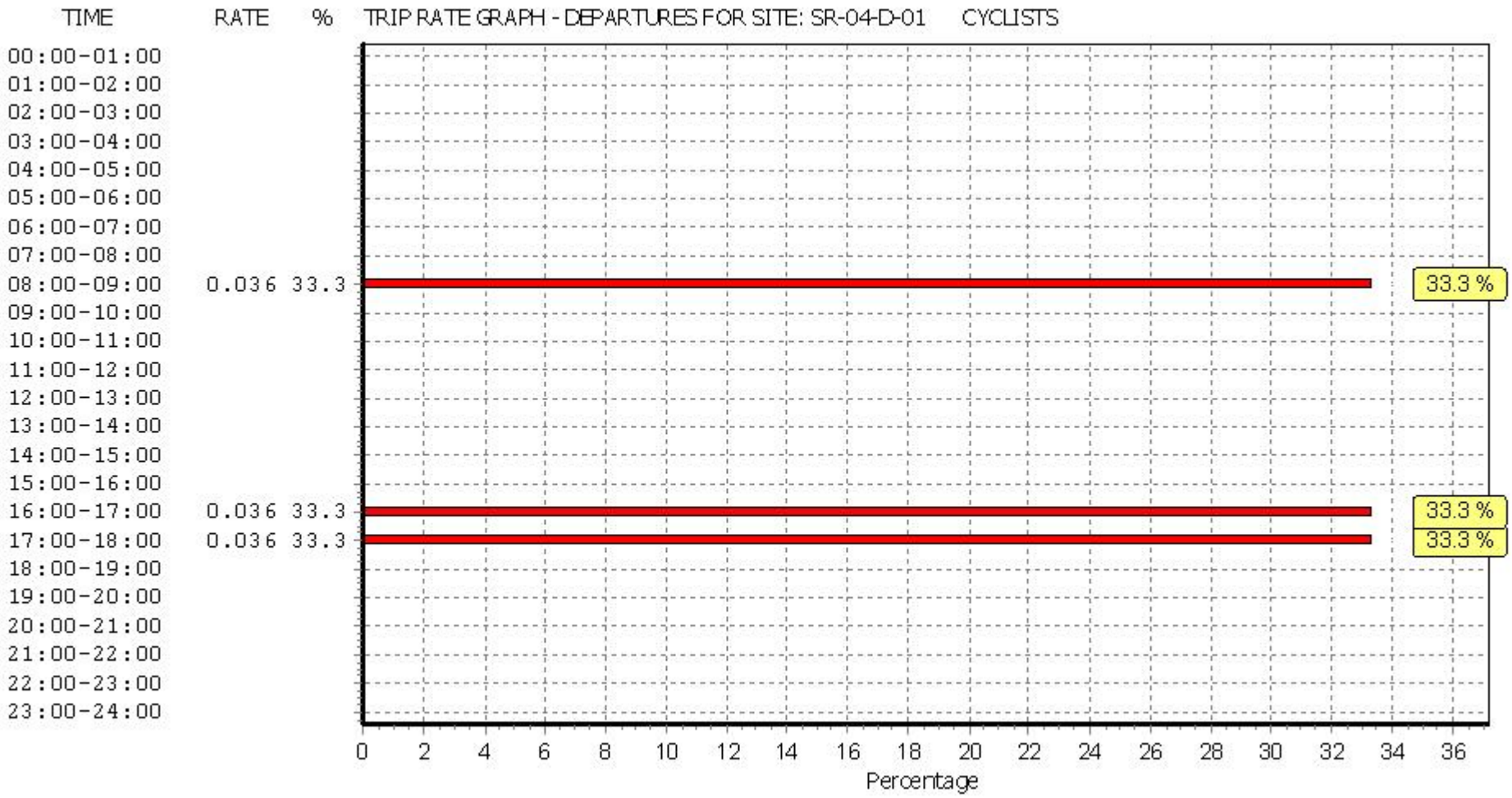
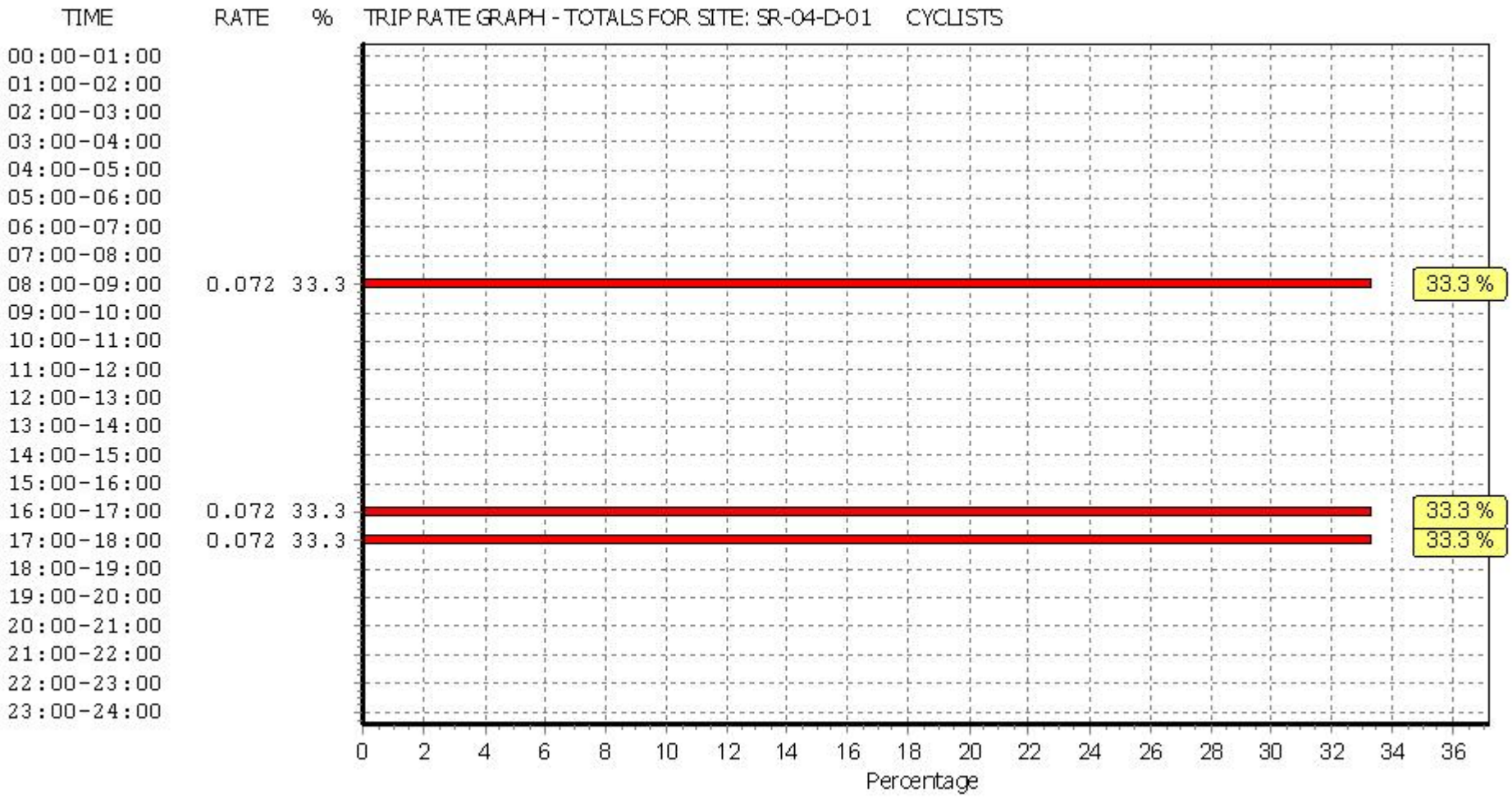


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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



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.

Appendix D

ARCADY Model Outputs

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.0.4211 []
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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

»2017, AM
»2017, PM
»2020, AM
»2020, PM
»2025, AM
»2025, PM
»2035, AM
»2035, PM

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.

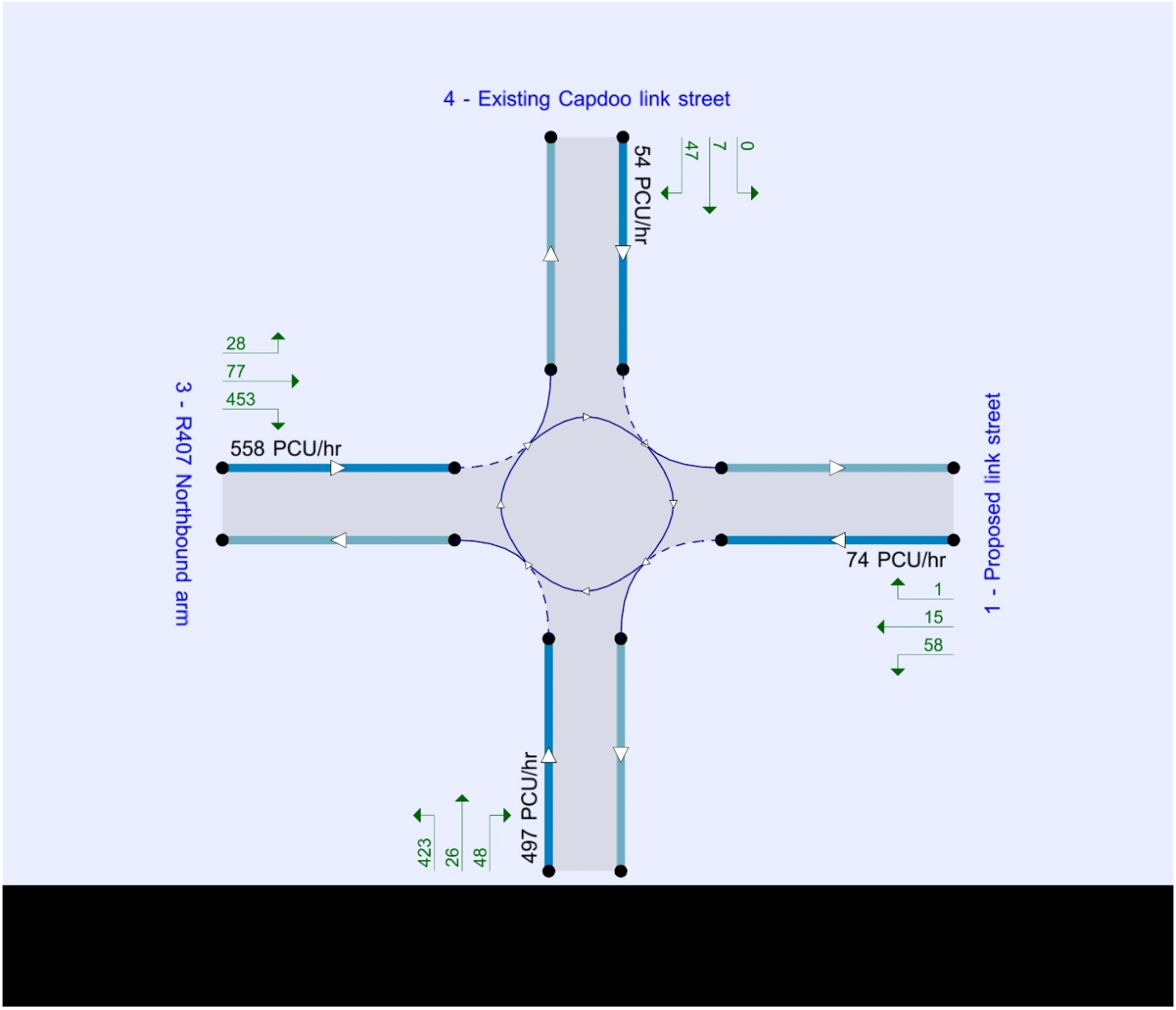
File summary

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 E

PICADY Model Outputs

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []
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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

»2017, AM
»2017, PM
»2020, AM
»2020, PM
»2025, AM
»2025, PM
»2035, AM
»2035, PM

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.

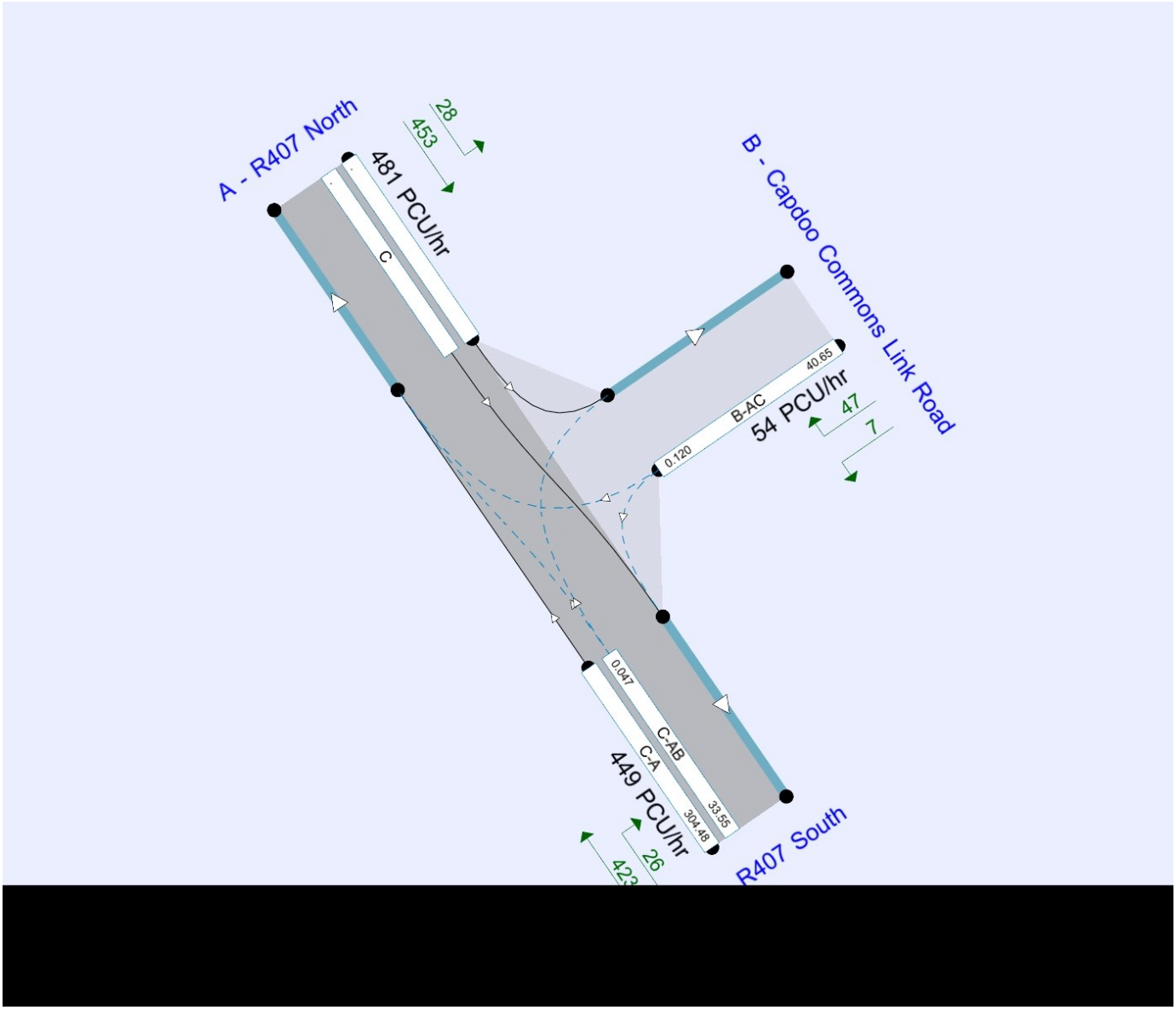
File summary

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

»2020 DN, AM
»2020 DN, PM
»2020 DS, AM
»2020 DS, PM
»2025 DN, AM
»2025 DN, PM
»2025 DS, AM
»2025 DS, PM
»2035 DN, AM
»2035 DN, PM
»2035 DS, AM
»2035 DS, PM
»2017 - Existing, AM
»2017 - Existing, PM

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.

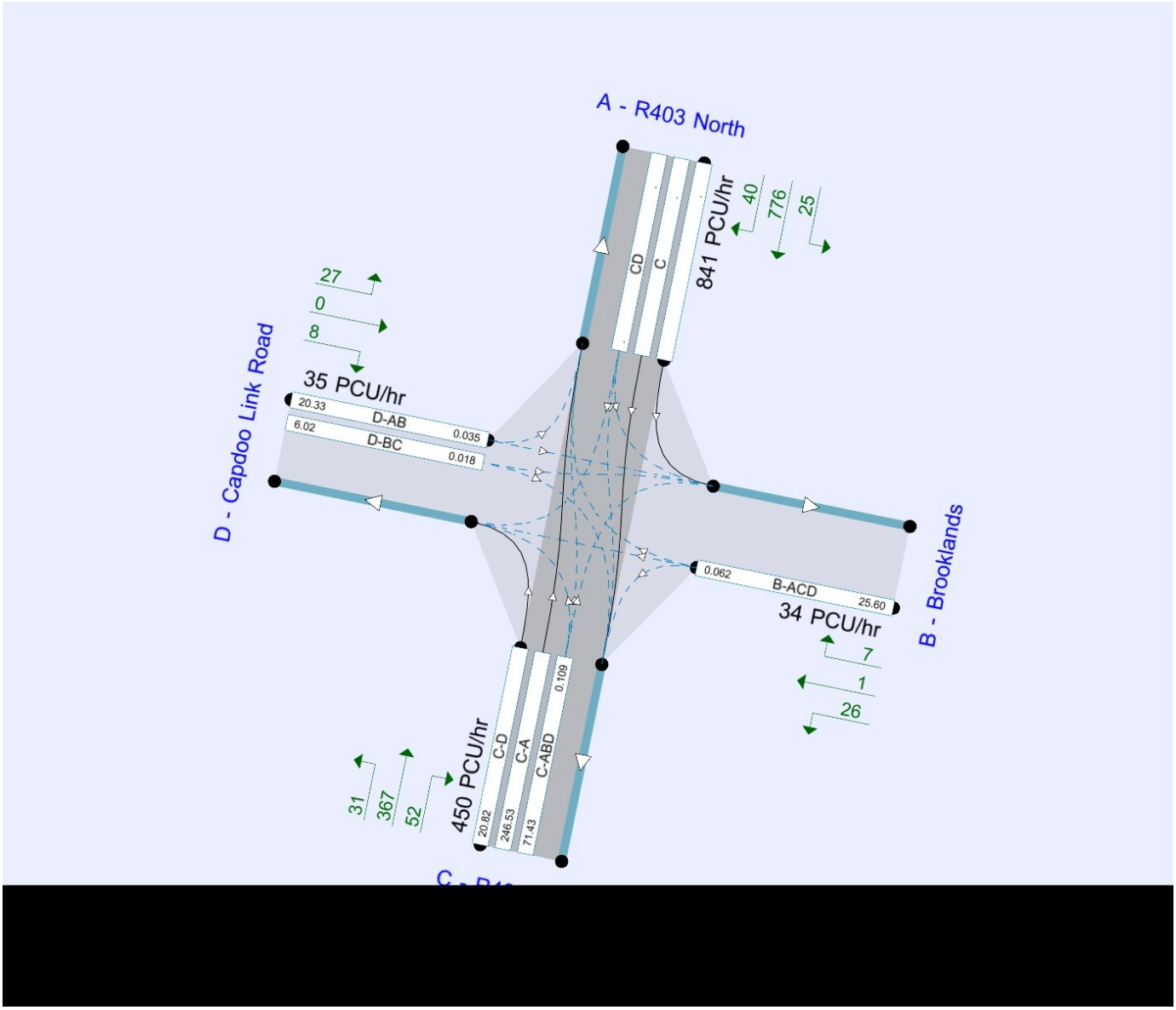
File summary

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			