

Project

**Strategic Housing Development at Colpe West,
Drogheda, Co. Meath**

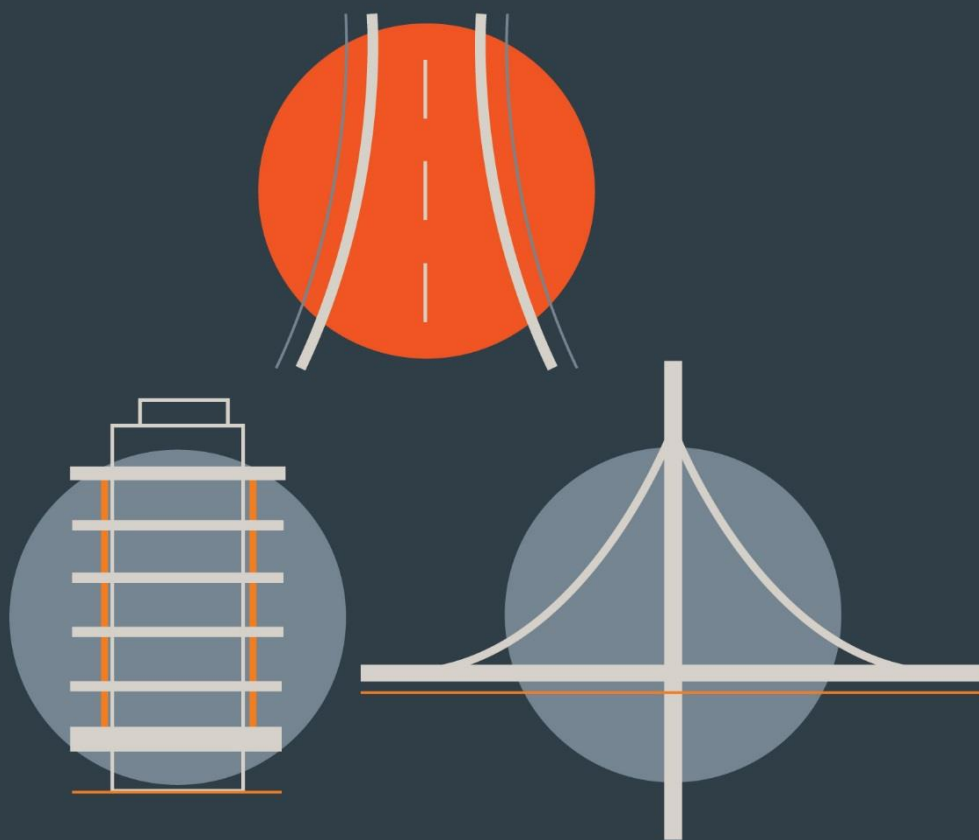
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Client

Shannon Homes Drogheda Ltd.

TRANSPORTATION



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1.0 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 DBFL Consulting Engineers have been commissioned by Shannon Homes Drogheda Ltd to undertake a Traffic and Transport Assessment (TTA) for a proposed residential development on an existing greenfield site in the south-eastern environs of Drogheda, Co. Meath.
- 1.1.2 The subject site is located in the townlands of Colp West, Co. Meath. The subject lands are currently greenfield, having been zoned as Residential as set out in the Local Area Plan for the Southern Environs of Drogheda (2009-2015).
- 1.1.3 The proposals seek permission for the development of approx. 13 Hectares for a residential development to provide 357 no. residential units, in line with the Local Area Plan and Meath County Development Plan (2013-2019) vision.

1.2 SCOPE

- 1.2.1 The purpose of this TTA is to quantify the existing transport environment and to detail the results of assessment work undertaken to identify the potential level of transport impact generated as a result of the proposed development.
- 1.2.2 The scope of the assessment covers transport and sustainability issues including access, pedestrian, cyclist and public transport connections. Recommendations contained within this report are based on existing and approved Link Street (Pl.Ref *LB180620*) layout plans, site visits, on site traffic observations and junction vehicle turning count data.
- 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 "Meath County Development Plan 2013-2019".
- 1.2.4 The subject proposal has been developed under the guidance of the Urban Development Framework Plan (UDFP) and the Mill Road/Marsh Road Transport Study (2017). This proposal has been produced to align with these documents to provide a consistent design that fits the character profile and design requirements outlined in these guidance documents. This proposed residential development is a key enabler for the wider development of the

masterplan lands and the first stage of this new urban extension of the town of Drogheda.

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;
- *Meath County Development Plan 2013-2019;*
- *Local Area Plan for the Southern Environs of Drogheda 2009-2015;*

1.3.2 In summary, our methodology incorporated a number of key inter-related stages, including:

- **Background Review:** This important exercise incorporated three parallel tasks which included (a) an examination of the local regulatory and development management documentation; (b) an analysis of previous 'transport' related, strategic and site specific studies of development and transport infrastructure proposals across the Southern Drogheda Environs, and (c) a review of planning applications to establish the legal status of various third party development schemes that were either considered within the strategic 'transport' studies or which have emerged and received full planning permission since.

- **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.
- **Mode Analysis & Trip Distribution:** Based upon both the existing traffic characteristics, 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 2021, 2026 and 2036 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.
- 1.4.3 The relevant transportation policies that influence the design and appraisal of the subject development proposals are highlighted within **Section 3**.
- 1.4.4 **Section 4** provides details of the proposed development itself.

- 1.4.5 **Section 5** 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, including the trip generation and trip distribution for the committed developments which may have an effect on this proposal.
- 1.4.6 **Section 6** details the potential traffic impact of the proposals assessed for the 2021 Opening Year, 2026 Interim Year and the 2036 Horizon Year.
- 1.4.7 The main conclusions and recommendations derived from the analysis are summarised within **Section 7**.

2.0 RECEIVING ENVIRONMENT

2.1 LAND USE

2.1.1 The existing site for the proposed development is a greenfield site which has been zoned for residential development by Meath County Council, within the southern environs of Drogheda Local Area Plan Lands.

2.2 LOCATION

2.2.1 The general location of the subject site in relation to the surrounding road network is illustrated in **Figure 2.1** below. (Drawings detailing the site layout have been submitted with this application.) The site is located in the south-eastern environs of Drogheda, in the townlands of Colpe West. The site is currently bound by the Belfast-Dublin Railway Line and greenfield sites to the North and South, with connections to Colpe Road available via the road network permitted under MCC Planning Reference *LB180620*.



Figure 2.1: Site Location (Ref: Google Maps)

2.2.2 The proposed residential site is currently a greenfield site, however, a recent planning application (reference *LB180620*) has been granted permission which includes for the provision of a link road from Colpe Road which would service this site and link onto the existing road network via Colpe Road, with potential links to Marsh road in future design years. This link road and a section of Colpe road are subject to upgrades, which will be further discussed later in this report.

2.3 EXISTING TRANSPORTATION INFRASTRUCTURE

Existing Pedestrian Environment

- 2.3.1 The receiving environment for this development is currently poorly served in terms of pedestrian facilities and linkages. Along the Marsh Road, and in the vicinity of the Colpe Road / Mill Road Junction (no pedestrian facilities for 400m of 1.2km length of road from the existing junction by the site westbound towards Colpe Cross) there are currently little or no dedicated pedestrian facilities which is a significant constraint at present, as illustrated in **Figure 2.2**. Pedestrians are compromised by relatively high traffic volumes and inadequate footpath provisions.



Figure 2.2: Existing Pedestrian and Cycle Facilities at Site (Eastbound)

Existing Cycling Environment

- 2.3.2 Dublin Road R132 and Colpe Road (750m section from Colpe Cross) offer cycle facilities which provide connectivity towards Drogheda Town Centre. Other than these facilities there are currently no dedicated cycle facilities within the southern Drogheda environs, including the roads surrounding the development site (Marsh Road, Mill Road and 400m section of Colpe Road). Cyclists are currently compromised by relatively high traffic volumes and speeds on sections of Marsh Road, Colpe Road and Mill Road.
- 2.3.3 A distance of up to 5km for cycling is generally considered reasonable for people to travel to access places of work, education or other amenities. Considering the location and proposed residential use of the site in relation to Drogheda town centre, it may be assumed that cycling may be adopted as a

sustainable mode of transport, as Drogheda town centre is located approximately 3km from the site.

Public Transport - Bus

2.3.4 Drogheda benefits from national, regional and local bus services as provided by private and public sector operators. The Site is located 3-4 km from Drogheda’s transportation hub, with no forms of public transport directly connecting the site to Drogheda Town. Bus Eireann provides a number of services linking Drogheda with Dundalk to the north and Dublin to the south where connections can be made to further regional / national services and destinations across the country.

2.3.5 The Bus Eireann services are supplemented by a number of private operators with a level of competition that is not typical for other similarly sized towns. Ultimately, this situation is to the benefit of the town’s residents and employees. The closest current bus services to the site is offered by the Matthews 910 service; this service runs to/from Dublin through Laytown and Bettystown which services the South east of Drogheda including Donacarney, and stops by Donacarney church (approx. 600m from the proposed residential site) and Southgate Shopping Centre.

2.3.6 **Figure 2.3** represents a schematic of the national and regional bus network that serves Drogheda including Matthews Coaches which travel along the Colpe Road.

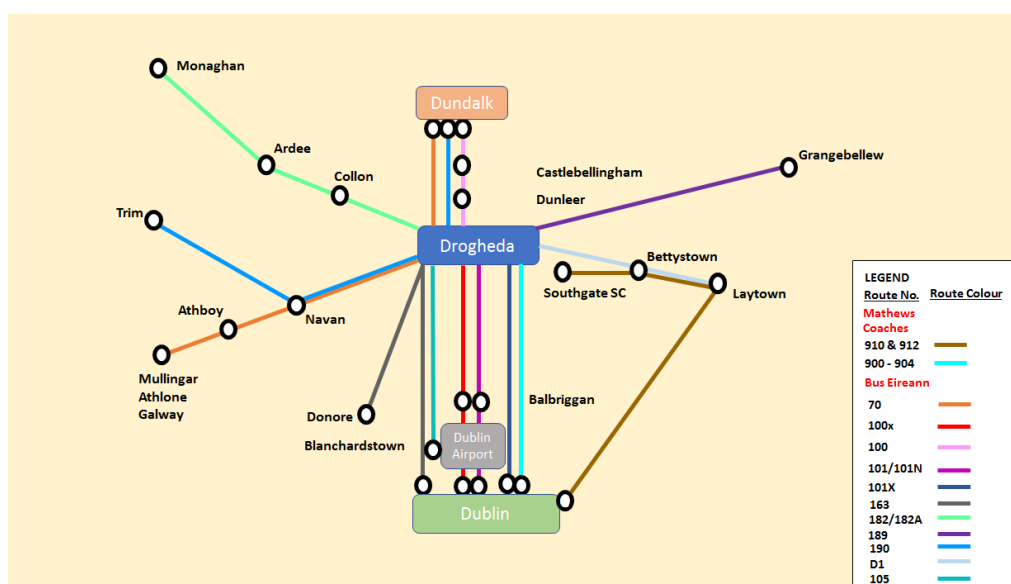


Figure 2.3: National / Regional Bus Network that serves Drogheda

- 2.3.7 The bus station in Drogheda is located at the junction of Donore Road and John Street. Currently, there are approximately 200 national and regional services serving this station each day, with the local Northside and Southside service also linking to this bus station. The Northside and Southside town services operate between 09:00 and 19:00 at an hourly frequency serving areas such as Brookeville, Moneymore, Marian Park and Rathmullan Road. Overall this provides a good level of service to the residents of Drogheda, however these town services do not link to the train station on the Dublin Road which currently leads to a lack of integration and interchange between these transport modes.
- 2.3.8 While the current location of Drogheda bus station is quite distant from the Development Site, a number of bus services serve the R132 with stops provided in the vicinity of Colpe Cross some 1.2km from the southern extent of the site.

Public Transport - Heavy Rail Network

- 2.3.9 Positioned midway on the main Belfast - Dublin railway line, MacBride Station is accessed via Dublin Road (R132) and is situated approximately 2km from the subject lands. There are currently 32 services from Dublin to Drogheda, 10 of which extend northbound to Dundalk per weekday and 33 services travelling southbound to Dublin from MacBride Station primarily serving commuter travel requirements. MacBride Station also serves the Dublin – Dundalk services with 7 trains stopping at Drogheda in each direction per weekday. **Figure 2.1** also highlights MacBride Station.

Road Network

- 2.3.10 With the exception of roundabout junctions at Colpe Cross, the remaining junctions in the vicinity of the subject lands are priority arrangements. Existing road access to the proposed development lands is provided via the Colpe Road, which runs along the southern boundary of the lands, and may be seen in **Figure 2.4** below. Colpe Road is a single carriageway road connecting Donacarney to Colpe Cross, onto Dublin Road providing connectivity in North and Southbound directions.



Figure 2.4: Colpe Road Carriageway (Source: google.ie)

- 2.3.11 Mill Road, which runs in a North-South direction, bounds the lands to the east. The Mill Road itself is a low grade rural road with restricted width, poor quality alignment and numerous existing dwellings accessing onto it.



Figure 2.5: Mill Road Carriageway (Source: google.ie)

- 2.3.12 The site is well positioned to avail of access via the Major Inter-urban and Trans European Road Network (TERN) in the form of the M1 motorway via Platin Road/new indicative Arterial Street as per the LAP (Interchange 8) also Julianstown (Interchange 7) which is approximately 10 km or 10 minutes

travel time from the lands without having to negotiate traffic congestion, which can be typical within Drogheda Town in peak periods.

- 2.3.13 The M1 is accessed via the R132 which is the old N1 and connects Dublin to Dundalk. The R132 is a wide single carriageway road, in the vicinity of Colpe Cross.

2.4 LOCAL AMENITIES

- 2.4.1 The proposed development site has an ideal location to make use of local amenities in the neighbouring area. There are a number of schools within 2km of the subject site including Gaelscoil an Bhradain Feasa, Scoil Realt na Mara, Drogheda Drammar School and Le Chéile Educate Together National School.
- 2.4.2 Furthermore, the subject site benefits from good access to leisure facilities such as public parks, GAA Clubs and golf clubs. The subject site also has good access to Southgate Shopping Centre.

2.5 COMMITTED DEVELOPMENT TRANSPORT INFRASTRUCTURE

Pedestrian & Cyclist Access

- 2.5.1 Along the Marsh Road, Mill Road and Colpe Road there are currently little or no pedestrian facilities. Pedestrians are compromised by relatively high traffic volumes and inadequate footpath provisions.
- 2.5.2 Accordingly, segregated pedestrian and cycle facilities will be constructed along the approved link road under the road and infrastructure plans for the committed development located south of this site under planning reference *LB180620*. This infrastructure proposal includes for a cycle track and footpath separated from the road surface by a 1.75m wide grass verge where achievable. These facilities will be located along the length of this approved road, with additional linkages along Colpe Road to tie into existing pedestrian and cycle facilities.
- 2.5.3 This approved Link Street forms a part of this residential development's road infrastructure and therefore will be amended as part of the proposals.

2.6 PROPOSED TRANSPORT INFRASTRUCTURE

Cycle and Walking Objectives

2.6.1 The NTA's cycle network proposals have outlined the future development of a Greenway route along River Boyne and a cycle route connecting Colpe Road to Drogheda Town has been indicated for future development plans as an "Inter-Urban Route", which will be connected to the site via an existing pedestrian footpath and cycle track. The NTA's cycle network proposals in the vicinity of the subject site are reproduced in **Figure 2.6** below.

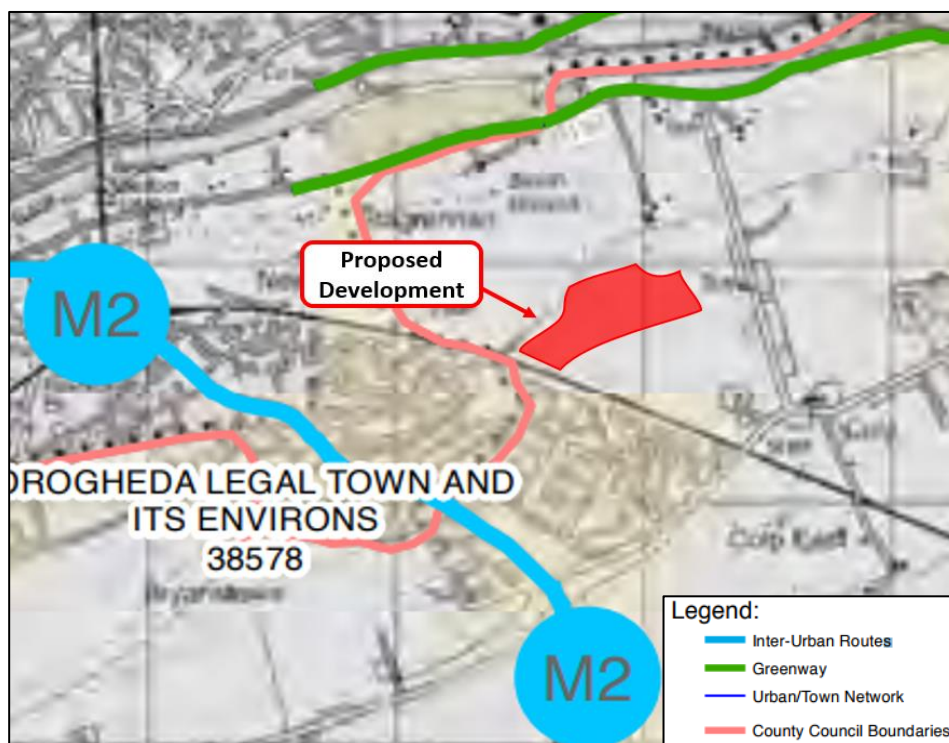


Figure 2.6: Proposed GDA Cycle Network

(Source: NTA Cycle Network Plan Rural Routes Sheet RN2)

Public Transport Routes

2.6.2 Southern Drogheda environs Local Area Plan highlights the proposal to implement a new bus route through the lands, linking the site to Drogheda Town Centre via Drogheda MacBride Train Station and Drogheda Bus Station. These services will allow commuters and residents near these stops to avail of public transport links to the proposed development site.

2.6.3 Meath County Council has recognised the need to expand and improve the bus services available within Drogheda, particularly with respect to links with Dundalk and Dublin, noting within the Southern Drogheda environs LAP,

“there is a limited town bus service. This internal service will have to be expanded to serve the new residential communities that will emerge within the southern environs.”

- 2.6.4 This suggests that MCC will make delivering a public transport service to provide increased connectivity to regional Bus and Rail stations to be an important deliverable within future years, also stating, *“Designers and developers will be required to provide for bus routes and shelters within developments and the integration of bus and railway services will be encouraged”*. This development proposes to provide two new bus stops (in both directions) within 50-100 metres of the southern boundary of the development site, along the approved link street.
- 2.6.5 The Southern Drogheda Environs LAP proposes a new Bus route, the No.4 bus route (**Appendix A**), connecting the site to Drogheda town centre with both Drogheda MacBride Train Station and Drogheda Bus station along the proposed route. The existing and future proposed bus routes for Drogheda are currently being reviewed by the National Transport Authority and may be updated in the near future.

Road Network Objectives

- 2.6.6 The southern Drogheda Environs Local Area Plan 2013-2019 identifies a number of road improvement schemes which may be of influence to the proposed residential development, a number of these have been addressed in the approved planning permission *Ref. LB180620*. Further details of the approved link street, which will provide connectivity between this proposed site and both Colpe Road and Drogheda town centre via Marsh road (in future design years) may be observed within the *Ref. LB180620* permitted development planning documents.
- 2.6.7 The provision of the proposed Newtown LIHAF Link Street and a proposal for a new Bridge Crossing for the River Boyne have been considered within this subject development’s network analysis, as these scenarios have been identified within the Southern Drogheda Environs LAP as a Strategic Aim to connect the Southern Environs of Drogheda to access Drogheda Port. An illustration of the proposed and existing road infrastructure may be observed in **Figure 2.7**.



Figure 2.7: Existing and Future Transport Infrastructure

2.6.8 The infrastructure to be implemented, permitted under Meath County Council planning reference LB180620, may facilitate both this proposed development as well as the future development of the surrounding lands in this vicinity in accordance with the Southern Drogheda Environs LAP. The permitted street will consist of a 6.5m-wide carriageway, a 1.75m wide grass verge where achievable, a 1.75m-wide cycle path and a 2m wide footpath on both sides of the road. The alignment of the street has been co-ordinated with the development strategy for the lands through the Mill Road / Marsh Road Framework Plan. This proposed new Link Street cross section can be seen in **Figure 2.8**.

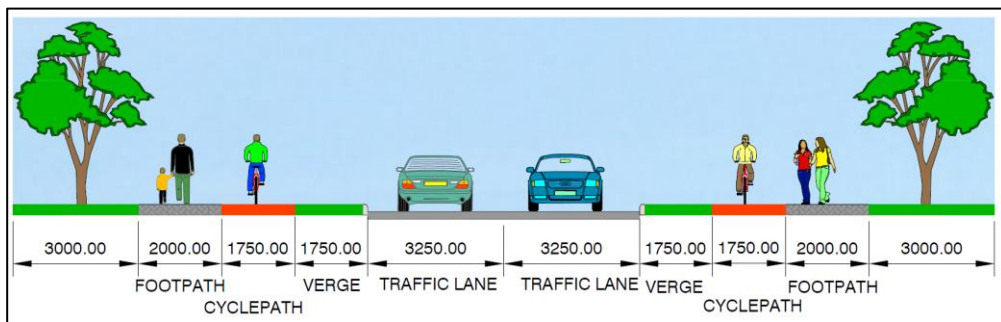


Figure 2.8 – Permitted Link Street Cross Section

- 2.6.9 This cross section was developed as a result of a collaborative process with Meath County Council and guidance from the Mill Road Marsh Road Transport Study (2017) and the Urban Development Framework Plan. Accordingly, this process has helped inform the design of a streetscape to meet the needs of all users.
- 2.6.10 The link street has been designed in accordance with the Design Manual for Urban Roads and Streets (DMURS) and would have a posted speed limit of 50kph design speed.
- 2.6.11 Further details of the above proposals in regard to the proposed residential development may be observed within the planning application *LB180620*, as well as on the drawings attached with this application.

3.0 POLICY FRAMEWORK

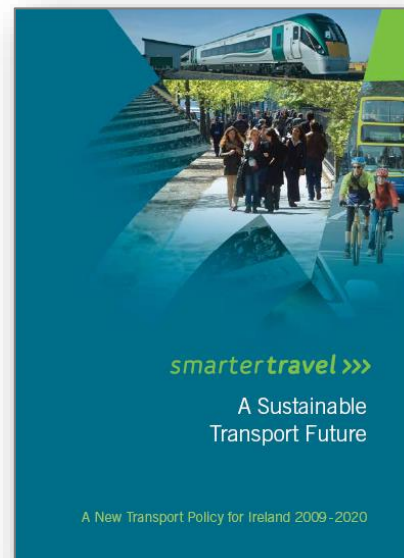
3.1 DEVELOPMENT POLICY

Introduction

3.1.1 This section of the report will provide an overview of the national, regional and local transportation policy relevant to the proposed site. These documents provide the policy framework for the proposed residential development. Relevant extracts from the documents are outlined in this section and commentary provided where necessary.

National Smarter Travel Policy

3.1.2 Smarter Travel - A Sustainable Transport Future, was published in February 2009, and represents a new transport policy for Ireland for the period 2009-2020. The policy recognises the vital importance of continued investment in transport to ensure an efficient economy and continued social development, but it also sets out the necessary steps to ensure that people choose more sustainable transport modes such as walking, cycling and public transport.



3.1.3 The policy is a direct response to the fact that continued growth in demand for road transport is not sustainable due to the resulting adverse impacts of increasing congestion levels, local air pollution, contribution to global warming, and the additional negative impacts to health through promoting increasingly sedentary lifestyles.

3.1.4 The following five key goals form the basis of the Smarter Travel policy document:

- Improve quality of life and accessibility to transport for all and, in particular, for people with reduced mobility and those who may experience isolation due to lack of transport.

- Improve economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructural bottlenecks.
- Minimise the negative impacts of transport on the local and global environment through reducing localised air pollutants and greenhouse gas emissions.
- Reduce overall travel demand and commuting distances travelled by the private car.
- Improve security of energy supply by reducing dependency on imported fossil fuels.

3.1.5 These aims will be achieved through 49 specific actions listed within the Smarter Travel Policy, which can be broadly grouped into 4 key areas:

- Actions to reduce distance travelled by private car and encourage smarter travel,
- Actions aimed at ensuring that alternatives to the private car are more widely available,
- Actions aimed at improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies, and
- Actions aimed at strengthening institutional arrangements.

3.1.6 The Smarter Travel policy also includes for a comprehensive range of supporting 'actions' including mode specific (e.g. walking, cycling and public transport etc.) and behaviour change initiatives which both encourage and provide for sustainable travel practices for all journeys.

Greater Dublin Area Transport Strategy 2016-2035

3.1.7 The Transport Strategy for the Greater Dublin Area 2016-2035 as compiled by the National Transport Authority sets out the Strategic Transport Plan for the Greater Dublin Area for the period up to 2035.



3.1.8 The purpose of the NTA's Strategy is to:

"provide a framework for the planning and delivery of transport infrastructure and services in the Greater Dublin Area (GDA) over the next two decades. It also provides a transport planning policy around which other agencies involved in land use planning, environmental protection, and delivery of other infrastructure such as housing, water and power, can align their investment priorities"

3.1.9 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.

3.1.10 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."

3.1.11 As part of this Strategy it is intended to implement the DART Expansion Programme, which will provide DART services as far north as Drogheda (see **figure 4.1** below).



Figure 4.1: 2035 Greater Dublin Area Heavy Rail Network

Meath County Development Plan – 2013-2019

3.1.12 The aim of the Meath County Development Plan 2013-2019 is to advance the present-day evolution of the county and to create a framework for the coordinated and sustainable economic, social, cultural and environmental development of County Meath.

3.1.13 Some relevant objectives of Meath County Development Plan:

- *To explore the provision of sustainable medium and long-distance walking routes.*
- *To facilitate and encourage the upgrading of existing railway stations.*
- *To facilitate the provision of adequate lands to provide for Park and Ride facilities at appropriate locations in the County. In the event of further growth in the south Drogheda area, the Council will explore the need for park and ride facilities and the reservation of land for this purpose as appropriate.*

3.1.14 Some relevant policies of Meath County Council include:

- *The facilitation of alternative transport modes to the private car, including ... frequent local bus services linking residential areas to District Centres and Designated Towns, and which serve shopping areas, employment areas and other activity centres, and connecting to key transport interchange points.*
- *To ensure the protection of existing roads infrastructure while improving the capacity and safety of the road network to meet future demands.*
- *To provide public transport interchange facilities, including facilities for taxis, at appropriate points on the public transport network, particularly in the main urban centres.*
- *To promote and support the provision of park and ride facilities which improve public transport accessibility without worsening road congestion, or which cause increased car travel distances, at appropriate locations within the county.*

3.1.15 The Development Plan states that an essential element of any integrated transport system is to provide for the needs of cyclists and pedestrians. The increased provision of cycle lanes and safer facilities for pedestrians is identified as a key action in the Government's 'Sustainable Development – A Strategy for Ireland'.

Local Area Plan (LAP) for the Southern Environs of Drogheda (2009-2015)

3.1.16 The Local Area Plan sets out the context, goals, objectives and structure for future development of the South Drogheda Environs area including the subject lands.

3.1.17 The Local Area Plan has defined the area as being bounded to the west by the existing Drogheda town boundary, to the north by the Marsh Road and River Boyne and to the south by the Dublin Rail line. To the east, the area stretches toward the Mill Road, which is a key link road between the Colpe Cross Area and the Marsh Road.

3.1.18 The LAP describes the implementation of local bus routes to service the Mill Road/Marsh Road lands as "*essential to the success of the new development*

area": The designated bus routes through the neighbourhoods should connect the Mill Road / Marsh Road Area with both the town centre and the rail station in Drogheda, with bus stop lay-bys provided along the M1 to R132 Link Road. The internal town bus service will have to be expanded to serve the new residential communities emerging in the southern environs.

3.1.19 The LAP outlines that the provision of cycle facilities along the Bryanstown Cross Route, R132 and Platin Road, Marley's Lane, Beamore Road, Rathmullen Road, Mill Road and Marsh Road should be investigated.

3.1.20 It is further proposed by the LAP:

- that pedestrian facilities along the Mill Road are created to provide a link to the new neighbourhood centre at Colpe Cross.

3.1.21 The LAP also sets out the following roads and transportation objectives:

- Meath County Council in conjunction with local authorities shall investigate the feasibility of a future strategic road crossing of the River Boyne, east of the railway viaduct, linking with the Northern Port Access Road.
- To upgrade the Mill Road and Marsh Road to provide on-street cycle tracks along the entirety of these roads.
- To provide for a link road through the Mill Road / Marsh Road District providing access to the lands and functioning as a local distributor road.
- To provide a segregated pedestrian and cycle link from the Mill Road/Marsh Road Area to Drogheda train station.

East Meath Local Area Plan (2014 – 2020)

3.1.22 This LAP was drawn up to provide a framework for the future advancement and evolution of Bettystown-Laytown-Mornington East-Donacarney-Mornington. The ambition of the LAP is to help guide development of these towns and villages in a stable and viable fashion.

3.1.23 A key consideration of this LAP is the promotion of walking & cycling and broader Smarter Travel initiatives to reduce car dependency, recognising that

challenges exist in addressing deficiencies in the existing pedestrian/cycling network.

3.1.24 The LAP states that the Boyne region has the potential to become one of the main development areas for cycling tourism with its numerous tourist attractions.

3.1.25 Some key aims of the LAP for transportation and Movement include:

- To promote the sustainable development of walking, cycling, public transport and other more sustainable forms of transport as an alternative to the private car, together with the development of the necessary infrastructure.
- To promote land use planning measures which facilitate transportation efficiency, economic returns on transport investment, minimisation of environmental impacts and a general shift towards the use of public transport.
- To promote and facilitate the provision of the necessary transport infrastructure to fully accommodate existing and future population needs as well as the demand for economic development in an environmentally sustainable manner.

Drogheda Transportation Study (2006)

3.1.26 The Drogheda Transportation Study developed a strategy to address the traffic management requirements of Drogheda Town and Environs. The study focused particularly on the provision of slow mode access to the town centre, on the key access routes and through key road junctions. This implied that, where necessary, recommendations would favour pedestrians and cyclists.

3.1.27 This study focused in particular on all aspects of transport management in the town centre and also on the key radial routes, cross routes and road junctions outside the town centre. This focus ensured that fully connected linkages were developed to and through the town centre whilst also ensuring that the key road links outside the town centre could facilitate all modes of transport making trips to and from the town centre or key destinations such as the railway station and national road network. The study provided a review of traffic management within Drogheda including provisions for pedestrian and

cyclist needs, parking requirements, public transport, road network management and a freight strategy. This transport study proposes potential bridge crossings over the Boyne River by the FloGas Ireland to Greenhills and from the Mill Road linking the Southern Environs of Meath with the Port Access Northern Cross Route (PANCR).

Mill Road/Marsh Road Urban Design Framework Plan (2017)

- 3.1.28 The Urban Design Framework Plan sets out parameters for the future development of the Mill Road/Marsh Road Area Lands, having regard to the existing planning policy framework and specific policies and objectives for the UDFP set out in the Local Area Plan for the Southern Environs of Drogheda which is the statutory plan for the area in addition to the Meath County Development Plan.
- 3.1.29 The Local Area Plan for the Southern Environs of Drogheda 2009- 15 states that the lands at Mill Road/Marsh Road have been zoned under the Local Area Plan, however future development is subject to an Urban Design Framework Plan and is qualified by the Order of Priority as contained in Variation No. 2 of the County Development Plan 2013-2019.
- 3.1.30 The Urban Design Framework Plan has been progressed to fulfil the requirements of the LAP to ensure the proper planning and sustainable development of the area.
- 3.1.31 The Framework Plan aims to provide guidance for the coherent development of a significant area of strategic undeveloped land at Mill Road/Marsh Road.

Mill Road/Marsh Road Transportation Study (2017)

- 3.1.32 The Mill Road/Marsh Road Transportation Study developed a strategy to address the traffic management requirements of south Drogheda and Colpe Environs. The study focused particularly on the provision of sustainable transport infrastructure necessary to promote green modes of transport, such as walking, cycling or public transport.

3.1.33 The Study sets out an overview of the access and movement strategy for the subject lands which is drawn together from the consideration of the requirements of the site itself, but importantly also recognizes the relationship and requirements of the surrounding Drogheda Urban Area (DUA). The Strategy has been prepared to provide an integrated land-use and transportation framework for a core area of land extending to approximately 180 hectares, and having regard to all immediate surrounding lands, located south east of Drogheda.

Policy Conclusion

3.1.34 The various studies discussed in the preceding sub-sections set out the transport planning policy context and need to promote the sustainable development of walking, cycling, public transport and other more sustainable forms of transport as an alternative to the private car and to facilitate the provision of the necessary transport infrastructure to fully accommodate existing and future population needs as well as the demand for economic development in an environmentally sustainable manner.

4.0 CHARACTERISTICS OF PROPOSALS

4.1 OVERVIEW

- 4.1.1 The subject proposals seek permission to develop a section of the existing greenfield site and construct a new residential development of approximately 357 total units, with a mix of houses, apartment and duplex units and a crèche.
- 4.1.2 This development proposes to provide two new bus stops (in both directions) within 50-100 metres of the southern boundary of the development site, along the approved link street. This development also aims to deliver pedestrian and cycling facilities between the subject site and the existing pedestrian and cycling facilities along Colpe Road to provide connectivity to Drogheda Town Centre via Colpe Cross and Dublin Road. This development also includes for the provision of a pedestrian/cycle bridge over the Dublin/Belfast Railway line, providing additional connectivity to Colpe Cross, Drogheda and MacBride Station.
- 4.1.3 The subject proposal has been developed under the guidance of the Urban Development Framework Plan (UDFP) and the Mill Road Marsh Road Transport Study. This proposal has been produced to align with these documents to provide a consistent design that fits the character profile and design requirements outlined in these guidance documents.

Development	Units/GFA
Apartments	188 Units
Duplex	52 Units
Houses	169 Units
Crèche	439 m²
Total	357 Units*

Table 4.1 – Development Schedule

4.2 SITE ACCESS ARRANGEMENTS

Vehicular Access

- 4.2.1 The proposed development will be accessed via a signal controlled junction connecting to the proposed development's street network. This development is connected to the local road network via the approved link street (*Ref. LB180620*). This approved link street is to be amended to form a part of this Strategic Housing Development to upgrade the roundabout junction which would act to provide access to the residential development and further to the Gaelscoil *An Bhradain Feasa*, to a 4-arm signal controlled junction, designed in accordance with Design Manual for Urban Roads and Streets (DMURS)
- 4.2.2 There are also potential future links zoned that will offer connectivity and permeability onto both future developments of the surrounding lands and to Marsh Road, located on the northern boundary of the Urban Development Framework Plan Lands.
- 4.2.3 The site layout may be observed in **Figure 4.1** below. The link street has been designed in accordance with the Design Manual for Urban Roads and Streets (DMURS) and would have a posted speed limit of 50kph design speed.
- 4.2.4 The site has been tracked for use by private car parking, which has been undertaken in areas with traffic calming measure where accessibility may be more difficult to achieve, and for Large Refuse Vehicle access within the site using turning heads throughout the proposed development. These drawings display how vehicular access may be achieved without any disruption to other users of the site, with drawings included within this planning package.

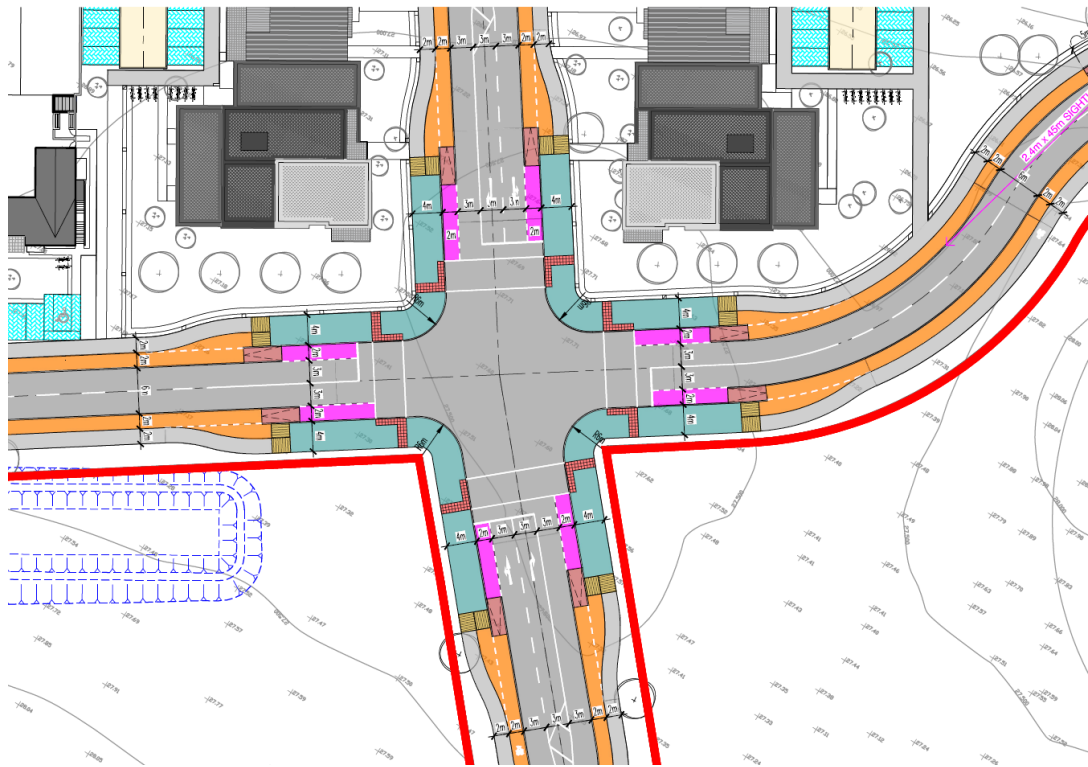


Figure 4.1 – Proposed Site Access Junction Layout

Pedestrian & Cycle Access

- 4.2.5 Pedestrian and cycle access to the site is achieved along the dedicated facilities proposed to run alongside the link street, which also provides separation between pedestrians and cyclists. A bridge across the Dublin – Belfast Railway line is also proposed to provide shared facilities for pedestrians and cyclists and offering permeability for users to and from neighbouring residential developments.
- 4.2.6 From these aforementioned access points, cyclists may then park their bicycles in their homes or in the dedicated cycle parking facilities located proximate to the various apartment and duplex blocks.
- 4.2.7 Pedestrian access and cycle access is achieved through a streetscaped dedicated pedestrian footpath and cycle track, which has been approved under *planning ref. LB180620* (will be upgraded to a signal controlled junction as part of this application), for the link road connecting to this site from Colpe Road, including for the provision of dedicated pedestrian and cycle facilities connecting into existing facilities along Colpe Road to provide connectivity.

There are also approved future links that will offer connectivity and permeability to Marsh Road which will help increase site accessibility in future years.

- 4.2.8 Accordingly, the subject site will be highly accessible to both pedestrians and cyclists with permeable connections provided to the neighbouring lands via local streets and footpaths throughout the subject development.
- 4.2.9 Further details of the site layout and site access arrangements are illustrated in the **Figure 4.2**, as shown below.



Figure 4.2 – Proposed Site Layout with Access Road (LB180620)

4.3 DEVELOPMENT CONTROL

Car Parking Standards

- 4.3.1 Reference has been made to Table 11.9 of the Meath County Development Plan (2013-2019) for the housing units which outlines the maximum car parking standards, as well as *the Design Standards for New Apartments*

Planning Guidelines (2018), which provides guidance for design of parking provision for apartment units.

4.3.2 With regard to the proposed development schedule the associated car parking requirements for the **Meath County Development Plan** are outlined in **Table 4.2** below:

- Apartments & Duplexes
 - 1 / 2 Bedroom – 1 Space per Unit (plus 1 visitor per 4 spaces).
 - 3 / 4 Bedroom – 2 Space per Unit (plus 1 visitor per 4 spaces).
- Crèche
 - 1 Space per Employee
 - 1 Set Down Space per 5 Children
- Houses - 2 per Dwelling Unit.

Land Use	Unit No. / Size	Parking Standard	Parking Requirement
Apartments & Duplexes	188	1 per 1 & 2 bedroom unit 2 per 3-4 bedroom unit (1 visitor per 4 apartments)	287
Crèche	439 sq.m	1 per employee & dedicated set down area 1 per 5 children	45
Dwellings	169	2 per conventional dwelling	338
Total Parking Required for Proposed Development			670

Table 4.2: Car Parking Standards (Meath Development Plan 2013-2019)

4.3.3 In response to the above local development management standards the scheme may provide 670 on-site car parking spaces, within the proposed development.

4.3.4 The Meath County Development Plan also states that, "Parking facilities for mobility impaired drivers and their vehicles shall be provided at the general rate of 2 per 100 spaces, such spaces shall be proximate to the entry points of the proposed buildings."

4.3.5 Houses will have two dedicated car parking spaces allocated per unit, with cycle parking expected to occur within the dwelling thus no cycle parking is required for these units.

4.3.6 *The Design Standards for New Apartments Planning Guidelines* (Department of Housing, Planning and Local Government, 2018) have been applied to Car parking for the Apartment and Duplex units to determine what the appropriate level of Car Parking required for this development may be.

4.3.7 Accordingly, the following car parking numbers have been proposed for this development:

Development	Units	Car Parking Spaces Proposed
Houses	169	338
Apartments & Duplex	188	188
Visitor	-	58
Crèche	439 sq.m	8
Total		592

Table 4.3: Car Parking Proposals (New Apartments Planning Guidelines)

4.3.8 The proposal plans to provide for a total of 592 no. parking spaces, of which there are 19 no. mobility impaired car parking spaces within the parking scheme.

Cycle Parking Standards

4.3.9 Reference has been made to Section 11.9.2 of the Meath County Development Plan (2013-2019) for the maximum cycle parking standards which may be provided for the housing units, as well as *the Design Standards for New Apartments Planning Guidelines (2018)*, which provides guidance for design of parking provision for apartment units.

4.3.10 The **Meath County Development Plan** outlines, "Secure cycle parking facilities shall be provided in new office, residential, retail and employment generating developments. Bicycle racks shall be provided in all cases where Meath County Council deems bicycle parking necessary. Such facilities should be within 25 metres of a destination for short-term parking, (shops) and 50 metres for long term parking (school, college, and office). The number of

stands required will be a third of the number of car spaces required for the development, subject to a minimum of one stand.”

- 4.3.11 In regard to the Meath County Development Plan, the number of cycle parking spaces required will be a third of the number of car spaces provided for the Apartments & Duplexes. House parking numbers will not be included because cyclists may park their bicycles in their homes or back gardens.
- 4.3.12 With regard to the proposed development schedule, the associated cycle parking requirements are outlined in Table 3.2 below:

Development	No. Car Parking Spaces	Cycle Parking Spaces Required
Apartments & Duplexes (MCC Development Plan)	182	61

Table 4.4: Cycle Parking Standards (Meath Development Plan 2013-2019)

- 4.3.13 The Design Standards for **New Apartments Planning Guidelines (2018)** for residential developments have outlined the following:

"A general minimum standard of 1 cycle storage space per bedroom shall be applied. For studio units, at least 1 cycle storage space shall be provided. Visitor cycle parking shall also be provided at a standard of 1 space per 2 residential units. Any deviation from these standards shall be at the discretion of the planning authority and shall be justified with respect to factors such as location, quality of facilities proposed, flexibility for future enhancement/enlargement, etc."

- 4.3.14 With regard to the proposed development schedule, the associated cycle parking requirements are outlined in **Table 4.4** below.

Development	Units	Cycle Parking Spaces Required
Apartments	188	370
visitor	-	93
Total		463

Table 4.4: Cycle Parking Standards

4.3.15 In response to the above two design standards, 532 no. cycle parking spaces are being provided with this proposed development, which significantly exceeds MCC development plan standards for cycle parking for this development while marginally lower than the Apartment Guidelines.

Development	Units	Cycle Parking Spaces Required
Apartments & Duplexes*	182	532
Total		532

Table 4.5: Cycle Parking Proposals

*Includes Visitor cycle parking and crèche cycle parking

5.0 TRIP GENERATION AND DISTRIBUTION

5.1 INTRODUCTION

5.1.1 The following paragraphs of this section detail the trip generation and trip distribution for the proposed residential development. The committed development's trip generation and distribution are considered for this assessment and are discussed in greater detail later in this chapter. Traffic Survey data and trip generation based upon proposed development details have been used to generate a complete and accurate representation of future traffic impacts based on industry standard methods.

5.1 TRAFFIC SURVEYS

5.1.1 With the objective of quantifying the existing traffic movements across the local road network vehicle link counts were undertaken.

5.1.2 The AM and PM peak period weekday vehicle turning count survey (fully classified junction turning count) was conducted by MHC Traffic Ltd. over a six-hour period from 07:00 to 10:00 and from 16:00 to 19:00 on Thursday 25th May 2017 across five junctions (**Figure 5.1**).

5.1.3 Both Junction Turning counts, and Automated Traffic Counts survey types were used to collect survey data for the road network to establish the network's existing conditions, such as AM and PM peak hours as well as traffic volumes for later analysis.

5.1.4 The surveys established that the local network's AM and PM peak hours occur between 08:30 – 09:30 and 17:00 – 18:00 respectively.

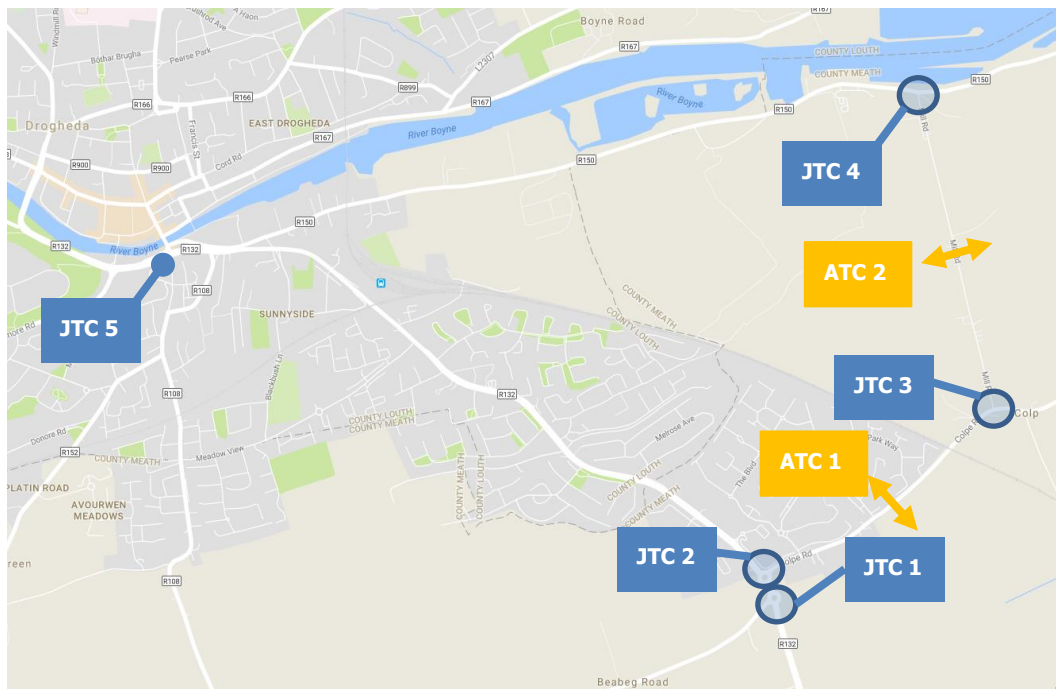


Figure 5.1: Traffic Survey Locations

5.2 TRIP GENERATION

Proposed Development

- 5.2.1 To estimate the level of vehicle trips that may be generated by the complete development of the surrounding lands for the purpose of this transport assessment, reference has been made to the TRICS database. 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.
- 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.

5.2.4 In order to predict the likely mode share associated with trips travelling to / from the assumed development two approaches have been employed including:

- An analysis of the 2016 Census travel to work / school / college mode share for residential developments on adjacent lands. The mode share proportions derived from the 2016 Census have been applied to the assumed residential element of the assumed development.
- Mode share proportions predicted by the TRICS database for all non-residential land uses.

5.2.5 The proposed development will be implemented in two different phases to provide an accurate representation of likely construction and occupational trends for a development of this size.

- 2021 Opening Year = 121 Residential Units + Crèche
- 2026 + 2036 Years – Full Development = 357 Residential Units + Crèche

5.2.6 A summary of the adopted trip rates and forecast traffic generation of the proposed development is provided in **Table 5.1** below, with the associate trips illustrated in **Table 5.2** and **Table 5.3**.

Land Use	AM			PM		
	Arr	Dep	Total	Arr	Dep	Total
Residential Dwellings (per unit)	0.165	0.332	0.497	0.424	0.222	0.646
Crèche (per 100sq. m GFA)	3.507	2.998	6.505	0.891	1.524	2.415

Table 5.1: Proposed Residential Development Vehicle Trip Rates

Land Use	Units/GFA	AM Trips			PM Trips		
		Arr	Dep	Total	Arr	Dep	Total
Residential	121	20	40	60	51	27	78
Crèche *	439 sq. m	15	13	28	14	18	32

Table 5.2: Proposed Residential Development Vehicle Trip Generation (2021 Opening Year)

Land Use	Units/GFA	AM Trips			PM Trips		
		Arr	Dep	Total	Arr	Dep	Total
Residential	357	59	118	177	151	79	230
Crèche *	439 sq. m	15	13	28	14	18	32

Table 5.3: Proposed Residential Development Vehicle Trip Generation (2026 Interim Year & 2036 Horizon Year)

*It has been assumed that all Crèche trips are generated internal to the network and will be undertaken as secondary trips.

Committed Developments

5.2.7 The following committed applications have been included within modelling scenarios for the proposed development to account for their impacts on the road network. The trips generated from these committed developments have been applied to the network, in accordance with TII guidelines and the trip generation information contained within their relevant transport assessments, agreed with planning authorities. Where developments are situated in more remote locations these trips have instead been accounted for within network growth.

Committed Development - Gaelscoil

5.2.8 With the objective of providing a robust appraisal this Traffic and Transport Assessment has incorporated development proposals for a local school on a neighbouring site as committed development. The school plans for an expansion from its existing 400 no. pupils to facilitate 600 no. pupils, with the aim to reroute trips to Gaelscoil an Bhradain Feasa from Mill Road onto the approved Link Street (*ref. LB180620*), to access the school via a new entrance through the proposed new road.

5.2.9 Trip Rates for this committed development have been predicted by the TRICS database. These third-party trip generation rates are presented in **Table 5.4** below.

Land Use	Peak Hour	Trip Rates (per pupil)			Total Traffic Generation (vehicles)		
		Arr	Dep	Total	Arr	Dep	Total
School – 600 Pupils (200 additional pupils)	AM	0.132	0.103	0.235	26	21	47
	PM	0.015	0.018	0.033	3	4	7

Table 5.4: Committed Development (Gaelscoil) Vehicle Trip Generation

Committed Development – Office (MCC Planning Ref. LB180620)

5.2.10 This approved office development is proposed on the south east of the plan lands. This site plans for a “High Tech Office Development” across a site of 11,205m² GFA. Trip rates adopted by this development have also been predicted using the TRICS database and access the permitted link road via a priority controlled junction. These third-party trip generation rates are presented in **Table 5.5** below.

Land Use	Peak Hour	Trip Rates (per pupil)			Total Traffic Generation (vehicles)		
		Arr	Dep	Total	Arr	Dep	Total
High Tech Offices	AM	0.132	0.103	0.235	125	20	145
	PM	0.015	0.018	0.033	6	73	79

Table 5.5: Committed Development (Office) Vehicle Trip Generation

Committed Development – Temporary School (Secondary)

5.2.11 This Traffic and Transport Assessment also includes for the development of a local school on a neighbouring site as committed development. There are plans to provide a temporary school for a total of 180 pupils to be accessed along the approved Link Street (*ref. LB180620*), via a priority controlled junction south of the Signal Controlled junction and north of the Colpe Road Mill Road Roundabout Junction.

5.2.12 Trip Rates for this committed development have been predicted by the TRICS database. These third-party trip generation rates are presented in **Table 5.6** below.

Land Use	Peak Hour	Trip Rates (per Pupil)			Total Traffic Generation (vehicles)		
		Arr	Dep	Total	Arr	Dep	Total
School – 180 Pupils	AM	0.095	0.060	0.155	17	11	28
	PM	0.033	0.045	0.078	6	8	14

Table 5.6: Committed Development (Gaelscoil) Vehicle Trip Generation

Committed Development – Residential

5.2.13 This Traffic and Transport Assessment also includes for the development of a Residential development (Louth County Council Ref. 17387) on lands at Marsh Road as committed development. There are plans to provide a residential development including for a total of 133 no. residential developments to be accessed via the Newton LIHAF road leading to a priority controlled junction between the Newtown LIHAF road and R150 Marsh Road.

5.2.14 Trip Rates for this committed development have been predicted by the TRICS database. These third-party trip generation rates are presented in **Table 5.7** below.

Land Use	Peak Hour	Trip Rates (per Unit)			Total Traffic Generation (vehicles)		
		Arr	Dep	Total	Arr	Dep	Total
Residential (133 Units)	AM	0.165	0.332	0.497	22	44	66
	PM	0.424	0.222	0.646	56	30	86

Table 5.7: Committed Development (Residential) Vehicle Trip Generation

Committed Development – Residential

5.2.15 This Traffic and Transport Assessment also includes for the Strategic Housing Development at Bryanstown, granted permission by An Bord Pleanála (Ref. ABP-3037899-19) for the development of 250 no. residential units (94 no. houses, 156 no. duplex/apartment units) creche and associated site works. The transport assessment for the Bryanstown SHD does not include for links into the proposed development’s adopted traffic network for this proposed development’s assessment. The flows proposed under the permitted SHD development are accounted for by network growth, which is predicted by TII traffic growth rates, as this development does not project for its trips to be

assigned to R108 Beamore Road and onto this proposed development's road network.

Vehicle Trip Distribution and Assignment

5.2.16 The proposed development trips have been distributed and subsequently assigned across the local road network. In order to establish the origin-destination (O-D) of future development trips to / from the subject lands, 15 no. O-D zones have been applied to the assumed geographical catchment areas of the subject development lands. **Figure 5.2** below presents these 15 no. O-D zones relative to the subject development and surrounding lands.

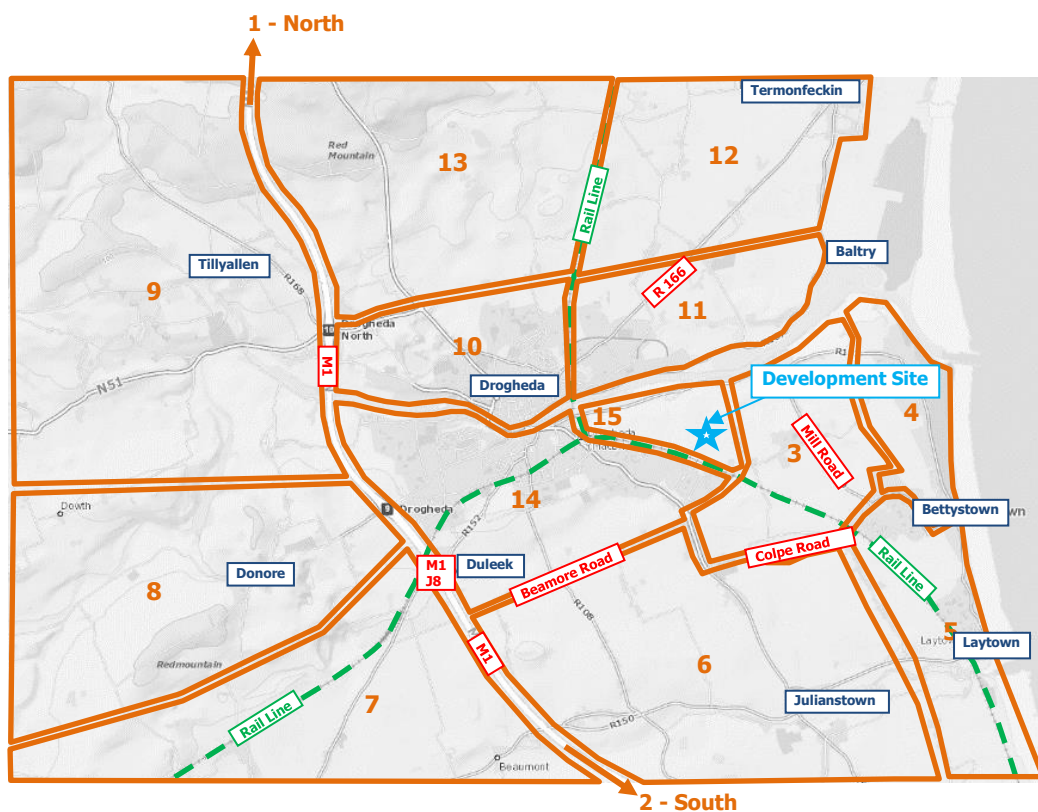


Figure 5.2: Adopted O-D Zones

5.2.17 Based on the aforementioned O-D zones, a proportion of the predicted development trips have been distributed to each O-D zone. These trips have been assigned to the surrounding road network based on the likely route between the subject site and each O-D zone. The quantum of trips assumed to be generated by each O-D zone has been estimated based on the existing / future population characteristics and employment opportunities within each zone. This may be viewed in greater detail within **Appendix B**.

Proposed Development Trip Distribution

5.2.18 The distribution of the proposed development's generated vehicle movements as proposed by DBFL is presented in **Appendix B** of this report. The associated residential vehicle trips have been assigned to the surrounding road network based on the surveyed traffic movements passing the site based on the following assumptions.

5.2.19 In the Opening Year 2021, we have assumed that 121 of the residential units and the crèche will be complete and occupied for the 2021 scenario in order to show the design scenario which reflects expectations of construction and occupation trends. Full Development and occupation of the 357 residential units is proposed to occur by the 2026 Interim Design Year, with the connection to Marsh Road proposed to be opened for this design year within the Urban Framework Development Plan and Mill Road / Marsh Road Transport Study.

Proposed Development Trip Distribution

5.2.20 The TTA adopts an Opening Year of 2021 and Future Horizon Years of 2026 (+5 years) and 2036 (+15 years) as per the methodology adopted in the NRA Transport Assessment Guidelines (2014). Growth rates using the TII "Travel Demand Projections" have been adopted for this assessment.

5.2.21 Table 5.3.2 within the TII Project Appraisal Guidelines (2016) provides Annual National Traffic Growth Factors for the different regions within Ireland. The subject site lies within 'Region 2 – Mid-East' with the growth factors as outlined within **Table 5.8** below.

Name	Low Growth				Central Growth				High Growth			
	2016-2030		2030-2040		2016-2030		2030-2040		2016-2030		2030-2040	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
Meath	1.0156	1.0349	1.0052	1.0164	1.0173	1.0365	1.0070	1.0186	1.0205	1.0400	1.0108	1.0226

**Table 5.8 : Project Appraisal Guidelines for National Roads Unit 5.3 –
 Travel Demand Projections (Extract from Table 6.2 PE PAG 02017)**

5.2.22 Applying the annual factors (Central growth) as outlined in **Table 5.8** above for the adopted Opening Year of 2021 and Future Horizon Years of 2026 and 2036, the following growth rates have been adopted to establish corresponding 2021, 2026 and 2036 baseline network flows:

- 2017 to 2021 – 1.071
- 2017 to 2026 – 1.1669
- 2017 to 2036 – 1.29

5.2.23 These factors have been used in the growth of the base traffic network for use in future design scenarios.

5.2.24 The distribution of the proposed development’s generated vehicle movements have been assigned based on CSO data for similar existing sites within the vicinity of the site.

5.3 ASSESSMENT SCOPE

Assessment Scenarios

5.3.1 This analysis looks at four different traffic scenarios, with two different network scenarios, namely an Option A – including the Link Street through route and an Option B – Without the Link Street Through Route.

5.3.2 Option B represents a scenario where the permitted Link Street (*Ref. LB180620*) is not completed to provide a link from Colpe Road to the proposed Newtown LIHAF road scheme nor onto Marsh Road. This Scenario has been prepared as a result of the request from An Bord Pleanala, which states the development should “*demonstrate the suitability of the proposed vehicular access arrangements for the subject site and impact on the Colpe and Mill*

Roads in the absence of the link road from the site to the Marsh Road, and consider or address any issues in respect of access to adjoining lands, in particular ensuring that the proposed development subject of this SHD pre-application does not unduly prejudice the future development of adjoining zoned lands particularly to the north.”

- 5.3.3 These two options each have 'Do-Minimum' and 'Do-Something' scenarios across each of the three design years for this traffic network.
- 5.3.4 The "Do Minimum" traffic scenarios have taken into account the existing flows travelling across the network, along with the committed developments in the vicinity of the traffic network.
- 5.3.5 The proposed development traffic is then added to the network's 'Do Minimum' traffic flows to establish the 'Post Development' traffic flows.
- 5.3.6 The Development scenarios, 'Do Minimum' and 'Do Something', may be summarised as follows:

Option A – With Link Street Through Route

- 'Do-Minimum' traffic characteristics – Adjusted Base conditions to account for approved development (*ref. LB180620*) link street opening, existing trip redistributions, and including committed development trips.
- 'Post development' (Do-Something Scenario) traffic characteristics – adjusted base network with completion of committed development and proposed development.

Option B – Without Link Street Through Route

- 'Do-Minimum' traffic characteristics – Base conditions plus committed development trips, diverted and the opening of the Link Street (*ref. LB180620*) without the through route.
- 'Post development' (Do-Something Scenario) traffic characteristics – base network with completion of committed development, diverted school trips from Mill Road and proposed development.

- 5.3.7 In summary, the following network modelling scenarios are considered: -

Option A – with Through Route

Do Minimum

- A1 – 2021 Opening year Redistributed Traffic Flows (Link street opening + Committed Developments)

- A2 – 2026 Interim Year Redistributed Traffic Flows (Link street opening + Committed Developments)
- A3 – 2036 Horizon Year Redistributed Traffic Flows Link street opening + Committed Developments)

Do Something

- B1 – 2021 Do Minimum (A1) + Proposed Residential Development (121 units with 439 sq.m crèche)
- B2 – 2026 Do Minimum (A2) + Proposed Residential Development (357 units with 439 sq.m crèche)
- B3 – 2036 Do Minimum (A3) + Proposed Residential Development (357 units with 439 sq.m crèche)

Option B – without Through Route

Do Minimum

- C1 – 2021 Opening year Traffic Flows (Base + Committed Developments)
- C2 – 2026 Interim Year Redistributed Traffic Flows (Base + Committed Developments)
- C3 – 2036 Horizon Year Redistributed Traffic Flows (Base + Committed Developments)

Do Something

- D1 – 2021 Do Minimum (C1) + Proposed Residential Development (121 units with 439 sq.m crèche)
- D2 – 2026 Do Minimum (C2) + Proposed Residential Development (357 units with 439 sq.m crèche)
- D3 – 2036 Do Minimum (C3) + Proposed Residential Development (357 units with 439 sq.m crèche)

Assessment Periods

5.3.8 The network's AM and PM peak hour flows have been identified as occurring between 08:30 to 09:30 and 17:00 to 18:00 respectively.

5.3.9 The following figures as included in **Appendix B** present the vehicle flows across the local road network for each of the adopted development scenarios:

- Figure 1 – 2021 Do Minimum (A1)
- Figure 2 – 2026 Do Minimum (A2)
- Figure 3 – 2036 Do Minimum (A3)
- Figure 4 – 2021 Do Something (B1)
- Figure 5 – 2026 Do Something (B2)
- Figure 6 – 2036 Do Something (B3)
- Figure 7 – 2021 Do Minimum (C1)
- Figure 8 – 2026 Do Minimum (C2)
- Figure 9 – 2036 Do Minimum (C3)
- Figure 10 – 2021 Do Something (D1)
- Figure 11 – 2026 Do Something (D2)
- Figure 12 – 2036 Do Something (D3)

5.4 IMPACT OF PROPOSALS

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

5.4.2 **Table 5.9** below details the percentage increase of two-way vehicle trips to/from the proposed development site that will travel through the local road network in the 2036 Horizon Design Year scenario. Percentage impacts were calculated for the impact of the development in 'Do Something' Scenarios vs 'Do Minimum' scenarios for the corresponding years. It may be noted that overall these junctions will experience a net decrease in traffic volumes due to the diversion of trips.

5.4.3 For the key off-site junctions, it can be seen that the proposed development (357 units) in 2036 would have effects on the following junctions:

- **Junction 1** – Mill Road / Colpe Road Roundabout
- **Junction 2** – Colpe Road / R132 Dublin Road Roundabout at Southgate Shopping Centre.
- **Junction 3** – R132 Dublin Road / Beamore Road Roundabout at Southgate Shopping Centre.
- **Junction 4** – Marsh Road / Mill Road.

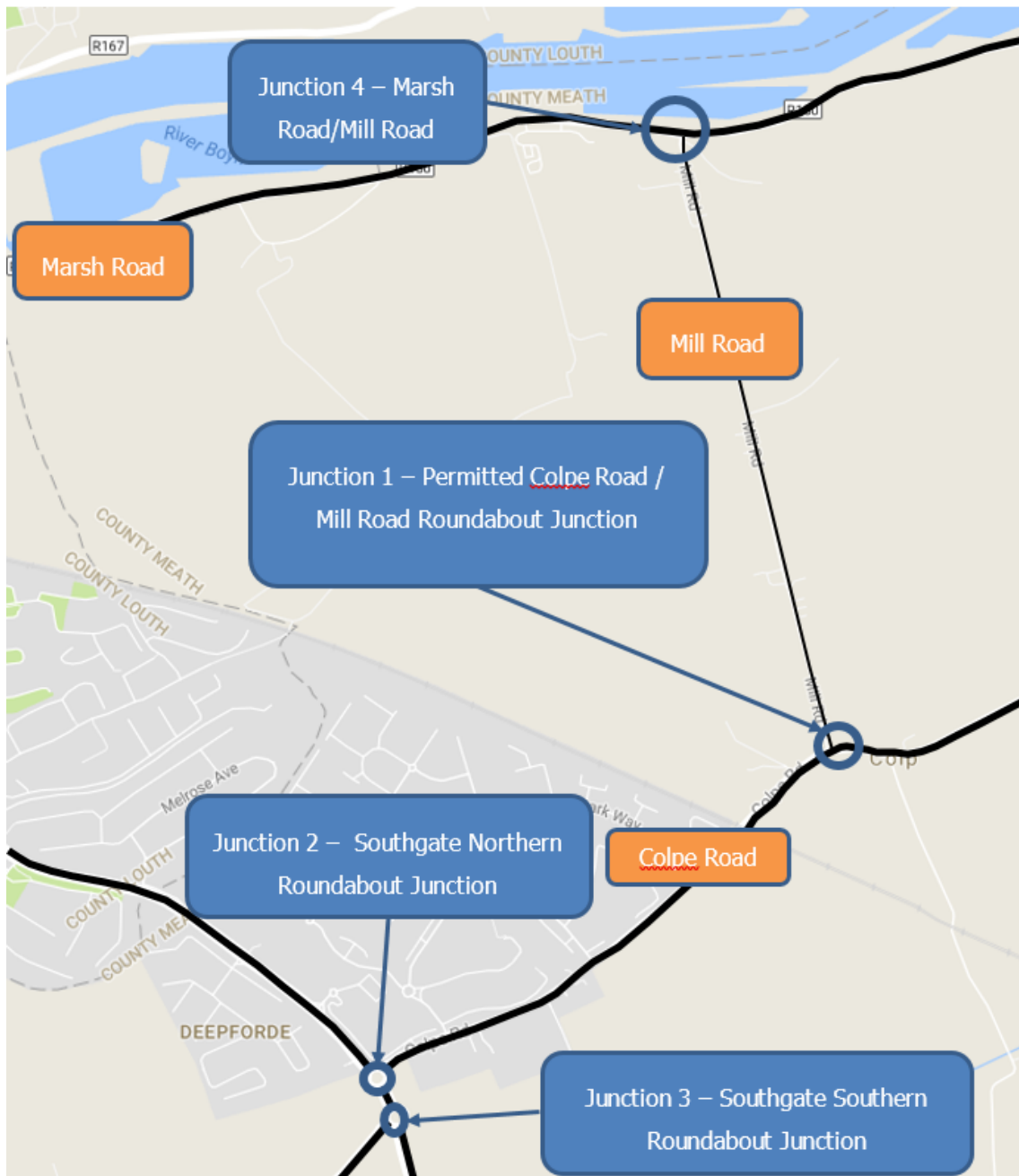


Figure 5.2: Road Network assessed as part of the Junction analyses

Junction ID	Junction/ Location	2036 Option A		2036 Option B	
		AM Peak Impact Scale	PM Peak Impact Scale	PM Peak Impact Scale	PM Peak Impact Scale
1	Colpe Road / Mill Road / Link Street	16.4%	26.2%	26.4%	34.5%
2	R132 / Colpe Road	2.2%	0.0%	7.2%	5.8%
3	R132 / Beamore Road	2.0%	-2.5%	4.6%	0.6%
4	Mill Road / Marsh Road	-32.9%	-17.4%	7.4%	14.8%

Table 5.9: Network Impact (2036 Future Design Year)

- 5.4.4 For the purposes of this analysis, central growth forecasts have been adopted thereby ensuring a robust analysis (i.e. utilising the High Growth rates results in lower percentage impact on the overall network as a result of the development).
- 5.4.5 As results in **Table 5.9** above show, Both **Option A** and **Option B** result in a development scenario where the 10% threshold for junction impact is exceeded and therefore requires further junction analysis to be undertaken. **Option A** requires the assessment of Junction 1 – Colpe Road / Mill Road / Link Street to be assessed further and **Option B** requires Junction 1 - Colpe Road / Mill Road / Link Street and Junction 4 – Mill Road / Marsh Road to be assessed further. Accordingly, These junctions will be assessed further to determine if they have adequate capacity to support these development scenarios.
- 5.4.6 The traffic network was assessed for the impact of junctions, which is determined by comparing the development traffic to the existing turning movements at junctions; should development traffic exceed 5% of the turning movements in areas where there is potential for congestion or sensitivity, further analysis is undertaken, in other areas, a threshold of development traffic exceeding 10% of junction movements is adopted for further analysis of detailed traffic modelling for junction capacity as a result of a development.
- 5.4.7 In order to determine the effects on areas outside the scope of the traffic network modelled, the impacts of the proposed development on all junctions

within the traffic network from the proposed development were reviewed to determine whether they were materially impacted. As the junctions assessed which are furthest from the proposed development did not display a material impact greater than the 5% threshold, as per the NRA/TII Traffic and Transportation Assessment Guidelines (2014), it would be anticipated that the level of impact experienced at junctions geographically beyond the scope of the traffic network modelled are also likely to experience impacts which are less than 5% of existing traffic movements, and therefore any impacts are expected to be immaterial beyond the modelled traffic network as a result of the proposed development.

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 ARCADY for Roundabout junctions and TRANSYT for Signal-controlled junctions.
- 6.1.2 When considering Roundabout junctions, a Ratio of Flow to Capacity (RFC) of greater than 85% (0.85) would indicate a junction to be approaching capacity, as operation above this RFC value is poor and deteriorates quickly. An equivalent Degree of Saturation may be observed in TRANSYT signal controlled junctions to determine how close to capacity a junction operates, with values greater than 90% generally suggesting the junction is operating in a congested state.
- 6.1.3 A 90-minute weekday AM and PM period has been simulated, from 08:30 to 10:00 and 17:00 to 18:30. Traffic flows were entered using an Origin-Destination table for the peak hours.
- 6.1.4 In order to determine if the proposed site access junction will cater sufficiently for the predicted level of traffic generation, a traffic model of the junction was analysed for the scheme's:
- 2021 Opening Year;
 - 2026 Interim Year; and
 - 2036 Future Design Year.

6.2 JUNCTION ANALYSIS

- 6.2.1 The operational performance of the signal controlled junction used for vehicular access to site has been modelled using the TRANSYT software package. In order to determine if the proposed site access junction will cater for the predicted level of traffic generation, a traffic model of the junction was analysed for the schemes 2021 Opening Year, 2026 Interim year and subsequent 2036 Future Design Year. Full network analysis may be observed in **Appendix F**.

Link Road Signal Junction Assessment – Option A

6.2.2 The proposed Four arm Signal Controlled junction, shown in **Figure 6.1**, has been analysed for all design years Do Minimum and Do Something scenarios using the TRANSYT 16 software package. The results of the operational assessment of this junction for the 'Do Minimum' and 'Do Something' scenarios are summarised in **Tables 6.1** and **Table 6.2** respectively.

6.2.3 In the "Do Minimum" and "Do Something" scenarios the four arms were labelled as follows within the ARCADY model:

- Arm 1 – Gaelscoil Link Street
- Arm 2 – Link Street South
- Arm 3 – Western Residential Link Street
- Arm 4 – Link Street North

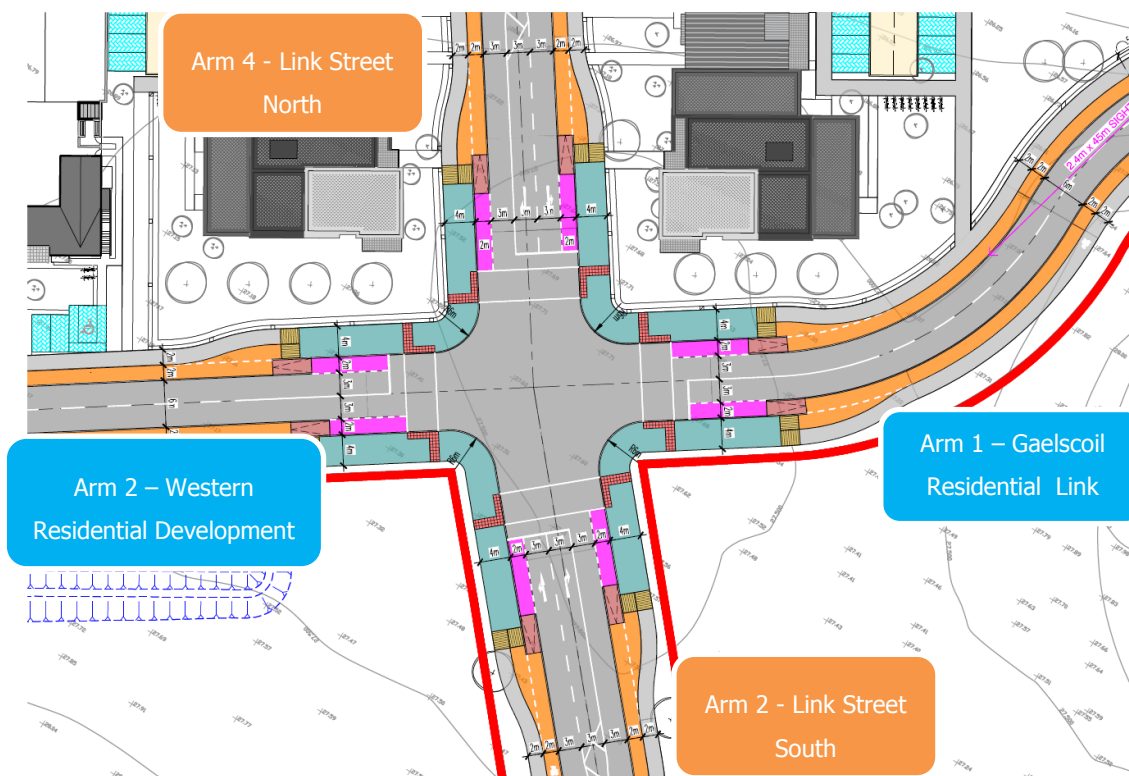


Figure 6.1 – Internal Roundabout Junction Layout

Do Minimum Scenario

6.2.4 The Do Minimum Results of the operational assessment of this signal controlled junction are summarised in **Table 6.1** below. From the results below, the highest Degree of Saturation and Queues may be seen in the 2021

Design year is observed in the AM Peak. The largest mean maximum queues of 1.09 PCUs is experienced along Arm 3 – Western Residential Link Street, with the highest Degree of Saturation being shown along Arm 2 - Link Street South with a DoS of 15%. The 2036 design year shows maximum Degree of Saturation of 36% with Queues of 4.93 PCUs along the Arm 2 – Link Street South in the AM scenario. All of the results for this analysis show this junction operates within Capacity for all design years.

Year	Scenario	Arm	Description	Queue (PCU)	DOS %
2021 (Opening Year)	AM Peak	1 – Gaelscoil	-	1.24	15
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	0.82	10
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
	PM Peak	1 – Gaelscoil	-	0.20	2
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	0.18	4
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
2026 (Opening Year + 5 Years)	AM Peak	1 – Gaelscoil	-	1.86	33
		2/1 – Link St South	SLT	2.82	22
		2/2 – Link St South	RTL	0.41	4
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	2.30	17
		4/2 – Link St North	RTL	0.0	0
	PM Peak	1 – Gaelscoil	-	0.37	10
		2/1 – Link St South	SLT	0.60	5
		2/2 – Link St South	RTL	0.05	1
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.65	5
		4/2 – Link St North	RTL	0.0	0
2036 (Horizon Year)	AM Peak	1 – Gaelscoil	-	1.57	39
		2/1 – Link St South	SLT	3.91	29
		2/2 – Link St South	RTL	0.49	5
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	2.16	16
		4/2 – Link St North	RTL	0.0	0

	PM Peak	1 – Gaelscoil	-	0.37	16
		2/1 – Link St South	SLT	1.31	11
		2/2 – Link St South	RTL	0.05	1
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	1.33	10
		4/2 – Link St North	RTL	0.0	0

Table 6.1: Option A - Do Minimum Scenario Junction Analysis

Do Something Scenario

- 6.2.5 The Do Something Results of the operational assessment of this roundabout junction during the weekday morning and evening peaks are summarised in **Table 6.2** below. From these results it may be seen that highest Degree of Saturation and Queues values which occur in the 2021 Design year are observed in the AM Peak, with Queues of 5.34 PCUs and DoS of 38%, along the Link Street South.
- 6.2.6 The 2036 design year shows highest Degree of Saturation and Queueing in the AM Peak along Arm 2 – Link Street South of 0.27 and delays of 5.00 seconds along the Link Street South arm 2. Results show this junction to be within capacity for all design scenarios.

Year	Scenario	Arm	Description	Queue (PCU)	DOS %
2021 (Opening Year)	AM Peak	1 – Gaelscoil	-	1.83	18
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	1.86	17
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
	PM Peak	1 – Gaelscoil	-	0.87	11
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	0.92	7
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
2026 (Opening Year + 5 Years)	AM Peak	1 – Gaelscoil	-	2.33	34
		2/1 – Link St South	SLT	3.36	27
		2/2 – Link St South	RTL	0.71	7
		3 – Residential	-	1.74	26
		4/1 – Link St North	SLT	2.71	20
		4/2 – Link St North	RTL	0.26	3
	PM Peak	1 – Gaelscoil	-	0.92	14
		2/1 – Link St South	SLT	1.44	12
		2/2 – Link St South	RTL	0.43	4
		3 – Residential	-	1.13	17
		4/1 – Link St North	SLT	1.11	9
		4/2 – Link St North	RTL	0.71	7
2036 (Horizon Year)	AM Peak	1 – Gaelscoil	-	2.42	39
		2/1 – Link St South	SLT	5.64	40
		2/2 – Link St South	RTL	0.68	7
		3 – Residential	-	1.80	30
		4/1 – Link St North	SLT	2.45	18
		4/2 – Link St North	RTL	0.25	3
	PM Peak	1 – Gaelscoil	-	0.98	20
		2/1 – Link St South	SLT	2.34	19
		2/2 – Link St South	RTL	0.38	4
		3 – Residential	-	1.21	24
		4/1 – Link St North	SLT	2.35	17
		4/2 – Link St North	RTL	0.66	7

Table 6.2: Option A - Do Something Scenario Junction Analysis

Link Road Signal Junction Assessment – Option B

- 6.2.7 The results of the operational assessment of this junction for the Option B 'Do Minimum' and 'Do Something' scenarios are summarised in **Tables 6.3** and **Table 6.4** respectively.
- 6.2.8 In the "Do Minimum" and "Do Something" scenarios the four arms were labelled as follows within the ARCADY model:
- Arm 1 – Gaelscoil Link Street
 - Arm 2 – Link Street South
 - Arm 3 – Western Residential Link Street
 - Arm 4 – Link Street North

Do Minimum Scenario

- 6.2.9 The Do Minimum Results of the operational assessment of this signal controlled junction are summarised in **Table 6.1** below. From the results below, the highest Degree of Saturation and Queues may be seen in the 2021 Design year is observed in the AM Peak. The largest mean maximum queues of 1.28 PCUs is experienced along Arm 2 – Link Street South, with the highest Degree of Saturation being shown along Arm 1 – Gaelscoil Link Street with a DoS of 15%.
- 6.2.10 The 2036 design year shows maximum Degree of Saturation of 15% along the Arm 2 – Link Street South, with Queues of 1.17 PCUs along the Gaelscoil Link Street – Arm 1 in the AM scenario. All of the results for this analysis show this junction operates within Capacity for all design years.

Year	Scenario	Arm	Description	Queue (PCU)	DOS %
2021 (Opening Year)	AM Peak	1 – Gaelscoil	-	1.24	15
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	1.28	10
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
	PM Peak	1 – Gaelscoil	-	0.20	2
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	0.18	4
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
2026 (Opening Year + 5 Years)	AM Peak	1 – Gaelscoil	-	1.24	15
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	1.28	10
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
	PM Peak	1 – Gaelscoil	-	0.20	2
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	0.18	4
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
2036 (Horizon Year)	AM Peak	1 – Gaelscoil	-	1.17	10
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	1.09	15
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
	PM Peak	1 – Gaelscoil	-	0.20	2
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	0.18	4
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0

Table 6.3: Option B - Do Minimum Scenario Junction Analysis

Do Something Scenario

- 6.2.11 The Do Something Results of the operational assessment of this roundabout junction during the weekday morning and evening peaks are summarised in **Table 6.2** below. From these results it may be seen that highest Degree of Saturation and Queues values which occur in the 2021 Design year are observed in the AM Peak, with Queues of 1.86 PCUs along the Link Street South – Arm 2, and highest DoS values of 18% observed along Gaelscoil Link Street - Arm 1.
- 6.2.12 The 2036 design year shows highest Degree of Saturation and Queueing in the AM Peak along Arm 2 – Link Street South of 2.04 and DoS of 21% along the Link Street South Arm 2. Results show this junction to be within capacity for all design scenarios.

Year	Scenario	Arm	Description	Queue (PCU)	DOS %
2021 (Opening Year)	AM Peak	1 – Gaelscoil	-	1.83	18
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	1.86	17
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
	PM Peak	1 – Gaelscoil	-	0.87	11
		2/1 – Link St South	SLT	0.0	0
		2/2 – Link St South	RTL	0.92	7
		3 – Residential	-	0.0	0
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
2026 (Opening Year + 5 Years)	AM Peak	1 – Gaelscoil	-	1.68	15
		2/1 – Link St South	SLT	0.76	9
		2/2 – Link St South	RTL	2.04	21
		3 – Residential	-	1.26	11
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
	PM Peak	1 – Gaelscoil	-	0.92	14
		2/1 – Link St South	SLT	1.45	13
		2/2 – Link St South	RTL	0.85	7
		3 – Residential	-	1.13	17
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
2036 (Horizon Year)	AM Peak	1 – Gaelscoil	-	1.68	15
		2/1 – Link St South	SLT	0.76	9
		2/2 – Link St South	RTL	2.04	21
		3 – Residential	-	1.26	11
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0
	PM Peak	1 – Gaelscoil	-	0.92	14
		2/1 – Link St South	SLT	1.45	13
		2/2 – Link St South	RTL	0.85	7
		3 – Residential	-	1.13	17
		4/1 – Link St North	SLT	0.0	0
		4/2 – Link St North	RTL	0.0	0

Table 6.4: Option B - Do Something Scenario Junction Analysis

Mill Road / Colpe Road Roundabout Assessment

6.2.13 The proposed four arm roundabout junction, shown in **Figure 6.2**, has been analysed for all of the modelling scenario using the Junctions 9 ARCADY software package. The results of the operational assessment of this junction for the 'Do Minimum' and 'Do Something' scenarios are summarised in **Tables 6.3** and **Table 6.4** respectively.

6.2.14 In the "Do Minimum" and "Do Something" scenarios the four arms were labelled as follows within the ARCADY model:

- Arm 1 – Colpe Road East
- Arm 2 – Colpe Road West
- Arm 3 – Link Street
- Arm 4 – Mill Road

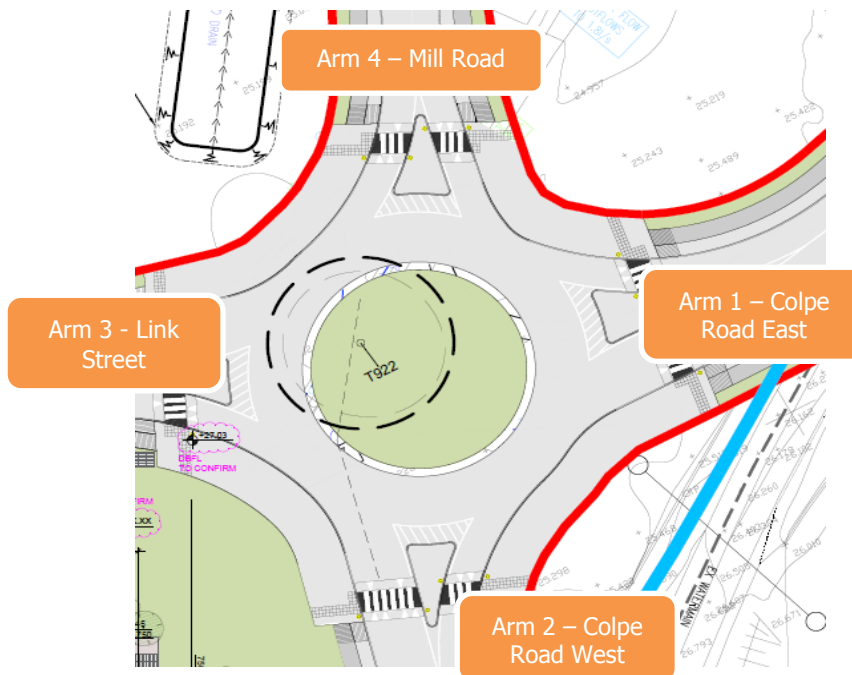


Figure 6.2 – Mill Road / Colpe Road Junction Layout

OPTION A – WITH LINK ROAD THROUGH ROUTE

Do Minimum Scenario

6.2.15 The Do Minimum Results of the operational assessment of this roundabout junction during the weekday morning and evening peaks are summarised in **Table 6.3** below. From the results it may be seen that Highest capacities and delay may be seen in the 2021 Design year is observed in the AM Peak, with

delays of 7.59 seconds along Mill Road and 0.42 Ratio of Flow-To-Capacity (RFC) along the Mill Road arm. The 2036 design year shows maximum RFC of 0.56 along Colpe Road West and delays of 8.09 seconds along Mill Road. All of the results for this analysis show this junction operates within Capacity for all design years.

Year	Scenario	Arm	Queue (PCU)	Delay (s)	RFC
2021 (Opening Year)	AM Peak	1 – Colpe Rd E	0.5	3.13	0.32
		2 – Colpe Rd W	0.7	3.27	0.39
		3 – Link Street	0.0	2.65	0.02
		4 – Mill Rd	0.8	7.59	0.42
	PM Peak	1 – Colpe Rd E	0.4	2.67	0.24
		2 – Colpe Rd W	0.4	2.70	0.27
		3 – Link Street	0.1	2.58	0.09
		4 – Mill Rd	0.2	5.60	0.14
2026 (Opening Year + 5 Years)	AM Peak	1 – Colpe Rd E	0.7	3.61	0.38
		2 – Colpe Rd W	0.9	3.70	0.45
		3 – Link Street	0.1	2.79	0.11
		4 – Mill Rd	1.0	9.83	0.49
	PM Peak	1 – Colpe Rd E	0.4	2.81	0.27
		2 – Colpe Rd W	0.5	2.81	0.30
		3 – Link Street	0.1	2.55	0.08
		4 – Mill Rd	0.2	6.09	0.15
2036 (Horizon Year)	AM Peak	1 – Colpe Rd E	0.7	3.61	0.40
		2 – Colpe Rd W	1.4	4.70	0.56
		3 – Link Street	0.1	3.00	0.12
		4 – Mill Rd	0.6	8.09	0.37
	PM Peak	1 – Colpe Rd E	0.5	2.96	0.30
		2 – Colpe Rd W	0.7	3.22	0.39
		3 – Link Street	0.2	2.80	0.12
		4 – Mill Rd	0.1	6.15	0.10

Table 6.5: Do Minimum Scenario Junction Analysis

Do Something Scenario

6.2.16 The Do Something Results of the operational assessment of this roundabout junction during the morning and evening peaks are summarised in **Table 6.4** below. From the results it may be seen that Highest capacities and delay in the 2021 Design year is observed in the AM Peak, with delays of 8.17 seconds along Mill Road and 0.45 RFC along the Mill Road arm. The 2036 design year

shows maximum RFC of 0.57 along Colpe Road West and delays of 8.59 seconds along Mill Road. All of the results for this analysis show this junction operates within Capacity for all design years.

Year	Scenario	Arm	Queue (PCU)	Delay (s)	RFC
2021 (Opening Year)	AM Peak	1 – Colpe Rd E	0.5	3.23	0.33
		2 – Colpe Rd W	0.8	3.49	0.41
		3 – Link Street	0.1	2.77	0.06
		4 – Mill Rd	0.9	8.17	0.45
	PM Peak	1 – Colpe Rd E	0.4	2.74	0.25
		2 – Colpe Rd W	0.5	2.81	0.29
		3 – Link Street	0.1	2.66	0.12
		4 – Mill Rd	0.2	5.94	0.17
2026 (Opening Year + 5 Years)	AM Peak	1 – Colpe Rd E	0.7	3.77	0.39
		2 – Colpe Rd W	0.9	3.81	0.46
		3 – Link Street	0.2	2.93	0.15
		4 – Mill Rd	1.1	10.77	0.51
	PM Peak	1 – Colpe Rd E	0.4	2.89	0.28
		2 – Colpe Rd W	0.6	2.99	0.34
		3 – Link Street	0.1	2.63	0.11
		4 – Mill Rd	0.2	6.32	0.16
2036 (Horizon Year)	AM Peak	1 – Colpe Rd E	0.8	3.74	0.41
		2 – Colpe Rd W	1.5	4.86	0.57
		3 – Link Street	0.2	3.13	0.15
		4 – Mill Rd	0.7	8.59	0.38
	PM Peak	1 – Colpe Rd E	0.5	3.03	0.31
		2 – Colpe Rd W	0.8	3.41	0.42
		3 – Link Street	0.2	2.88	0.14
		4 – Mill Rd	0.1	6.34	0.10

Table 6.6: Do Something Scenario Junction Analysis

Option A Summary of Results

- 6.2.17 The above results show that up to the Horizon year of 2036, the Site Access roundabout junction provides adequate capacity.
- 6.2.18 It has been assumed that secondary trips are not included for analysis for both the crèche and the expansion of the existing gaelscoil. However, primary trips for the gaelscoil expansion are included along the Link Street in both the Do Minimum and Do Something scenarios.

- 6.2.19 In the 2026 scenario, a LIHAF link road is proposed to open and tie into the proposed Link Street creating a through route to Drogheda Town in an east west direction. This provides a more direct route from the Drogheda town area to the proposed development, and thus the number of right turns into the site increases, as observed through the significant increase in Ratio of Flow to Capacity (RFC), Delays and Queue lengths along the Link Street.
- 6.2.20 The 2036 Scenario shows adequate capacity and delays within tolerance for this junction at horizon design year. The 2036 scenario ARCADY results show a maximum RFC of 0.57 and a Maximum delay of 8.59 Seconds for the Mill Road / Colpe Road / Link Street Junction. Thus, it may be assumed that this junction will operate within capacity for the Horizon Design Year, for both AM and PM peak hours, in accordance with all junction analysis shown above.

OPTION B – WITHOUT LINK ROAD THROUGH ROUTE

Do Minimum Scenario

- 6.2.21 The Do Minimum Results of the operational assessment of this roundabout junction during the weekday morning and evening peaks are summarised in **Table 6.3** below. From the results it may be seen that Highest capacities and delay may be seen in the 2021 Design year is observed in the AM Peak, with delays of 9.25 seconds and 0.51 Ratio of Flow-To-Capacity (RFC) along the Mill Road arm.
- 6.2.22 The 2036 design year shows maximum RFC of 0.60 along Colpe Road West and delays of 12.08 seconds along Mill Road. All of the results for this analysis show this junction operates within Capacity for all design years.

Year	Scenario	Arm	Queue (PCU)	Delay (s)	RFC
2021 (Opening Year)	AM Peak	1 – Colpe Rd E	0.6	3.38	0.34
		2 – Colpe Rd W	0.9	3.75	0.44
		3 – Link Street	0.1	2.79	0.06
		4 – Mill Rd	1.1	9.25	0.51
	PM Peak	1 – Colpe Rd E	0.4	2.68	0.24
		2 – Colpe Rd W	0.4	2.71	0.28
		3 – Link Street	0.1	2.62	0.10
		4 – Mill Rd	0.2	5.66	0.14
2026 (Opening Year + 5 Years)	AM Peak	1 – Colpe Rd E	0.6	3.41	0.36
		2 – Colpe Rd W	0.9	3.80	0.46
		3 – Link Street	0.1	2.88	0.07
		4 – Mill Rd	0.9	8.70	0.46
	PM Peak	1 – Colpe Rd E	0.4	2.76	0.26
		2 – Colpe Rd W	0.5	2.79	0.30
		3 – Link Street	0.1	2.67	0.10
		4 – Mill Rd	0.2	5.86	0.15
2036 (Horizon Year)	AM Peak	1 – Colpe Rd E	0.8	3.84	0.41
		2 – Colpe Rd W	1.2	4.36	0.51
		3 – Link Street	0.1	3.02	0.07
		4 – Mill Rd	1.7	12.08	0.60
	PM Peak	1 – Colpe Rd E	0.4	2.86	0.29
		2 – Colpe Rd W	0.5	2.91	0.33
		3 – Link Street	0.1	2.75	0.11
		4 – Mill Rd	0.2	6.19	0.17

Table 6.5: Do Minimum Scenario Junction Analysis

Do Something Scenario

6.2.23 The Do Something Results of the operational assessment of this roundabout junction during the morning and evening peaks are summarised in **Table 6.4** below. From the results it may be seen that Highest capacities and delay in the 2021 Design year is observed in the AM Peak, with delays of 7.69 seconds along Mill Road and 0.38 RFC along the Colpe Road West arm. The 2036 design year shows maximum RFC of 0.53 along Colpe Road West and delays of 7.84 seconds along Mill Road. All of the results for this analysis show this junction operates within Capacity for all design years.

Year	Scenario	Arm	Queue (PCU)	Delay (s)	RFC
2021 (Opening Year)	AM Peak	1 – Colpe Rd E	0.6	3.49	0.35
		2 – Colpe Rd W	0.9	3.89	0.46
		3 – Link Street	0.1	2.92	0.11
		4 – Mill Rd	1.3	10.11	0.54
	PM Peak	1 – Colpe Rd E	0.4	2.76	0.25
		2 – Colpe Rd W	0.5	2.82	0.30
		3 – Link Street	0.2	2.69	0.13
		4 – Mill Rd	0.2	6.01	0.18
2026 (Opening Year + 5 Years)	AM Peak	1 – Colpe Rd E	0.7	3.66	0.38
		2 – Colpe Rd W	1.0	4.04	0.48
		3 – Link Street	0.2	2.96	0.15
		4 – Mill Rd	1.2	10.36	0.53
	PM Peak	1 – Colpe Rd E	0.4	2.97	0.29
		2 – Colpe Rd W	0.6	3.14	0.35
		3 – Link Street	0.2	2.86	0.16
		4 – Mill Rd	0.4	6.91	0.25
2036 (Horizon Year)	AM Peak	1 – Colpe Rd E	0.8	4.15	0.43
		2 – Colpe Rd W	1.3	4.65	0.54
		3 – Link Street	0.2	3.39	0.17
		4 – Mill Rd	2.2	15.23	0.67
	PM Peak	1 – Colpe Rd E	0.5	3.09	0.31
		2 – Colpe Rd W	0.8	3.48	0.42
		3 – Link Street	0.2	2.95	0.17
		4 – Mill Rd	0.4	7.38	0.27

Table 6.6: Do Something Scenario Junction Analysis

Option B Summary of Results

- 6.2.24 The above results show that up to the Horizon year of 2036, the Site Access roundabout junction provides adequate capacity.
- 6.2.25 It has been assumed that secondary trips are not included for analysis for both the crèche and the expansion of the existing gaelscoil. However, primary trips for the gaelscoil expansion are included along the Link Street in both the Do Minimum and Do Something scenarios.
- 6.2.26 The 2036 Scenario shows adequate capacity and delays within tolerance for this junction at horizon design year. The 2036 scenario ARCADY results show a maximum RFC of 0.53 and a Maximum delay of 15.23 Seconds for the Mill

Road / Colpe Road / Link Street Junction. Thus, it may be assumed that this junction will operate within capacity for the Horizon Design Year, for both AM and PM peak hours, in accordance with all junction analysis shown above.

Mill Road / Marsh Road Priority Junction

6.2.27 Junction Impact analysis results has shown that the priority controlled junction between Mill Road and Marsh Road for the Option B scenario within the horizon design year (2036)

6.2.28 The existing three arm priority-controlled junction has been analysed for the 'Do Something' modelling scenario using the Junctions 9 PICADY software package. The results of the operational assessment of this junction during the weekday morning and evening peaks for the Do Nothing scenario is summarised in **Table 6.7** and **Table 6.8** summarises the Do Something scenario below.

6.2.29 In the "Do Something" scenario the three arms were labelled as follows within the ARCADY model:

Arm A: Marsh Road R150 East

Arm B: Mill Road

Arm C: Marsh Road R150 West

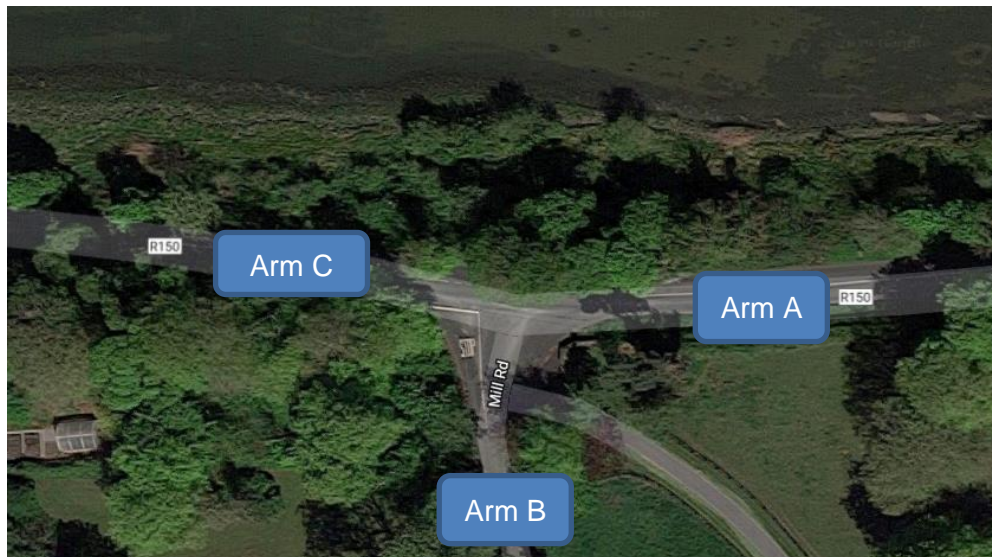


Figure 6.3: Junction 4 Priority Controlled Junction

Do Minimum Scenario

6.2.30 The PICADY results (**Table 6.7**) indicate that the Mill Road / Marsh road three-arm priority-controlled junction will operate within capacity for all design years for the Do Minimum Scenario. The junction will operate within

the 2036 AM peak hour with a maximum RFC value of 0.57 and a corresponding queue of 1.3 pcus being recorded on the Mill Road minor arm. For the 2036 PM peak hour, results show a maximum RFC value of 0.16 occurring on the Mill Road minor arm, with a corresponding queue of 0.2 pcus.

Year Scenario	Period	Arm	Description	Queue (pcu)	Delay (s)	RFC
2021 DM	AM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	1.0	12.89	0.50
		C	Marsh Road R150 West	0.8	8.61	0.40
	PM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	0.3	7.99	0.24
		C	Marsh Road R150 West	0.2	5.30	0.12
2026 DM	AM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	1.0	13.25	0.51
		C	Marsh Road R150 West	0.5	7.43	0.31
	PM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	0.2	7.33	0.15
		C	Marsh Road R150 West	0.2	5.28	0.13
2036 DM	AM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	1.3	15.26	0.57
		C	Marsh Road R150 West	0.7	7.82	0.35
	PM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	0.2	7.54	0.16
		C	Marsh Road R150 West	0.3	5.29	0.14

Do Something Scenario

6.2.31 The PICADY results (**Table 6.8**) below indicate that the Mill Road / Marsh road three-arm priority-controlled junction will operate within capacity for all design years for the Do Something Scenario. The junction will operate within the 2036 AM peak hour with a maximum RFC value of 0.66 and a corresponding queue of 1.9 pcus being recorded on the Mill Road minor arm. For the 2036 PM peak hour, results show a maximum RFC value of 0.27 occurring on the Mill Road minor arm, with a corresponding queue of 0.5 pcus.

Year Scenario	Period	Arm	Description	Queue (pcu)	Delay (s)	RFC
2021 DS	AM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	1.1	13.91	0.53
		C	Marsh Road R150 West	0.9	9.04	0.43
	PM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	0.4	8.26	0.27
		C	Marsh Road R150 West	0.3	5.6	0.17
2026 DS	AM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	1.5	16.10	0.60
		C	Marsh Road R150 West	0.7	8.01	0.36
	PM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	0.3	7.79	0.21
		C	Marsh Road R150 West	0.5	6.17	0.25
2036 DS	AM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	1.9	19.16	0.66
		C	Marsh Road R150 West	0.8	8.48	0.40
	PM Peak	A	Marsh Road R150 East	-	-	-
		B	Mill Road	0.3	8.05	0.22
		C	Marsh Road R150 West	0.5	6.24	0.27

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) a proposed residential development scheme on a greenfield site located in Drogheda, Co. Meath.
- 7.1.2 The proposed development being considered consists of 357 units of residential development and a 439 sq.m Crèche. Vehicles will access the development via a signal controlled junction, which is located along the approved Link Street (*LB180620*), which is connected to the existing road network by a roundabout junction linking with Mill Road and Colpe road. Pedestrians will access the site via dedicated footpaths, with cyclists provided access via off road dedicated cycle tracks which connect into existing pedestrian and cycling facilities. This development also includes for the provision of a pedestrian/cycle bridge over the Dublin/Belfast Railway line, providing additional connectivity to Colpe Cross, Drogheda and MacBride Station.
- 7.1.3 The purpose of this TTA was as follows:
- To quantify the existing transport environment
 - To detail the results of assessment work undertaken
 - To identify the potential level of transport impact generated as a result of the proposed residential development.
- 7.1.4 This TTA has carried out a range of assessments for an opening year of 2021 and a future horizon year assessment of 2036, across two separate scenarios, one including the approved Link Street connecting into Marsh Road northbound and a scenario which does not include for such connectivity. This assessment has assumed that the development will be phased to allow for the completion and occupation of over 100 units by Opening Year and full completion and occupation of the lands before the 2026 interim design year, as this provided design assessment of network operations which most accurately reflects construction practices. A total of Twelve different assessments were analysed as follows: -

Option A – with Through Route

Do Minimum

- A1 – 2021 Opening year Redistributed Traffic Flows (Link street opening + Committed Developments)
- A2 – 2026 Interim Year Redistributed Traffic Flows (Link street opening + Committed Developments)
- A3 – 2036 Horizon Year Redistributed Traffic Flows Link street opening + Committed Developments)

Do Something

- B1 – 2021 Do Minimum (A1) + Proposed Residential Development (121 units with 439 sq.m crèche)
- B2 – 2026 Do Minimum (A2) + Proposed Residential Development (357 units with 439 sq.m crèche)
- B3 – 2036 Do Minimum (A3) + Proposed Residential Development (357 units with 439 sq.m crèche)

Option B – without Through Route

Do Minimum

- C1 – 2021 Opening year Traffic Flows (Base + Committed Developments)
- C2 – 2026 Interim Year Traffic Flows (Base + Committed Developments)
- C3 – 2036 Horizon Year Traffic Flows (Base + Committed Developments)

Do Something

- D1 – 2021 Do Minimum (C1) + Proposed Residential Development (121 units with 439 sq.m crèche)
- D2 – 2026 Do Minimum (C2) + Proposed Residential Development (357 units with 439 sq.m crèche)
- D3 – 2036 Do Minimum (C3) + Proposed Residential Development (357 units with 439 sq.m crèche)

7.1.5 Based upon the information and analysis detailed within this Traffic and Transport Assessment it has been demonstrated that:

- The subject proposals are comparable to the MCC land zoning objectives outlined in the Meath County Development Plan in terms of land use, and offer pedestrian, cycle, public transport and vehicle accessibility to help improve sustainable travel practices in the area of Drogheda.
- The proposals comply with Meath County Council's policies and objectives for Transport, particularly with the objectives to reduce the reliance on Private Car usage with aims to promote and provide for sustainable modes of transport such as Cycling and Walking wherever possible, in accordance with the objectives and principles outlined in the Mill Road / Marsh Road Transport Study.
- The proposals are in accordance with the land use zoning for the subject development site.
- There is an appropriately located, sized and designed site access junction provided which may support the proposed vehicular movements expected for this development.
- The site of the proposed development, located within the south Drogheda environs is ideally located to maximise access to / from the site by sustainable forms of travel including walking, cycling and public transport upon completion. Proposed cycle and pedestrian access via Colpe road will service this site to facilitate sustainable transport opportunities. This development proposes to provide two new bus stops (in both directions) within 50-100 metres of the southern boundary of the development site, along the approved link street.
- The subject site offers pedestrian and cycle facilities to connect the road network towards Colpe Cross, facilitating cycle and pedestrian links to the site.
- An Impact Assessment was undertaken to determine whether junction analysis was required for the surrounding road network. The assessment concluded that the only junctions that experienced an

impact level which exceeded the criteria set out in National Roads Authority / Transport Infrastructure Ireland "Traffic and Transportation Assessment Guidelines" document and thus justified detailed junction analysis were the Colpe Road / Mill Road / approved Link Street junction and the Mill Road Marsh Road junction. Detailed analysis showed that both of these junctions would operate within capacity for all design scenarios proposed under this residential development.

- Arcady, Picady and TRANSYT analysis was undertaken on the junctions which exceeded the NRA / TII thresholds for junction impact for the Colpe Road Mill Road junction, the Mill Road / Marsh Road junction and the Approved Link Street / Site Access junction as previously shown within Chapter 6.
- An additional scenario, referred to throughout this report as 'Option B', represents a scenario where the permitted Link Street (*Ref. LB180620*) is not completed to provide a link from Colpe Road to the proposed Newtown LIHAF road scheme nor onto Marsh Road. This Scenario has been prepared as a result of the request from An Bord Pleanala, which states the development should "*demonstrate the suitability of the proposed vehicular access arrangements for the subject site and impact on the Colpe and Mill Roads in the absence of the link road from the site to the Marsh Road, and consider or address any issues in respect of access to adjoining lands, in particular ensuring that the proposed development subject of this SHD pre-application does not unduly prejudice the future development of adjoining zoned lands particularly to the north.*"
- The analysis carried out as part of this assessment shows that the proposed development will not cause excessive delays or queueing, nor will junction capacity issues arise as a result of this proposed development. Analysis shows that all junctions in all scenarios operate within capacity for the Horizon Design year of 2036 within the local traffic network for both design options analysed.

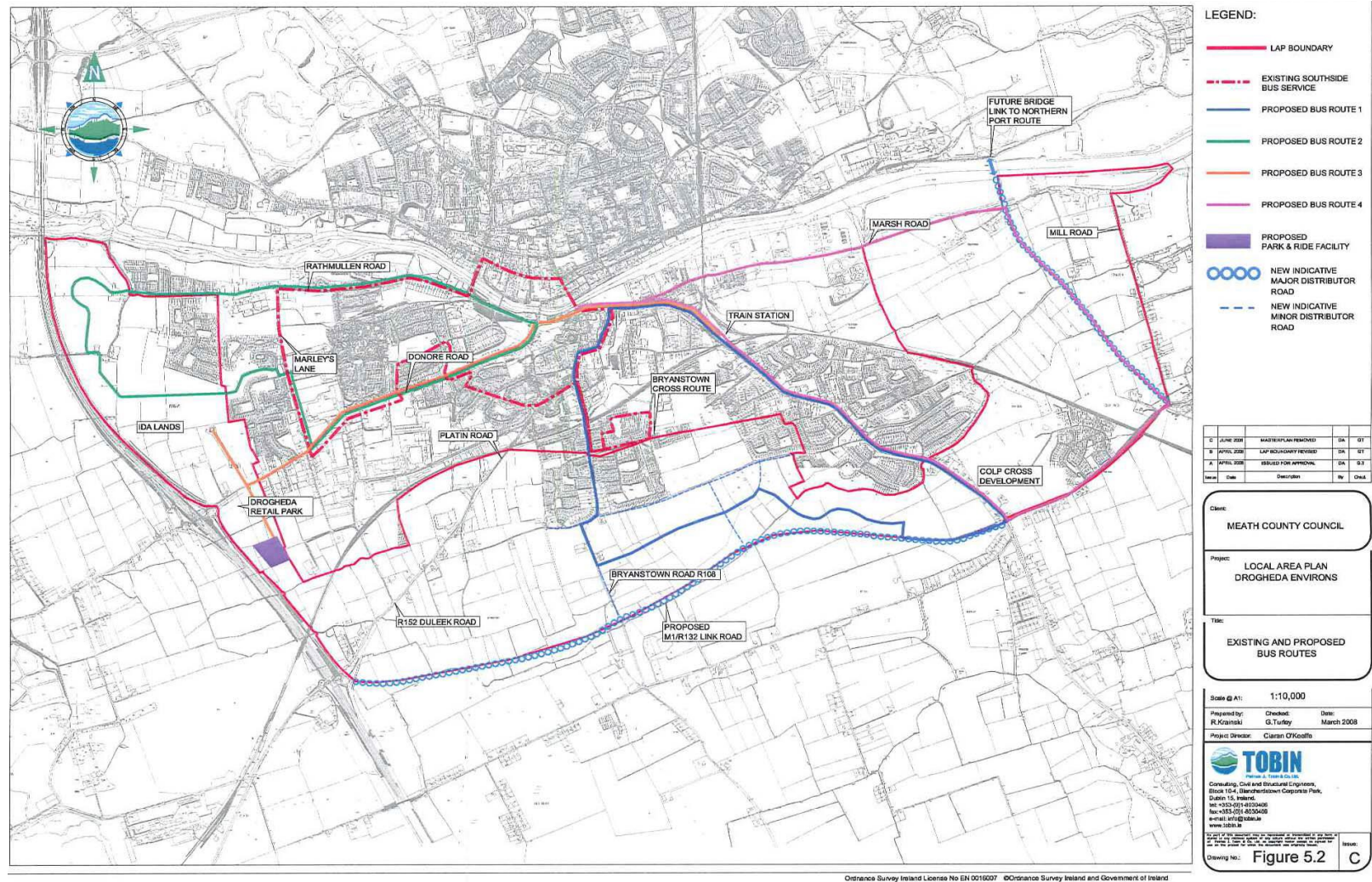
- It is considered that the impact on the surrounding road network as a result of the implementation of the proposed residential development will not be significant in the 2021, 2026 and 2036 design year scenarios as per the requirements of the National Roads Authority/Transport Infrastructure Ireland "Traffic and Transportation Assessment Guidelines". These guidelines do not require locations further afield to be subject to further assessment as they would not be expected to be impacted 'significantly', in accordance with NRA/TII guidelines.
- This conclusion is based on the anticipated levels of traffic generated by the proposed development, the existing and future road infrastructure and the information and analysis summarised in the above report. Accordingly, it is concluded that the proposals will not result in a material deterioration of road conditions and as a result there are no significant traffic or transportation related reasons that should prevent the granting of planning permission for the proposed development.

7.2 CONCLUSION

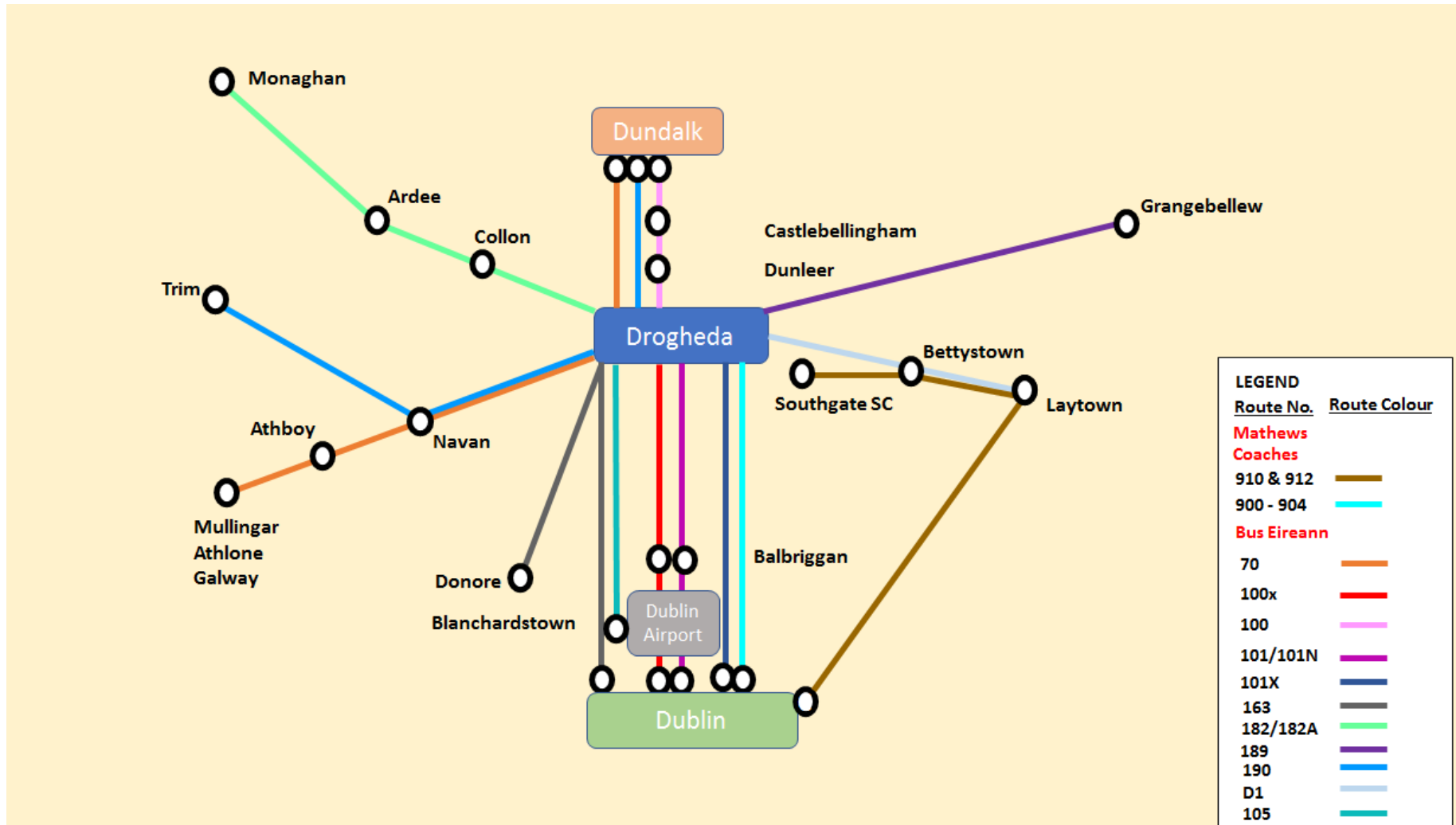
- 7.2.1 In conclusion, we believe that the opportunity is available, in terms of transport and traffic, for An Bord Pleanála to consider favourably the proposed residential development and relevant infrastructural facilities on the subject greenfield site.
- 7.2.2 It is concluded that there are no traffic or transportation related reasons that should prevent the granting of planning permission for the proposed residential development.

APPENDICES

APPENDIX A
Existing and Proposed Bus Routes



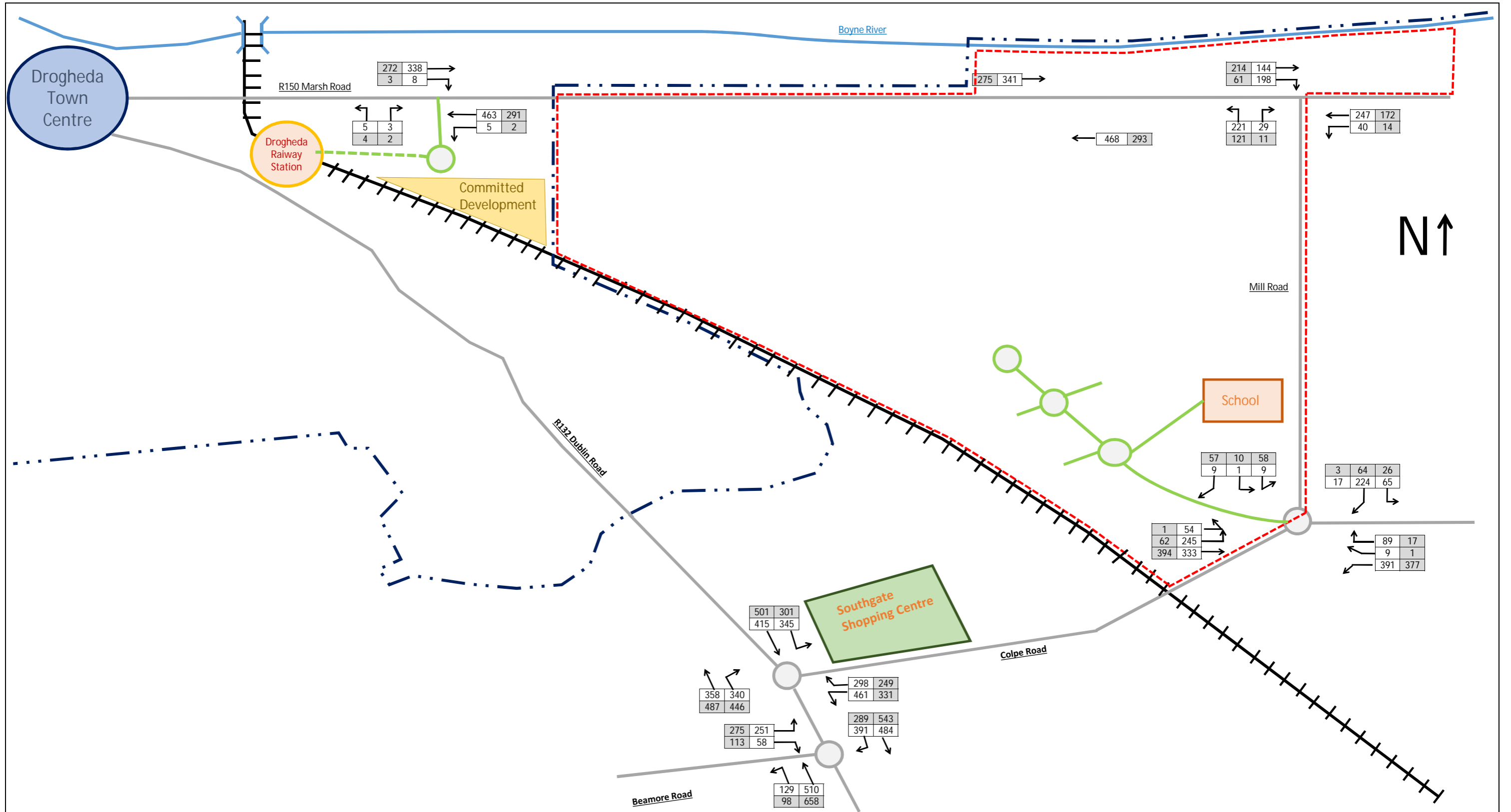
Existing and Proposed Bus Routes Servicing Drogheda Town (Southern Environs of Drogheda LAP)



National / Regional Bus Network that serves Drogheda.

APPENDIX B

Traffic Flow Diagrams – Option A



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Project :
**Proposed Residential Development
Colpe Road, Drogheda**

DRG. Title :
**Network Traffic Flows - Vehicles
2021 Do-Minimum**

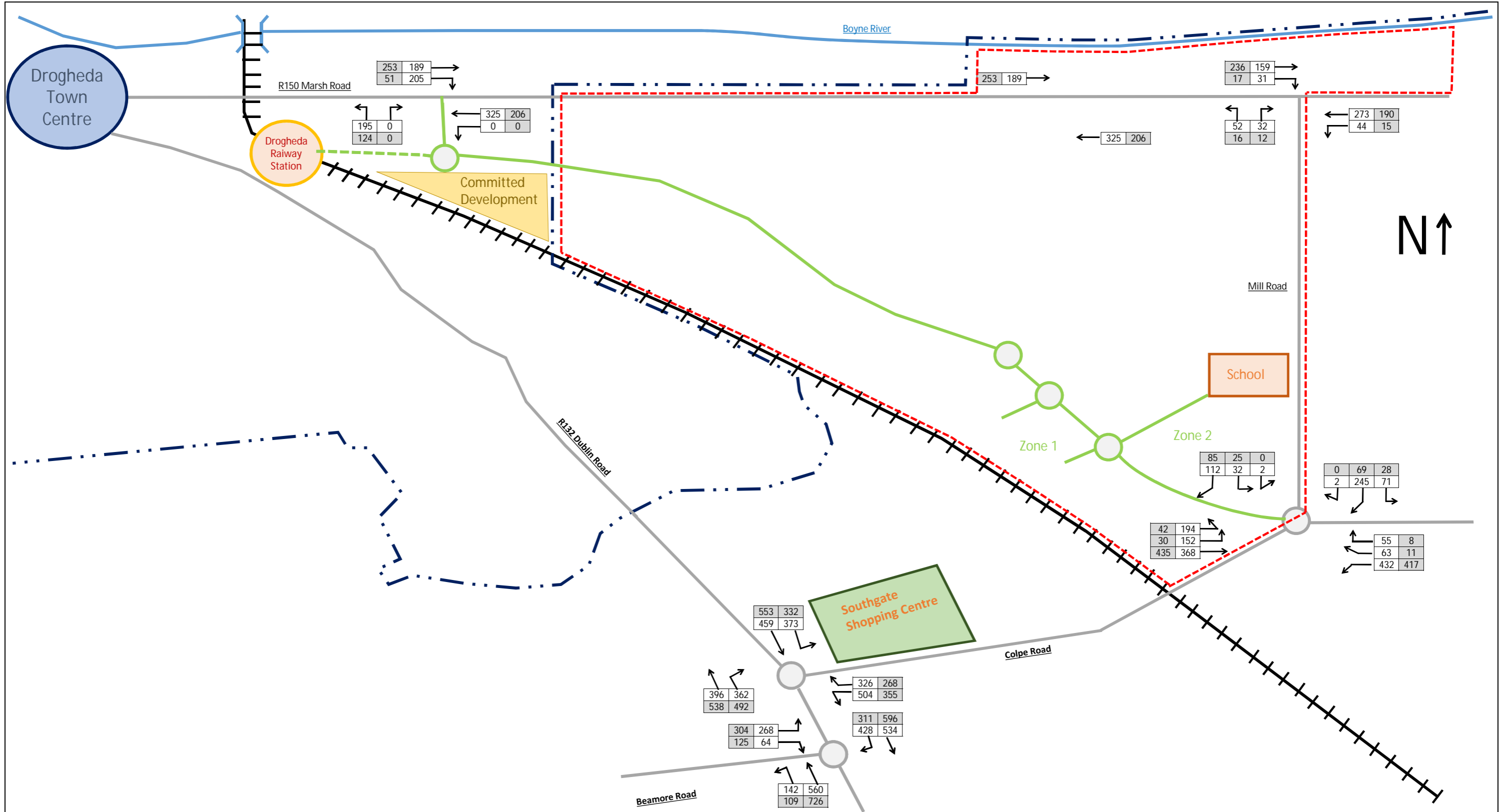
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PM Peak Hour (1700 to 1800)

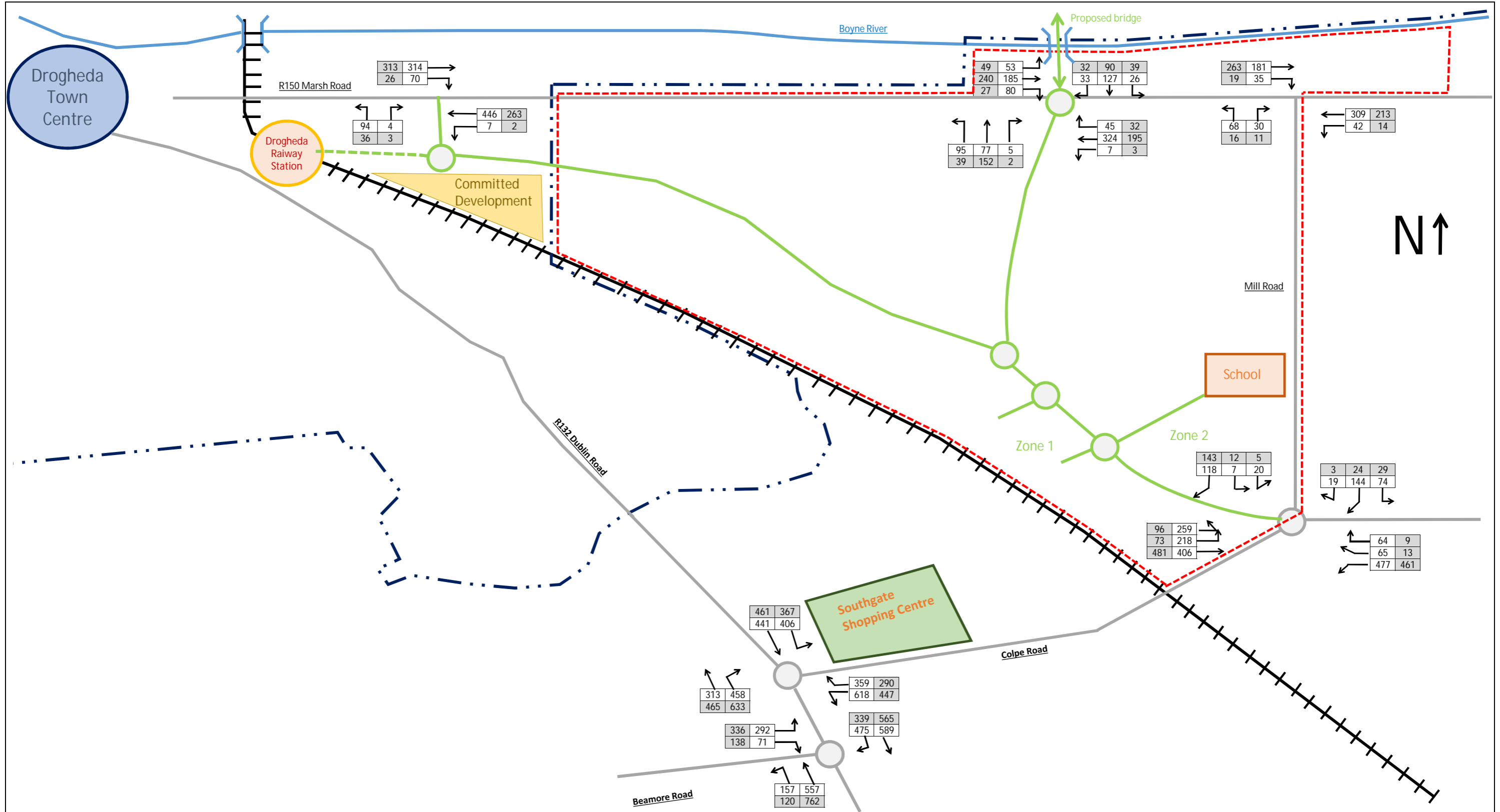
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 DBFL Consulting Engineers	Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000	Project : Proposed Residential Development Colpe Road, Drogheda	Key: <table border="1"> <tr><td>AM Peak Hour (0830 to 0930)</td></tr> <tr><td>PM Peak Hour (1700 to 1800)</td></tr> </table>	AM Peak Hour (0830 to 0930)	PM Peak Hour (1700 to 1800)	Legend: <table border="1"> <tr><td>--- Louth Co. Council Boundary Line</td></tr> <tr><td>- - - Study Area Boundary Line</td></tr> <tr><td>+ + + + Railway Line</td></tr> </table>	--- Louth Co. Council Boundary Line	- - - Study Area Boundary Line	+ + + + Railway Line	Dwn: MMK Ckd: RJK Date: 23/08/2017
	AM Peak Hour (0830 to 0930)									
	PM Peak Hour (1700 to 1800)									
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+ + + + Railway Line										
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website: www.dbfl.ie

Project :
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DRG. Title :
Network Traffic Flows - Vehicles
Do Minimum 2036

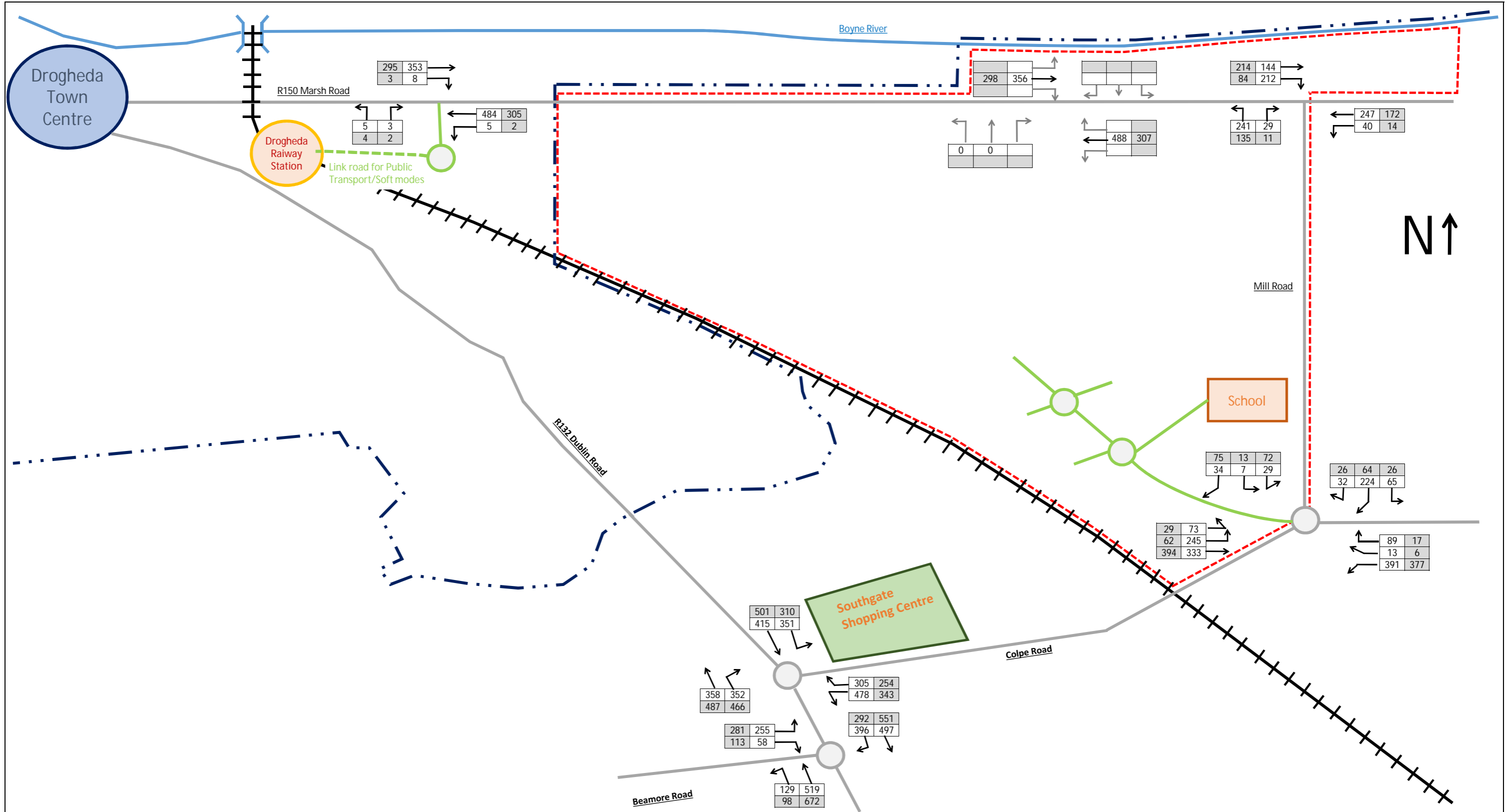
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Key:

AM Peak Hour (0830 to 0930)

PM Peak Hour (1700 to 1800)

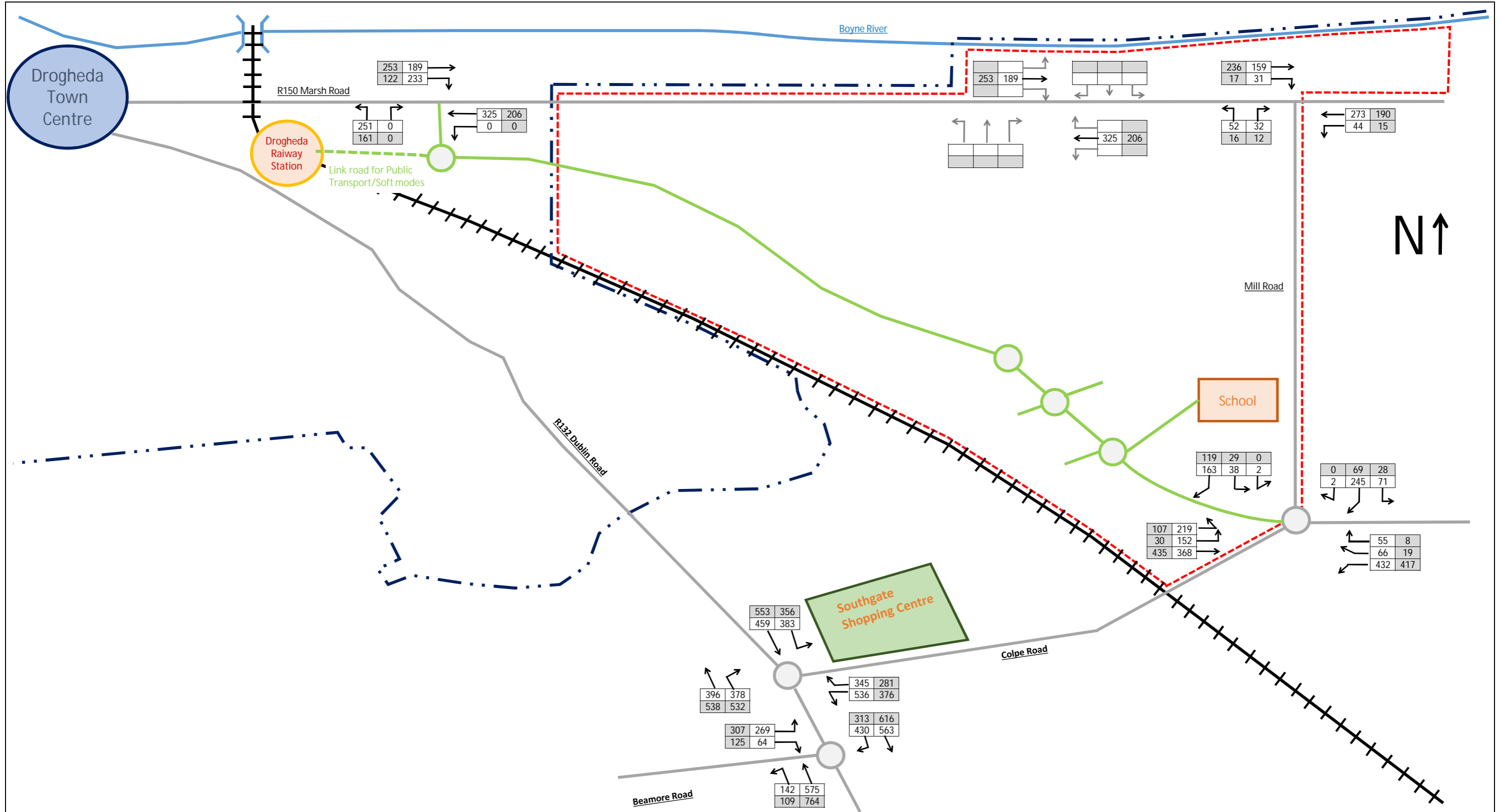
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2026 Do Something

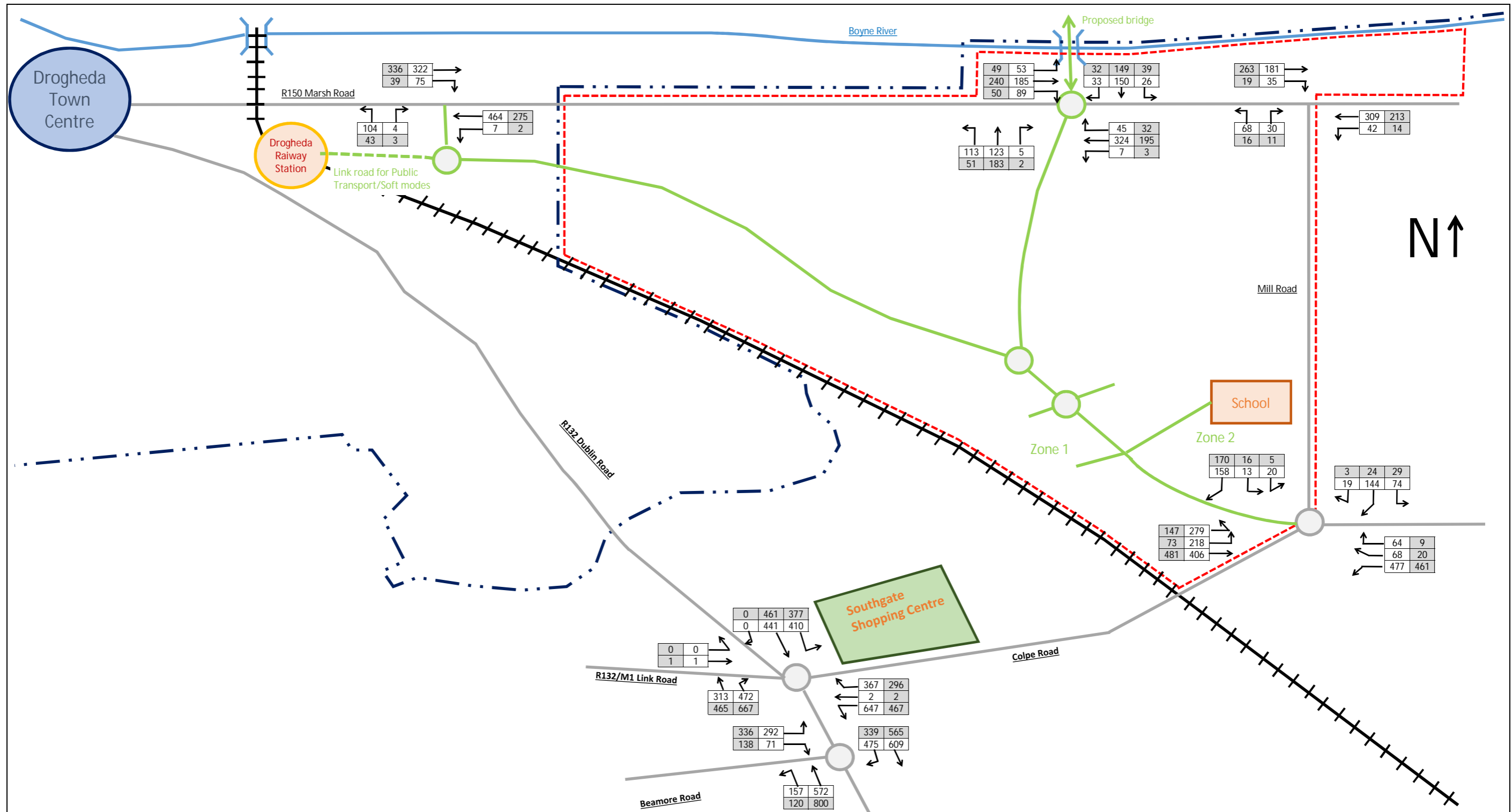
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Key:

- AM Peak Hour (0830 to 0930)
- PM Peak Hour (1700 to 1800)

Legend:

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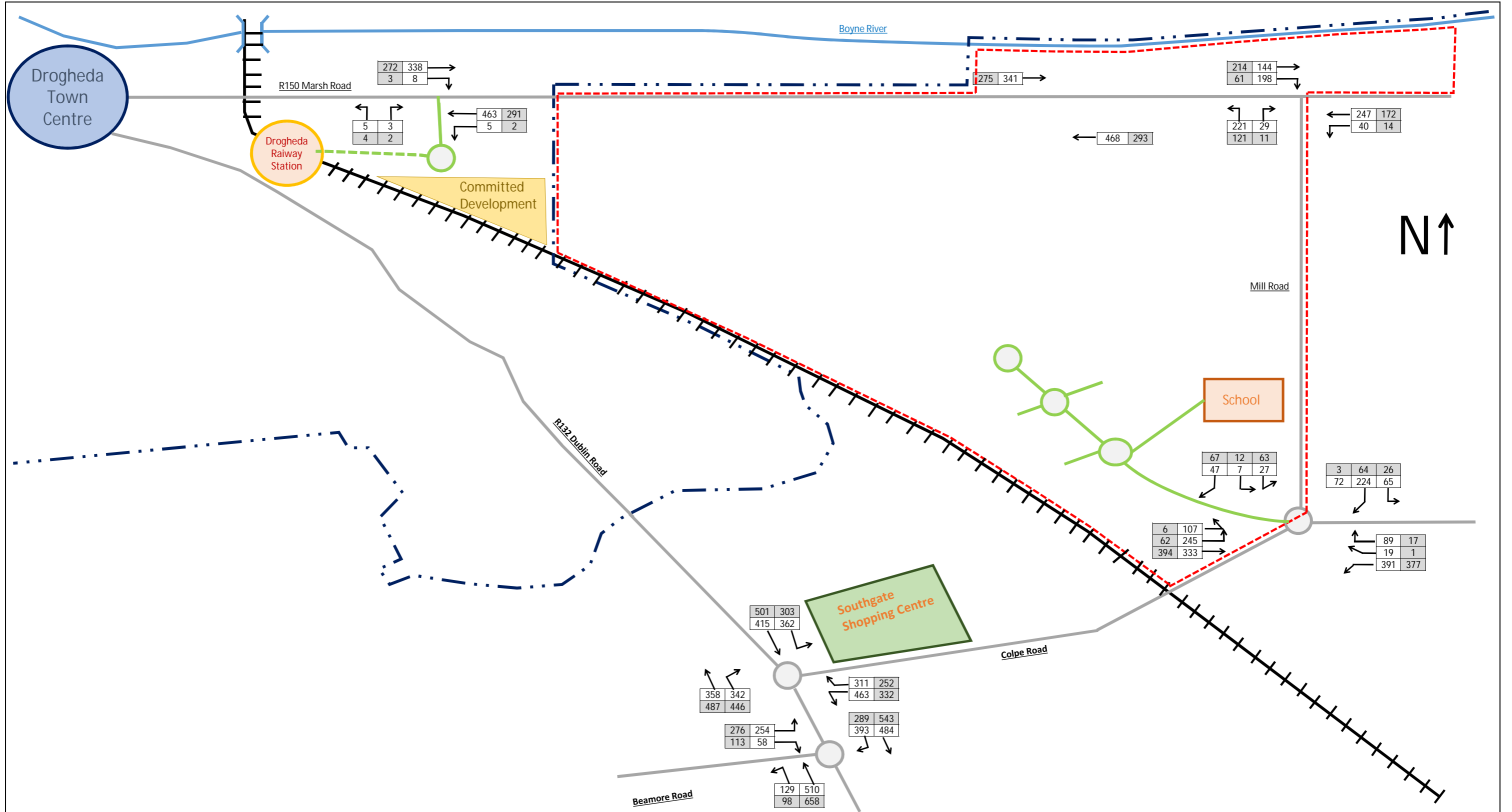
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APPENDIX B

Traffic Flow Diagrams – Option B



N ↑



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Project :

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Colpe Road, Drogheda

DRG. Title :

Network Traffic Flows - Vehicles
2021 Do-Minimum

Key:

AM Peak Hour (0830 to 0930)
PM Peak Hour (1700 to 1800)

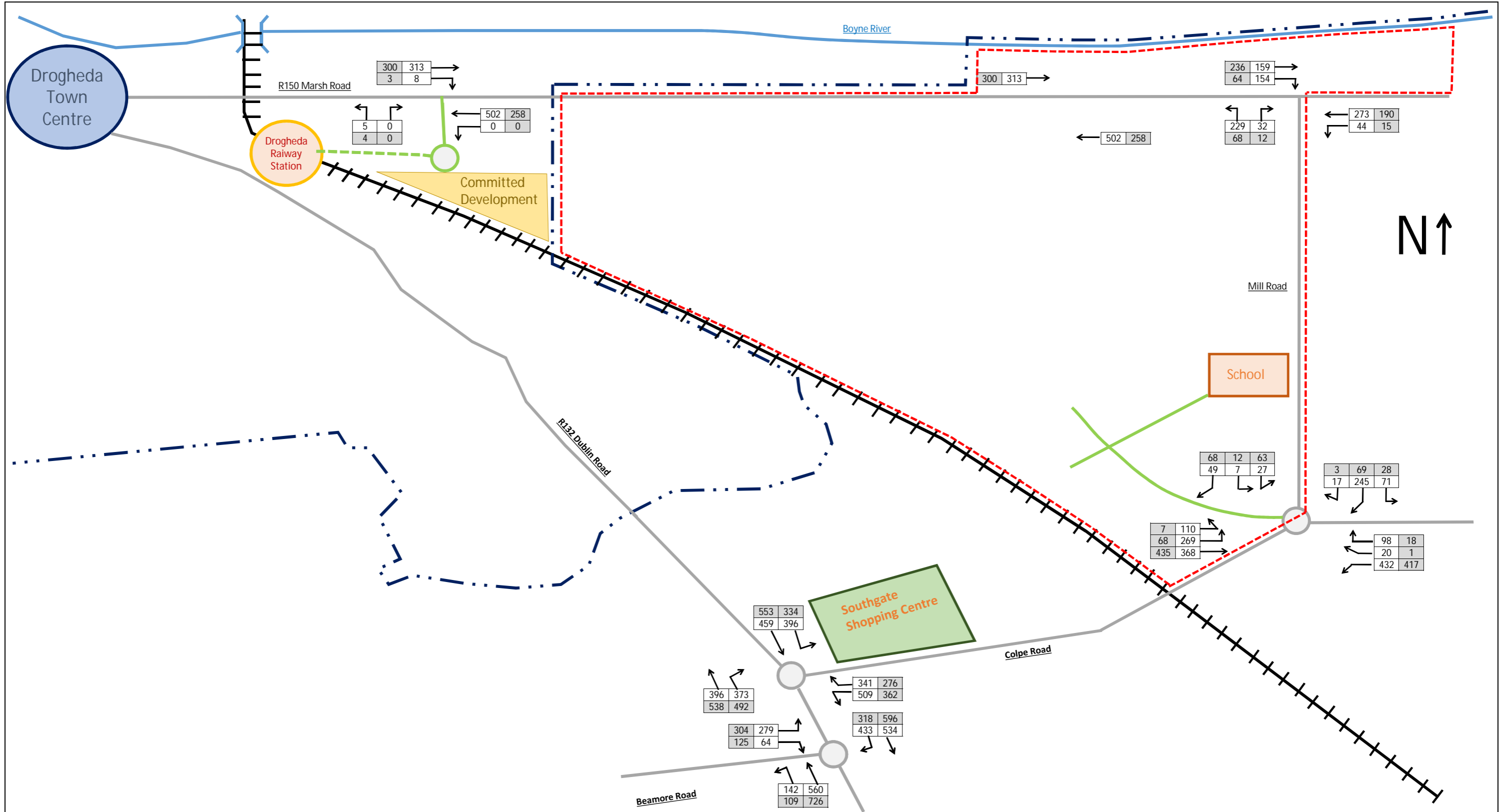
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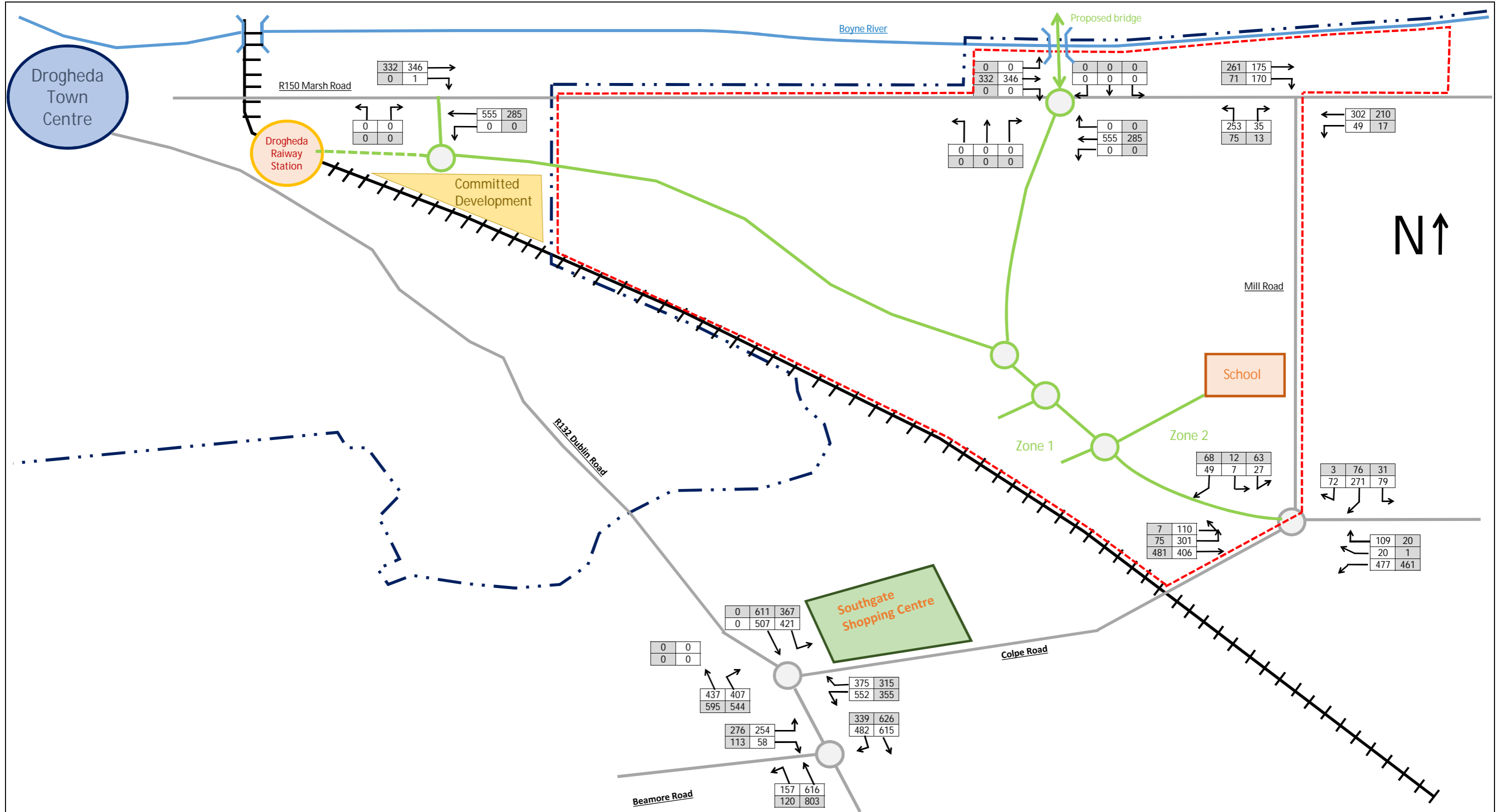
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 <p>DBFL Consulting Engineers</p>	<p>Dublin Office: Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7 phone: +353 1 400 4000</p>	<p>Project : Proposed Residential Development Colpe Road, Drogheda</p>	<p>Key:</p> <ul style="list-style-type: none"> AM Peak Hour (0830 to 0930) PM Peak Hour (1700 to 1800) 	<p>Legend:</p> <ul style="list-style-type: none"> Louth Co. Council Boundary Line Study Area Boundary Line Railway Line 	<p>Dwn: MMK Ckd: RJK Date: 23/08/2017</p>
	<p>Waterford Office: Unit 2, The Unhandery, 1-2 O'Connell Street, Waterford phone: +353 51 309 500</p>	<p>DRG. Title : Network Traffic Flows - Vehicles 2026 Do-Minimum</p>			<p>Ref: G:\2017\p170092\calcs\excel\Traffic Model</p>
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DRG. Title :

Network Traffic Flows - Vehicles
Committed Development Trips 2036

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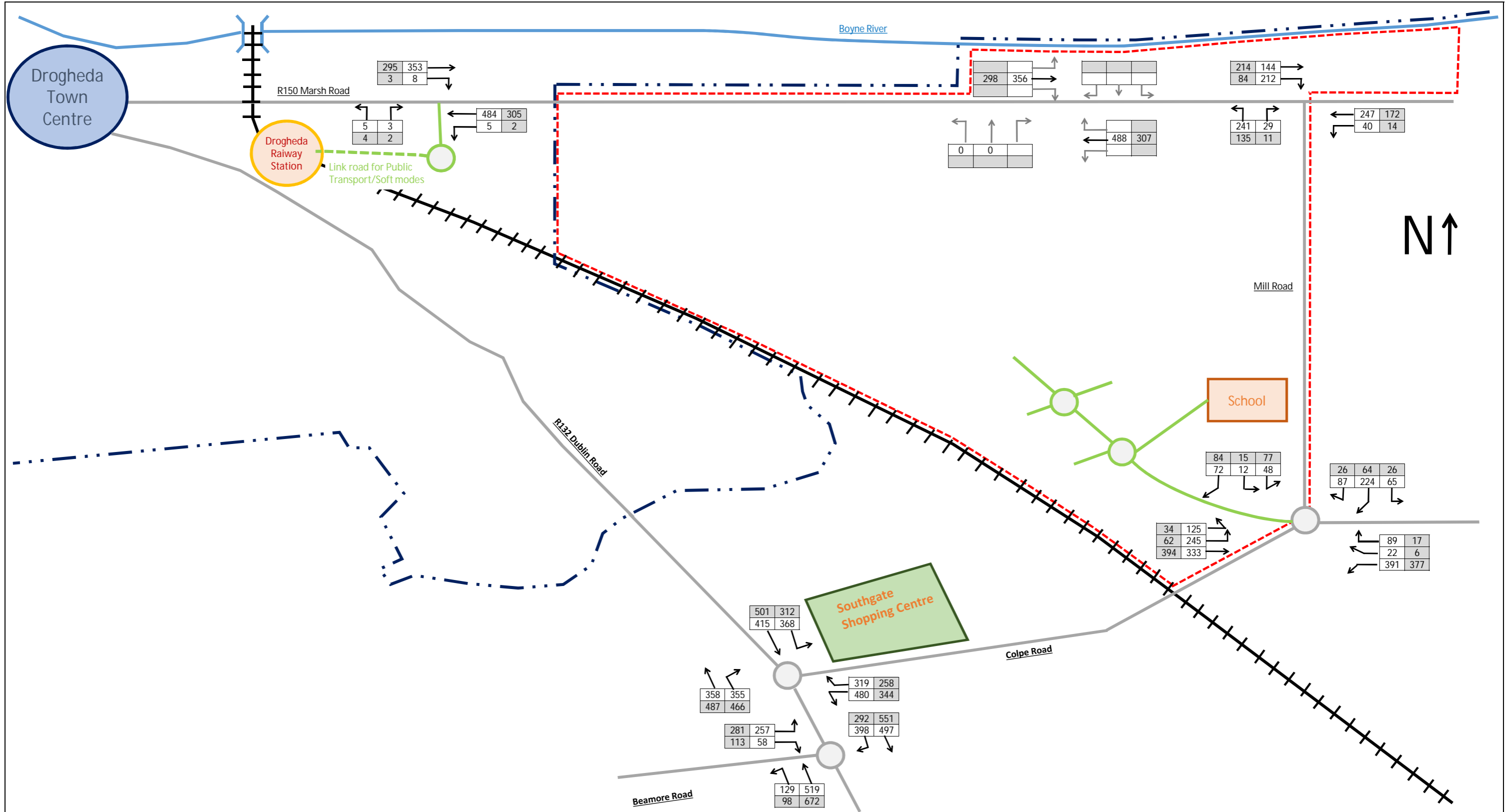
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- Railway Line

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Project : Proposed Residential Development
Colpe Road, Drogheda

DRG. Title : 2021 Do Something

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AM Peak Hour (0830 to 0930)

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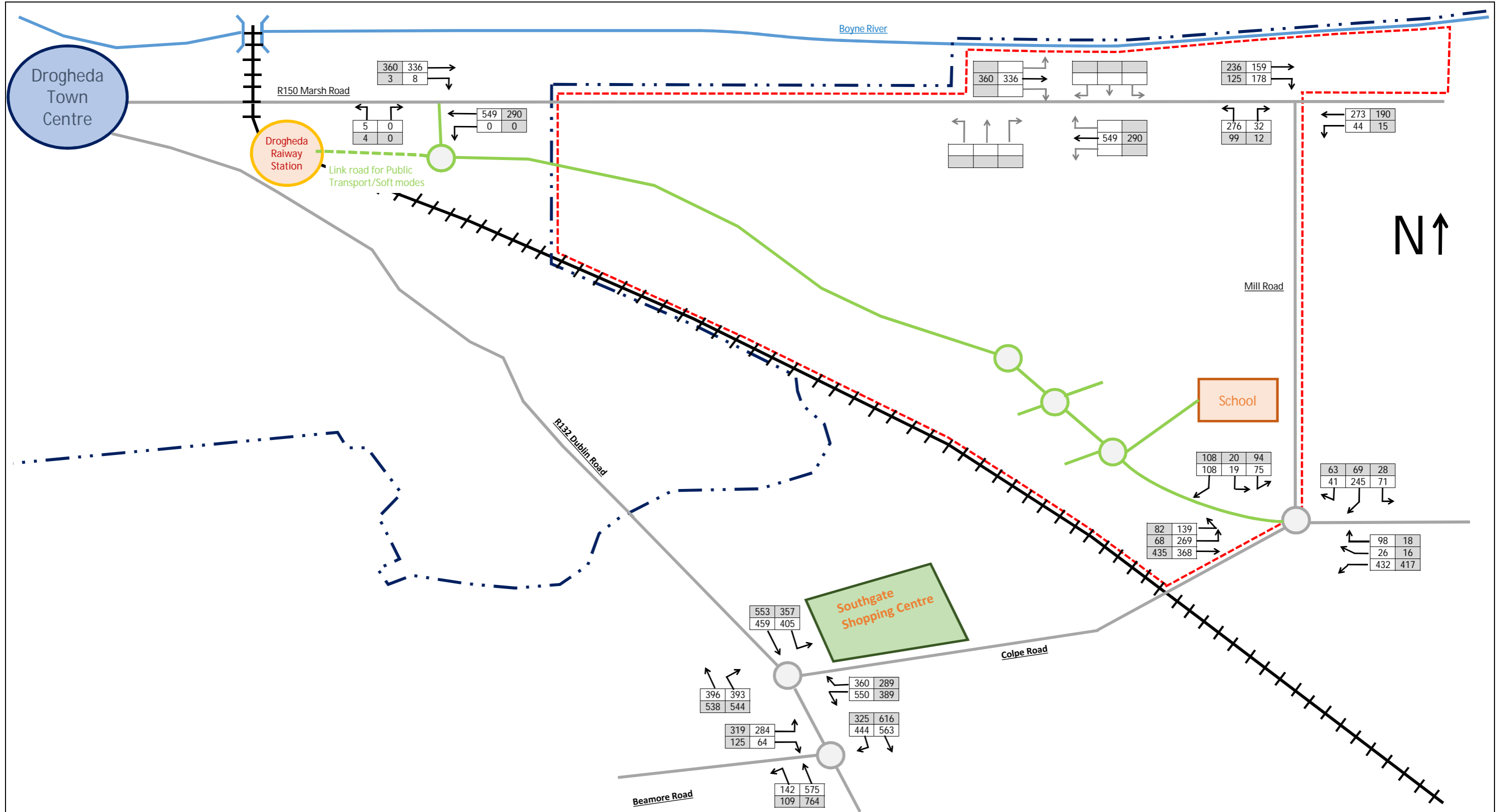
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DRG. Title :
2026 Do Something

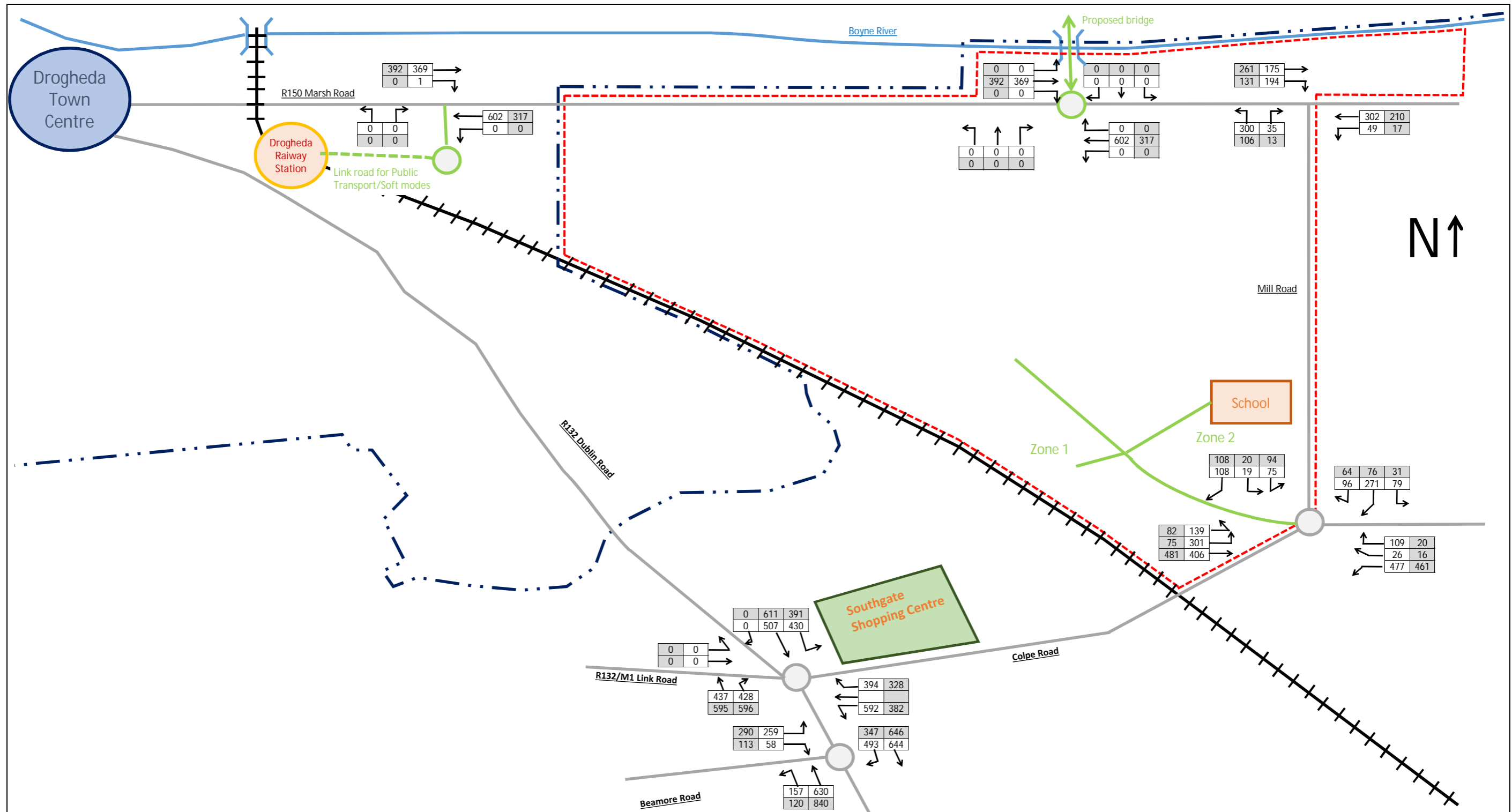
Key:
 AM Peak Hour (0830 to 0930)
 PM Peak Hour (1700 to 1800)

Legend:

- Louth Co. Council Boundary Line
- Study Area Boundary Line
- Railway Line

Dwn:	skd:	Date:
MMK	RJK	14/12/2018
Ref: G:\2017\p170092\calcs\excel\Traffic Model		
Figure:	Rev:	
14b	-	

DBFL Consulting Engineers



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website: www.dbfl.ie

Project : **Proposed Residential Development Colpe Road, Drogheda**

DRG. Title : **2036 Do Something**

Key:

- AM Peak Hour (0830 to 0930)
- PM Peak Hour (1700 to 1800)

Legend:

- Louth Co. Council Boundary Line
- Study Area Boundary Line
- Railway Line

Dwn:	Ckd:	Date:
MMK	RJK	14/12/2018
Ref: G:\2017\p170092\calcs\excel\Traffic Model		
Figure:	Rev:	
14c	-	

APPENDIX C

TRICS Database Output

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : B - BUSINESS PARK
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	SC SURREY	1 days
	WG WOKINGHAM	1 days
06	WEST MIDLANDS	
	HE HEREFORDSHIRE	1 days
	SH SHROPSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	2 days
09	NORTH	
	TW TYNE & WEAR	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	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: Gross floor area
 Actual Range: 1281 to 55000 (units: sqm)
 Range Selected by User: 975 to 121275 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 28/11/16

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	3 days
Wednesday	1 days
Thursday	2 days
Friday	3 days

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

Selected survey types:

Manual count	10 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 undertaken using machines.

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	3
Edge of Town	4
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

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:

B1 10 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	1 days
10,001 to 15,000	3 days
20,001 to 25,000	2 days
25,001 to 50,000	2 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	1 days
50,001 to 75,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	6 days

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

Travel Plan:

Yes	2 days
No	8 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	10 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	AN-02-B-01 BEECHILL ROAD NEWTOWNBREDA BELFAST Edge of Town No Sub Category Total Gross floor area: Survey date: THURSDAY	BUSINESS PARK 4000 sqm 27/11/14	ANTRIM Survey Type: MANUAL
2	DN-02-B-02 N56 KNOCKNAMONA LETTERKENNY Edge of Town No Sub Category Total Gross floor area: Survey date: MONDAY	BUSINESS PARK 7951 sqm 29/09/14	DONEGAL Survey Type: MANUAL
3	HC-02-B-02 WESTERN ROAD PORTSMOUTH Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area: Survey date: FRIDAY	BUSINESS PARK 55000 sqm 18/10/13	HAMPSHIRE Survey Type: MANUAL
4	HE-02-B-01 A4103 WHITESTONE NEAR HEREFORD Neighbourhood Centre (PPS6 Local Centre) Village Total Gross floor area: Survey date: TUESDAY	BUSINESS PARK 18808 sqm 13/09/11	HEREFORDSHIRE Survey Type: MANUAL
5	SC-02-B-03 A331 FRIMLEY Edge of Town Centre No Sub Category Total Gross floor area: Survey date: TUESDAY	BUSINESS PARK 20160 sqm 27/11/12	SURREY Survey Type: MANUAL
6	SH-02-B-03 CASTLE STREET HADLEY TELFORD Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area: Survey date: TUESDAY	BUSINESS CENTRE 1300 sqm 16/06/09	SHROPSHIRE Survey Type: MANUAL
7	TW-02-B-05 MONARCH ROAD NEWCASTLE Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area: Survey date: FRIDAY	BUSINESS PARK 7926 sqm 13/11/15	TYNE & WEAR Survey Type: MANUAL
8	WG-02-B-02 WHARFEDALE ROAD WINNERSH READING Edge of Town Development Zone Total Gross floor area: Survey date: FRIDAY	BUSINESS PARK 4775 sqm 20/11/15	WOKINGHAM Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	WY-02-B-02 ARMITAGE BRIDGE	BUSINESS PARK	WEST YORKSHIRE
	HUDDERSFIELD Edge of Town No Sub Category		
	Total Gross floor area:	9200 sqm	
	Survey date: WEDNESDAY	23/04/14	Survey Type: MANUAL
10	WY-02-B-03 SCRIFTAN LANE KIRK DEIGHTON WETHERBY	BUSINESS PARK	WEST YORKSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total Gross floor area:	1281 sqm	
	Survey date: THURSDAY	15/09/16	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 02 - EMPLOYMENT/B - BUSINESS PARK
VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	13040	0.453	10	13040	0.061	10	13040	0.514
08:00 - 09:00	10	13040	1.435	10	13040	0.136	10	13040	1.571
09:00 - 10:00	10	13040	0.800	10	13040	0.221	10	13040	1.021
10:00 - 11:00	10	13040	0.282	10	13040	0.164	10	13040	0.446
11:00 - 12:00	10	13040	0.218	10	13040	0.229	10	13040	0.447
12:00 - 13:00	10	13040	0.362	10	13040	0.486	10	13040	0.848
13:00 - 14:00	10	13040	0.390	10	13040	0.336	10	13040	0.726
14:00 - 15:00	10	13040	0.276	10	13040	0.265	10	13040	0.541
15:00 - 16:00	10	13040	0.158	10	13040	0.370	10	13040	0.528
16:00 - 17:00	10	13040	0.166	10	13040	0.613	10	13040	0.779
17:00 - 18:00	10	13040	0.140	10	13040	1.171	10	13040	1.311
18:00 - 19:00	9	13467	0.062	9	13467	0.479	9	13467	0.541
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.742			4.531			9.273

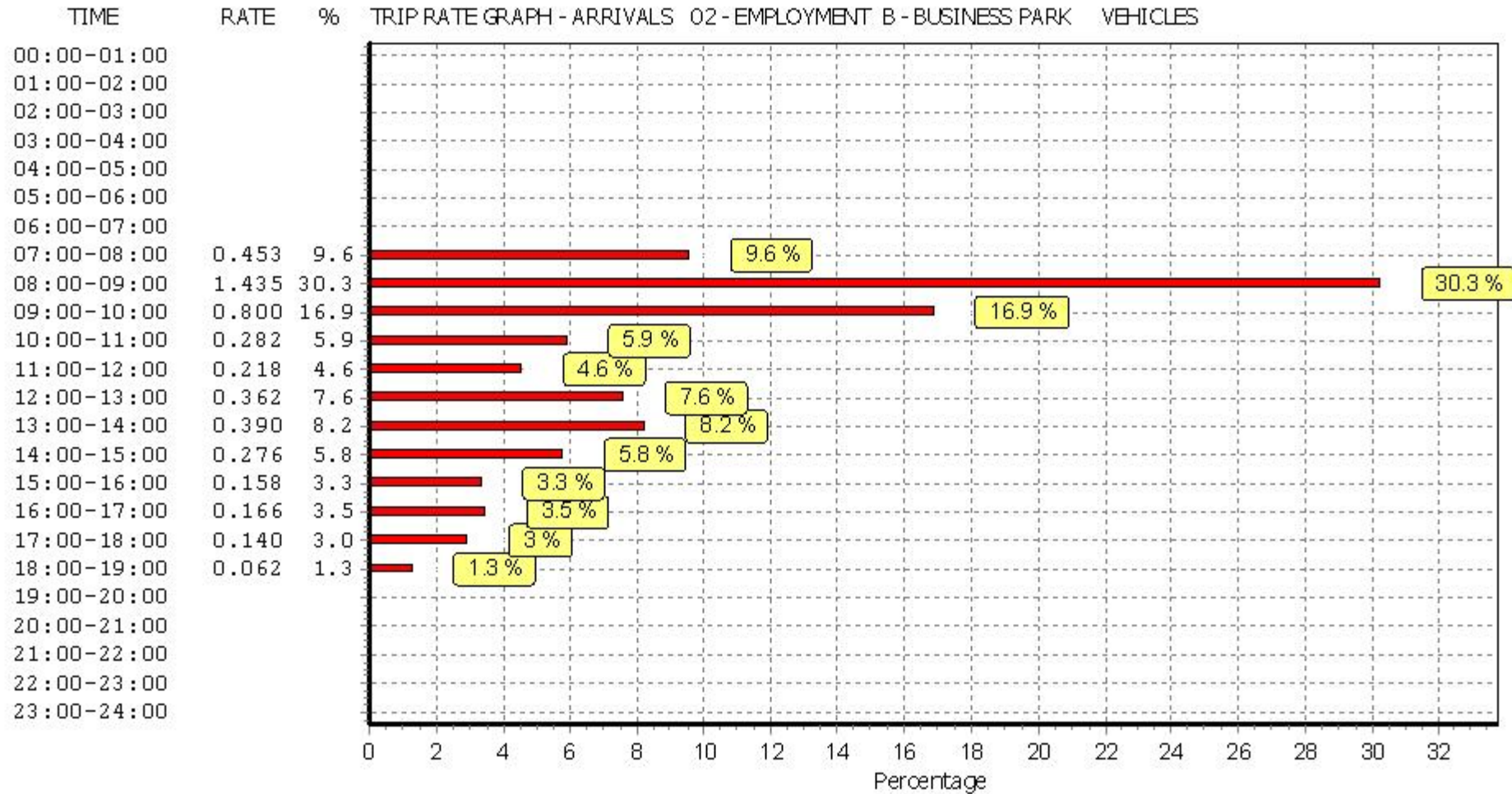
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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

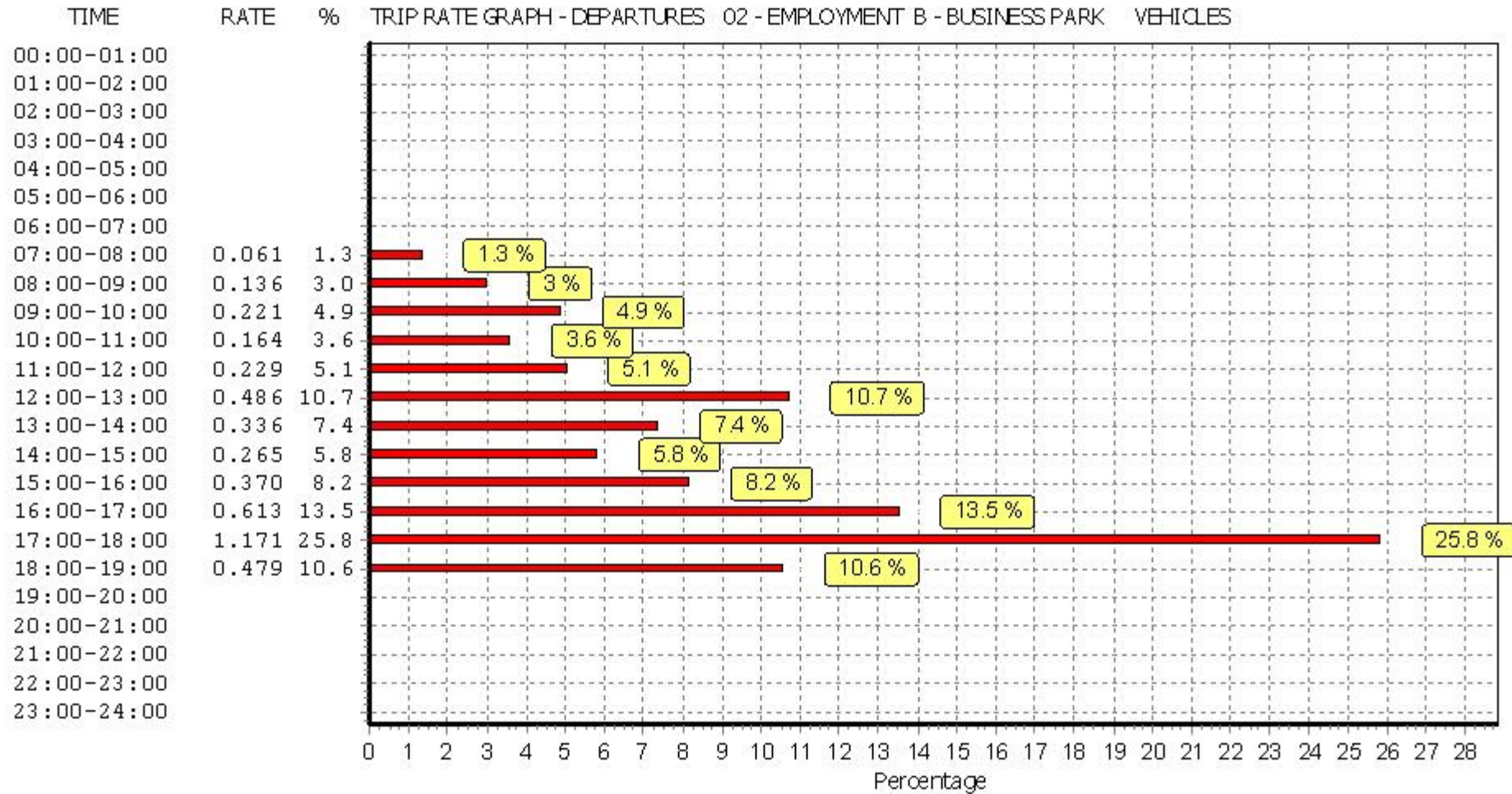
Parameter summary

Trip rate parameter range selected: 1281 - 55000 (units: sqm)
 Survey date date range: 01/01/09 - 28/11/16
 Number of weekdays (Monday-Friday): 10
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

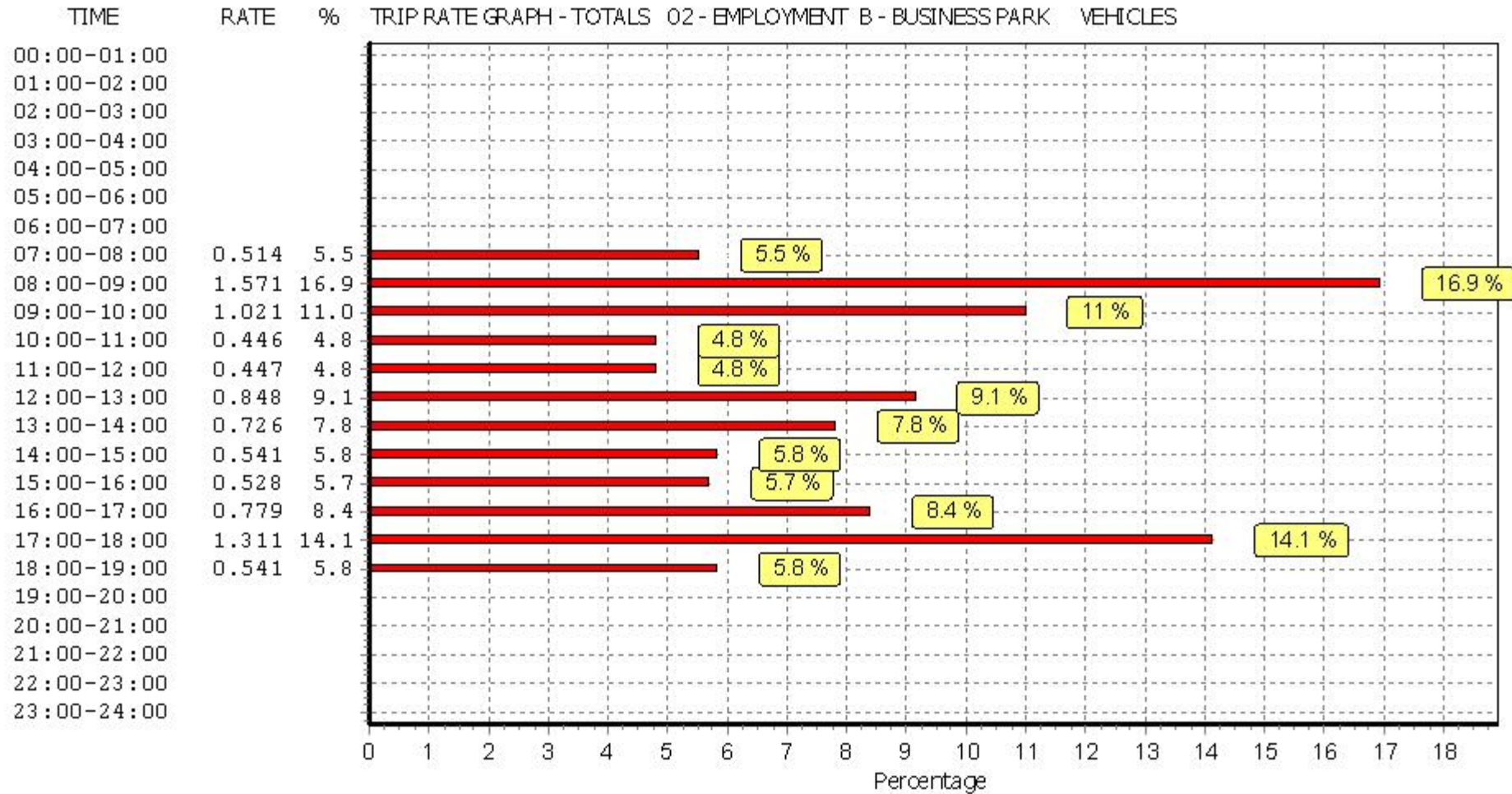
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	13040	0.002	10	13040	0.002	10	13040	0.004
08:00 - 09:00	10	13040	0.010	10	13040	0.009	10	13040	0.019
09:00 - 10:00	10	13040	0.018	10	13040	0.018	10	13040	0.036
10:00 - 11:00	10	13040	0.009	10	13040	0.008	10	13040	0.017
11:00 - 12:00	10	13040	0.008	10	13040	0.009	10	13040	0.017
12:00 - 13:00	10	13040	0.014	10	13040	0.012	10	13040	0.026
13:00 - 14:00	10	13040	0.005	10	13040	0.007	10	13040	0.012
14:00 - 15:00	10	13040	0.004	10	13040	0.004	10	13040	0.008
15:00 - 16:00	10	13040	0.006	10	13040	0.007	10	13040	0.013
16:00 - 17:00	10	13040	0.008	10	13040	0.004	10	13040	0.012
17:00 - 18:00	10	13040	0.016	10	13040	0.018	10	13040	0.034
18:00 - 19:00	9	13467	0.004	9	13467	0.003	9	13467	0.007
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.104			0.101			0.205

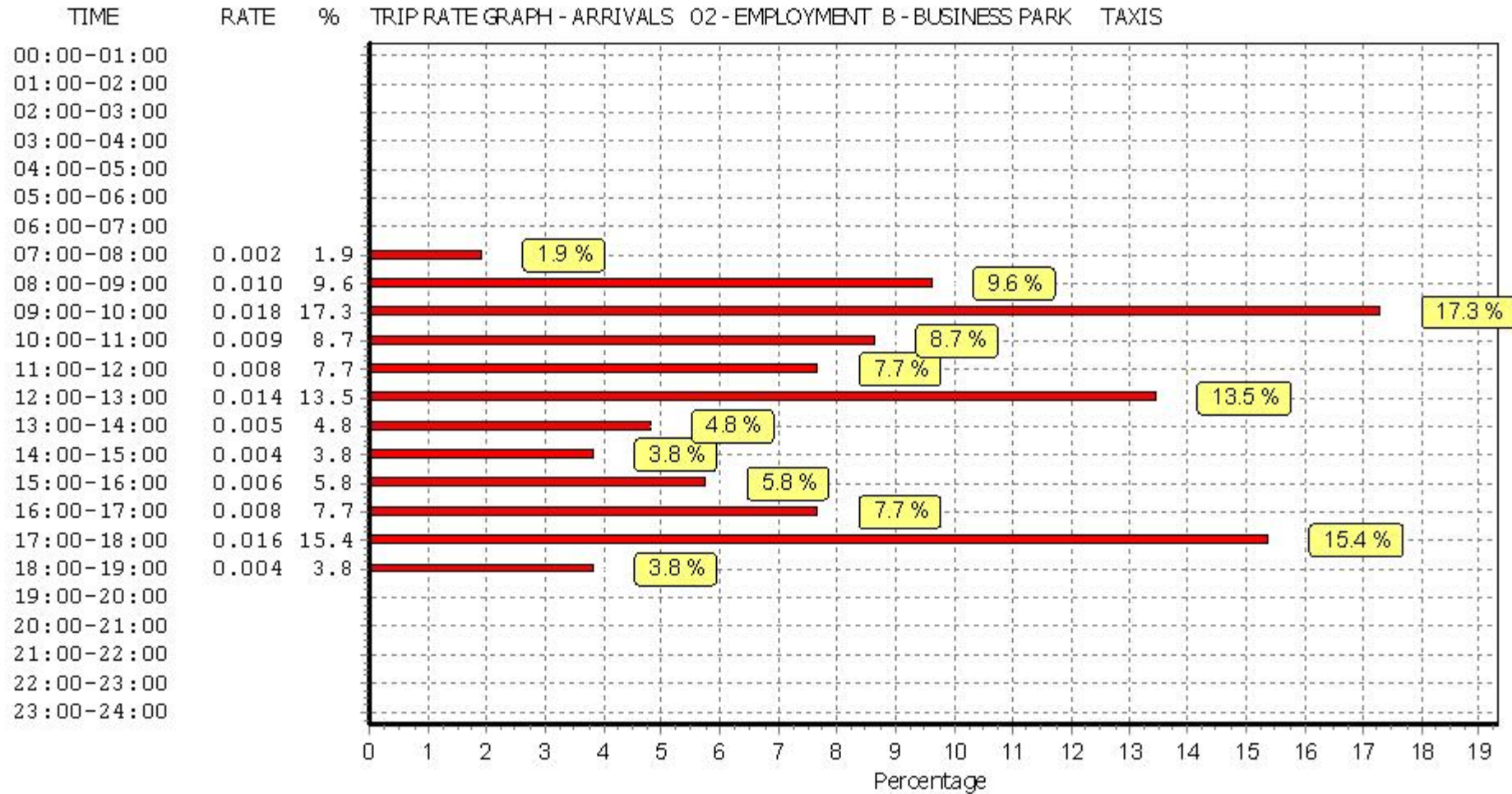
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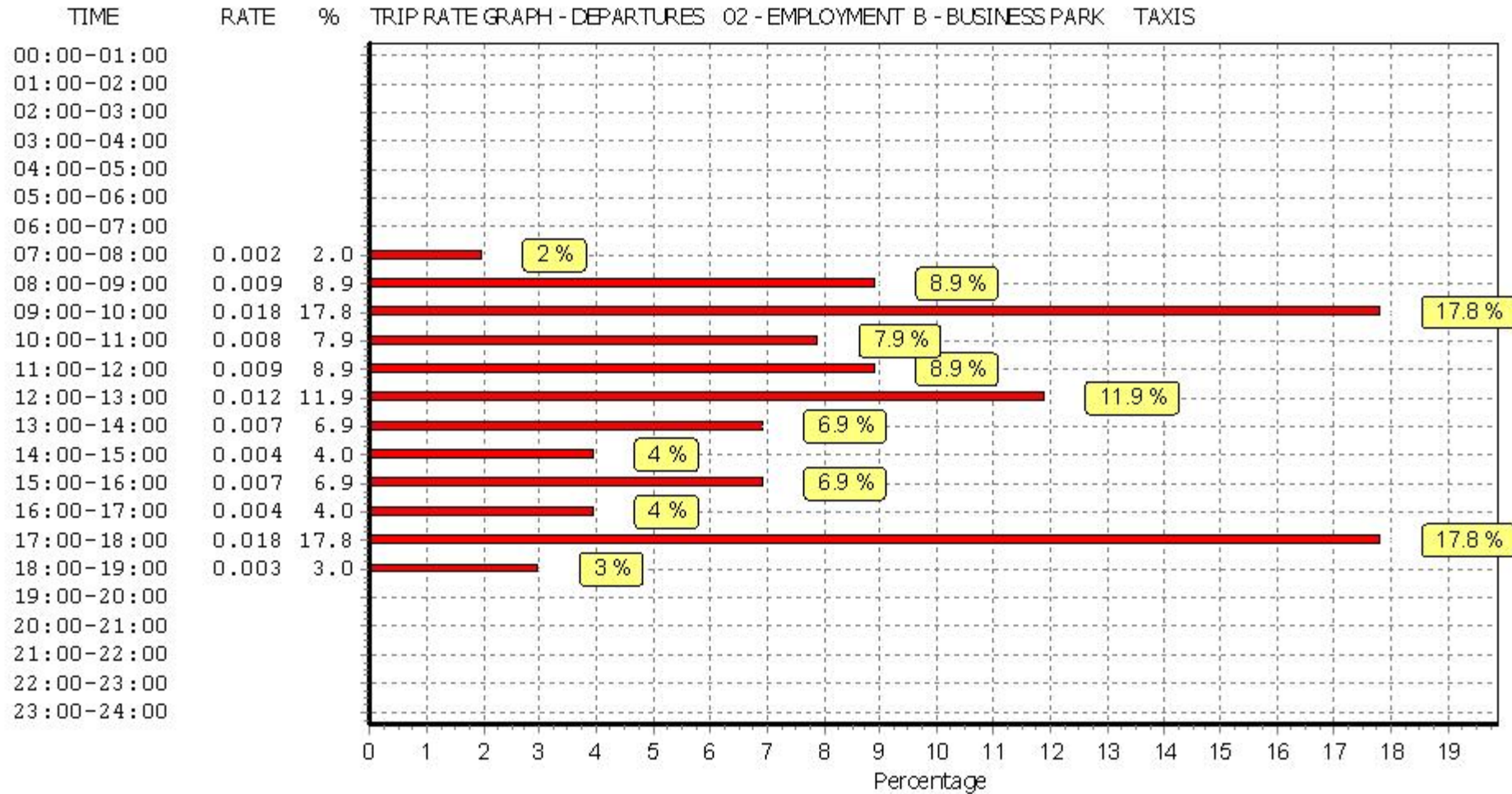
Parameter summary

Trip rate parameter range selected:	1281 - 55000 (units: sqm)
Survey date date range:	01/01/09 - 28/11/16
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

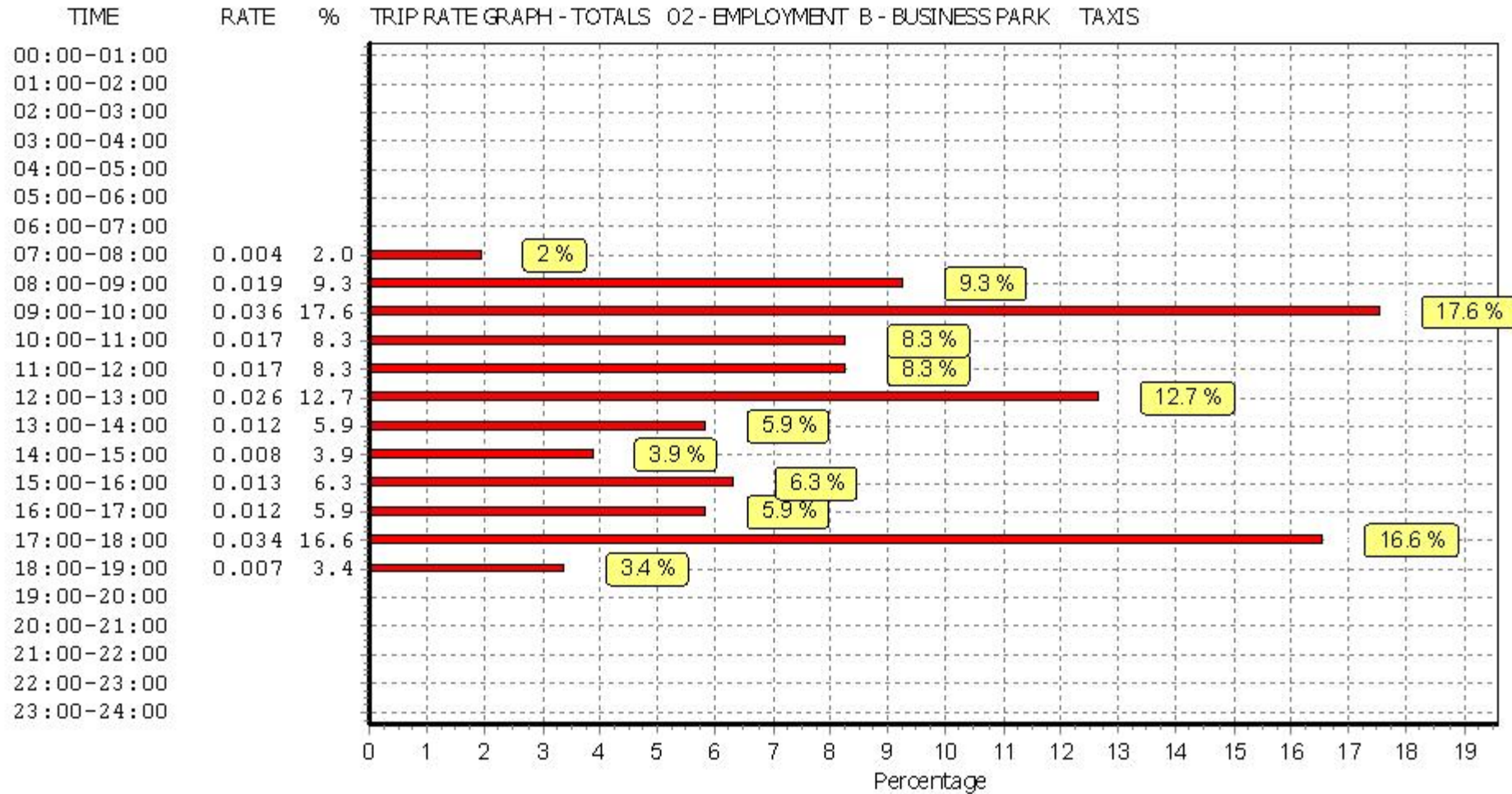
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	13040	0.003	10	13040	0.002	10	13040	0.005
08:00 - 09:00	10	13040	0.009	10	13040	0.007	10	13040	0.016
09:00 - 10:00	10	13040	0.006	10	13040	0.008	10	13040	0.014
10:00 - 11:00	10	13040	0.005	10	13040	0.005	10	13040	0.010
11:00 - 12:00	10	13040	0.004	10	13040	0.003	10	13040	0.007
12:00 - 13:00	10	13040	0.006	10	13040	0.005	10	13040	0.011
13:00 - 14:00	10	13040	0.003	10	13040	0.003	10	13040	0.006
14:00 - 15:00	10	13040	0.005	10	13040	0.004	10	13040	0.009
15:00 - 16:00	10	13040	0.005	10	13040	0.005	10	13040	0.010
16:00 - 17:00	10	13040	0.006	10	13040	0.008	10	13040	0.014
17:00 - 18:00	10	13040	0.003	10	13040	0.004	10	13040	0.007
18:00 - 19:00	9	13467	0.001	9	13467	0.003	9	13467	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.056			0.057			0.113

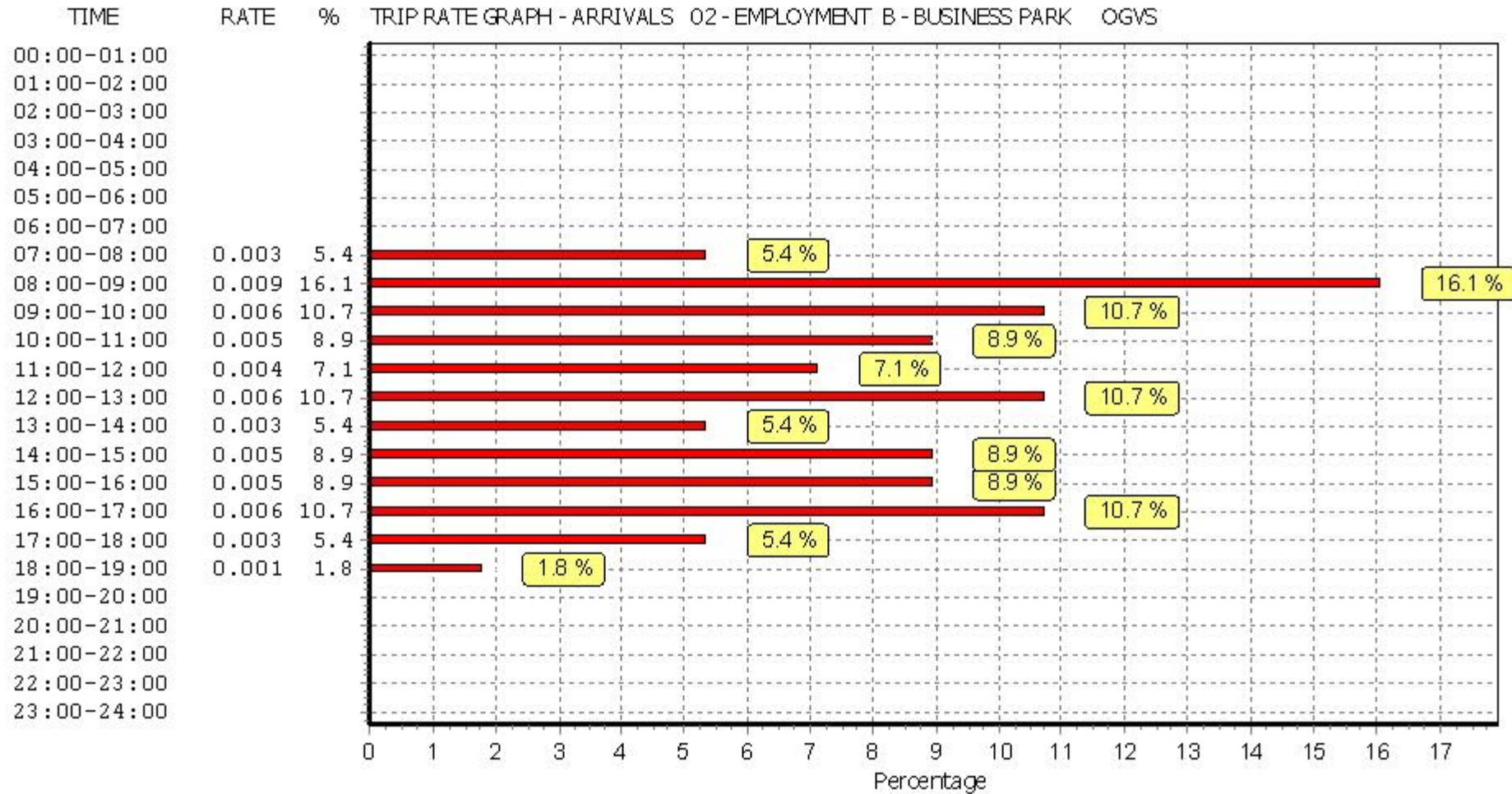
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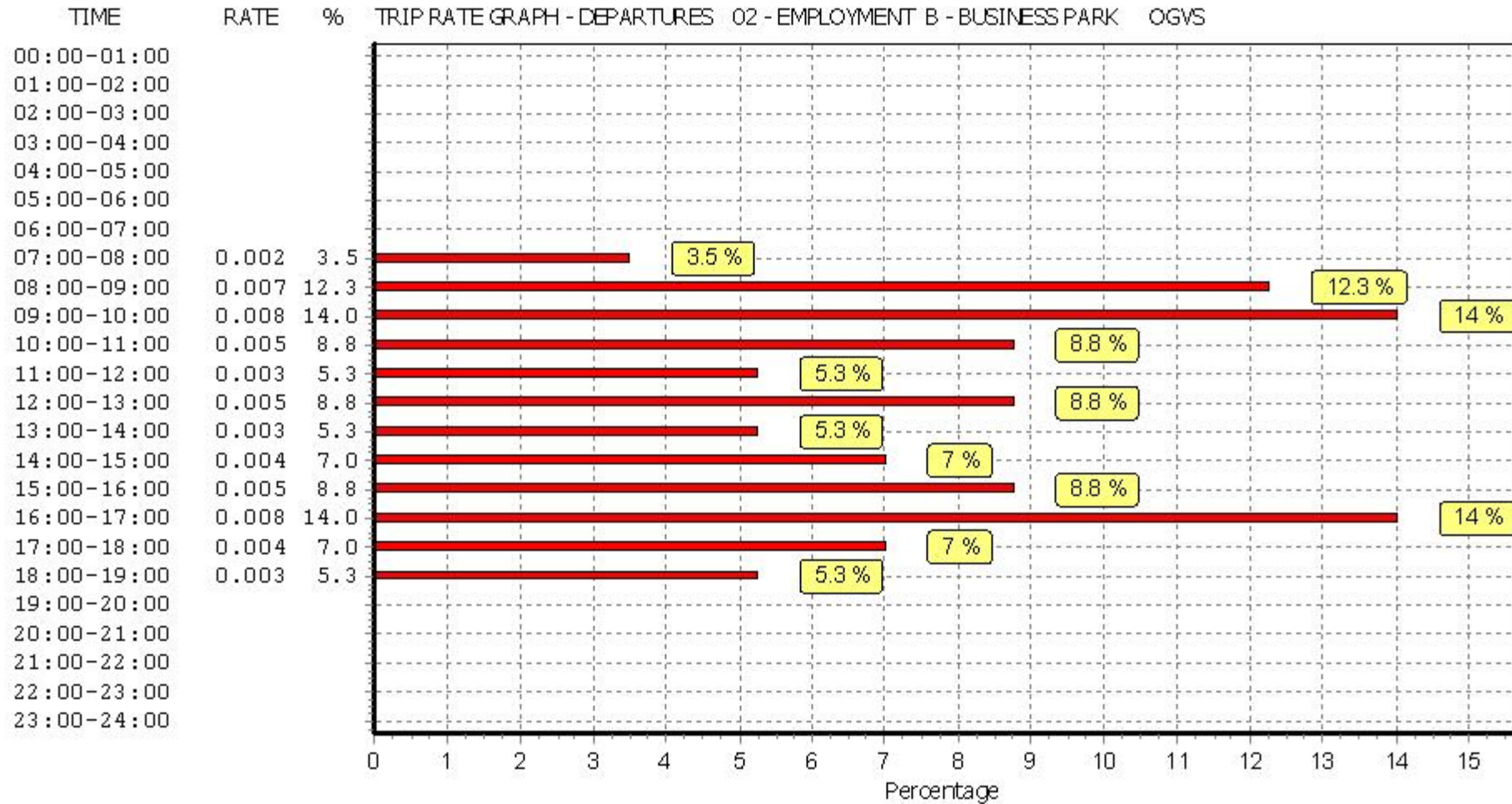
Parameter summary

Trip rate parameter range selected: 1281 - 55000 (units: sqm)
 Survey date date range: 01/01/09 - 28/11/16
 Number of weekdays (Monday-Friday): 10
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

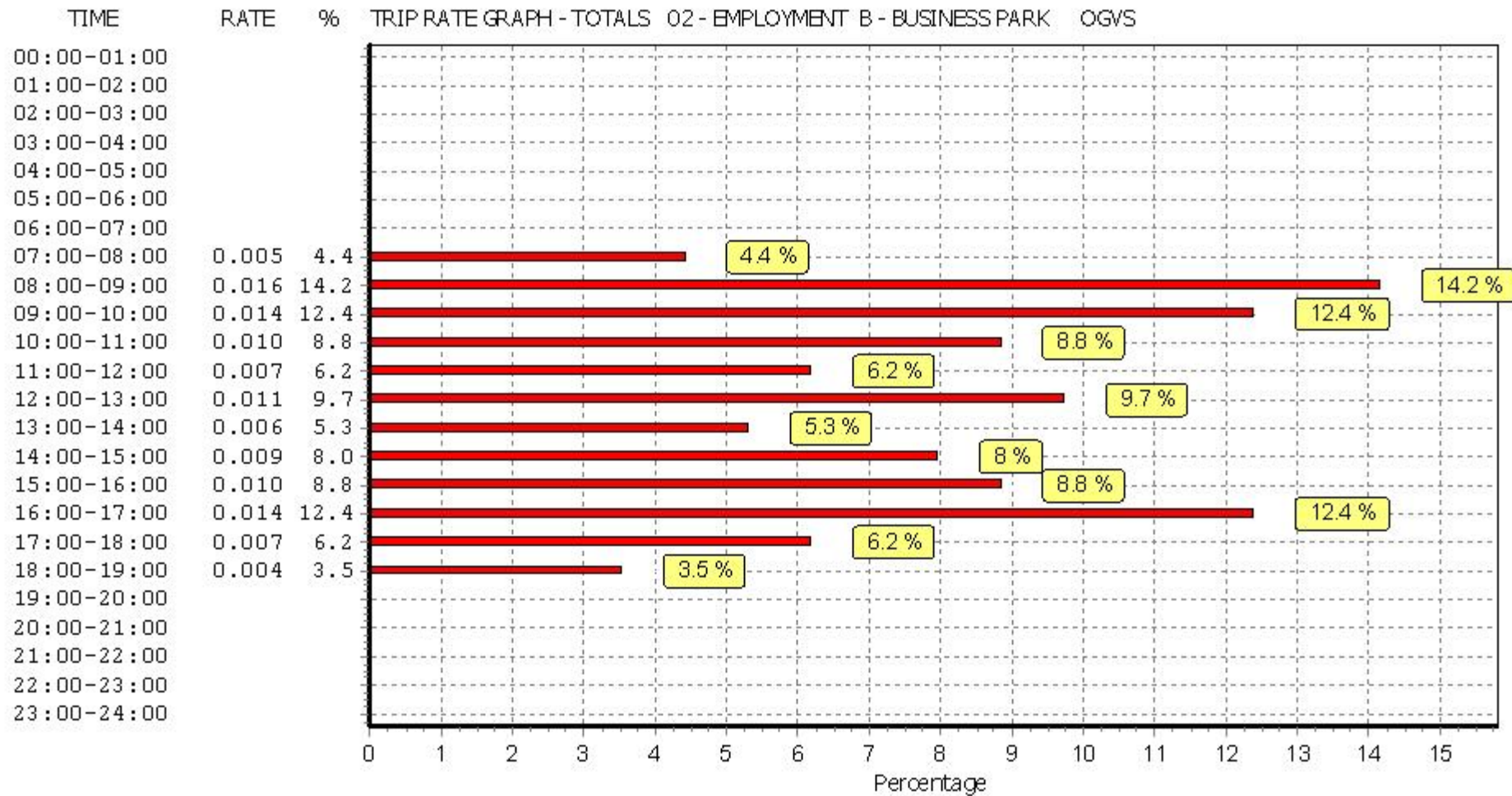
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TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	13040	0.004	10	13040	0.003	10	13040	0.007
08:00 - 09:00	10	13040	0.003	10	13040	0.004	10	13040	0.007
09:00 - 10:00	10	13040	0.004	10	13040	0.004	10	13040	0.008
10:00 - 11:00	10	13040	0.000	10	13040	0.000	10	13040	0.000
11:00 - 12:00	10	13040	0.001	10	13040	0.000	10	13040	0.001
12:00 - 13:00	10	13040	0.000	10	13040	0.001	10	13040	0.001
13:00 - 14:00	10	13040	0.000	10	13040	0.000	10	13040	0.000
14:00 - 15:00	10	13040	0.000	10	13040	0.000	10	13040	0.000
15:00 - 16:00	10	13040	0.002	10	13040	0.002	10	13040	0.004
16:00 - 17:00	10	13040	0.004	10	13040	0.004	10	13040	0.008
17:00 - 18:00	10	13040	0.005	10	13040	0.004	10	13040	0.009
18:00 - 19:00	9	13467	0.002	9	13467	0.004	9	13467	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.025			0.026			0.051

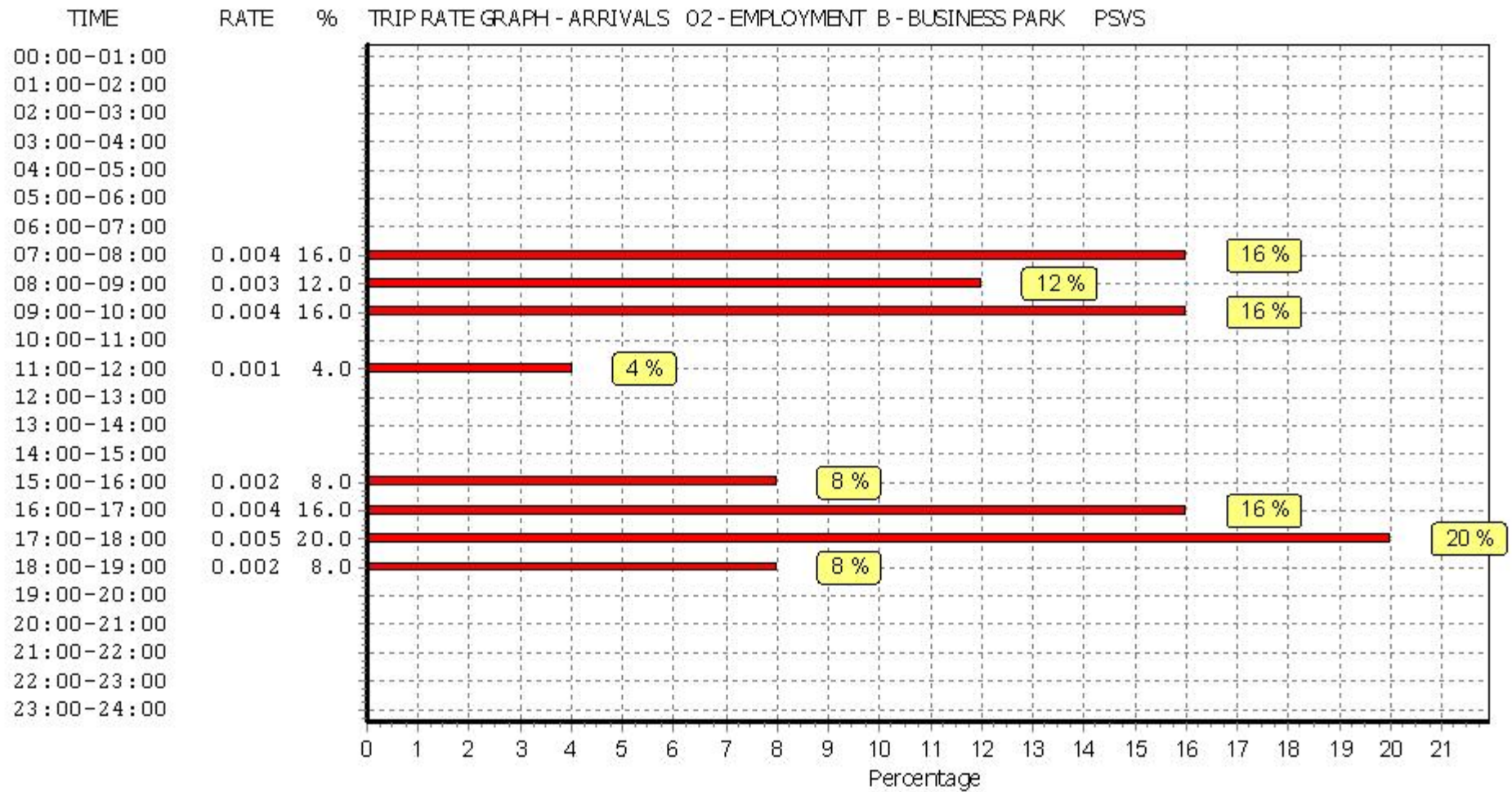
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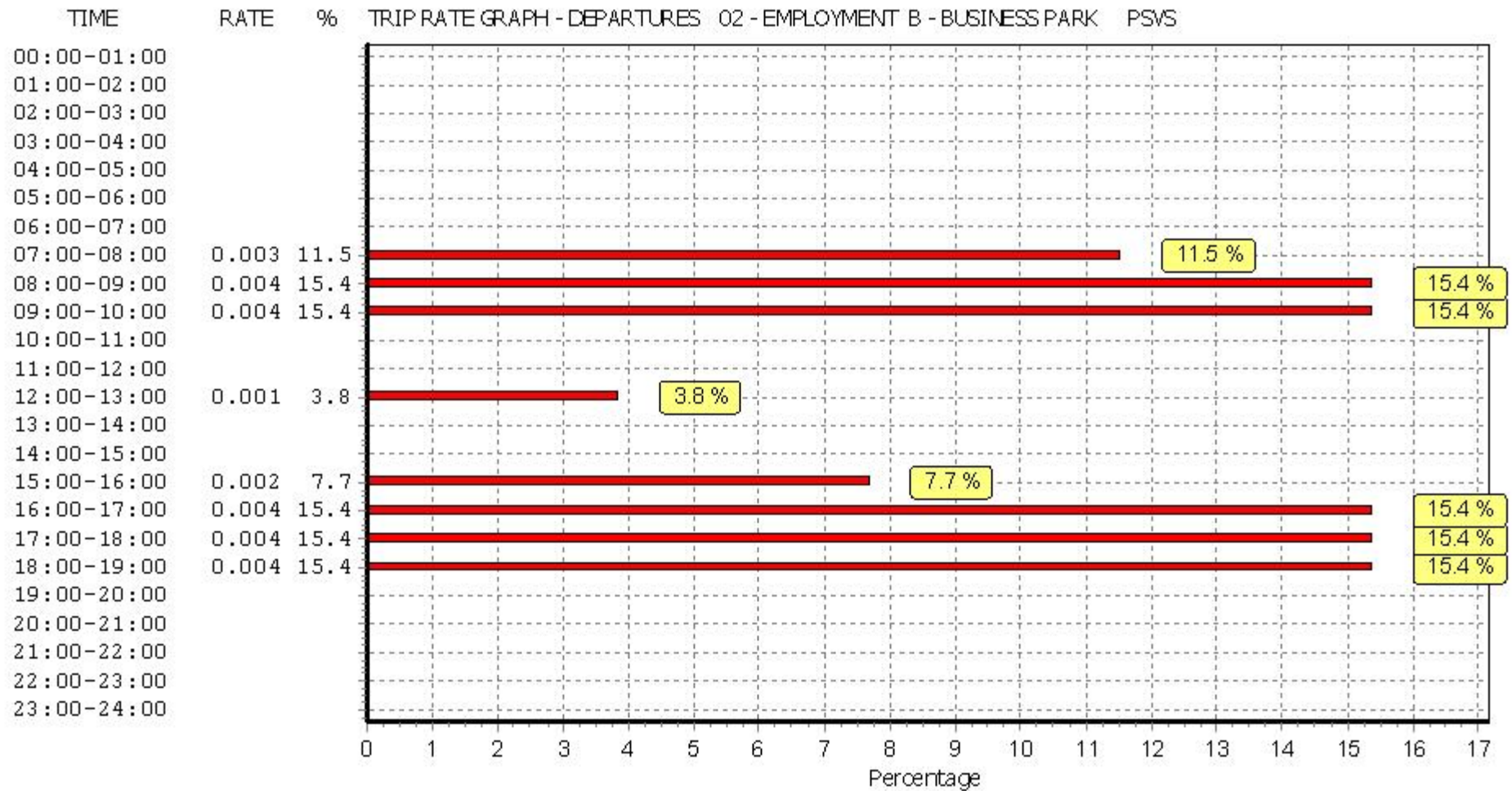
Parameter summary

Trip rate parameter range selected:	1281 - 55000 (units: sqm)
Survey date date range:	01/01/09 - 28/11/16
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

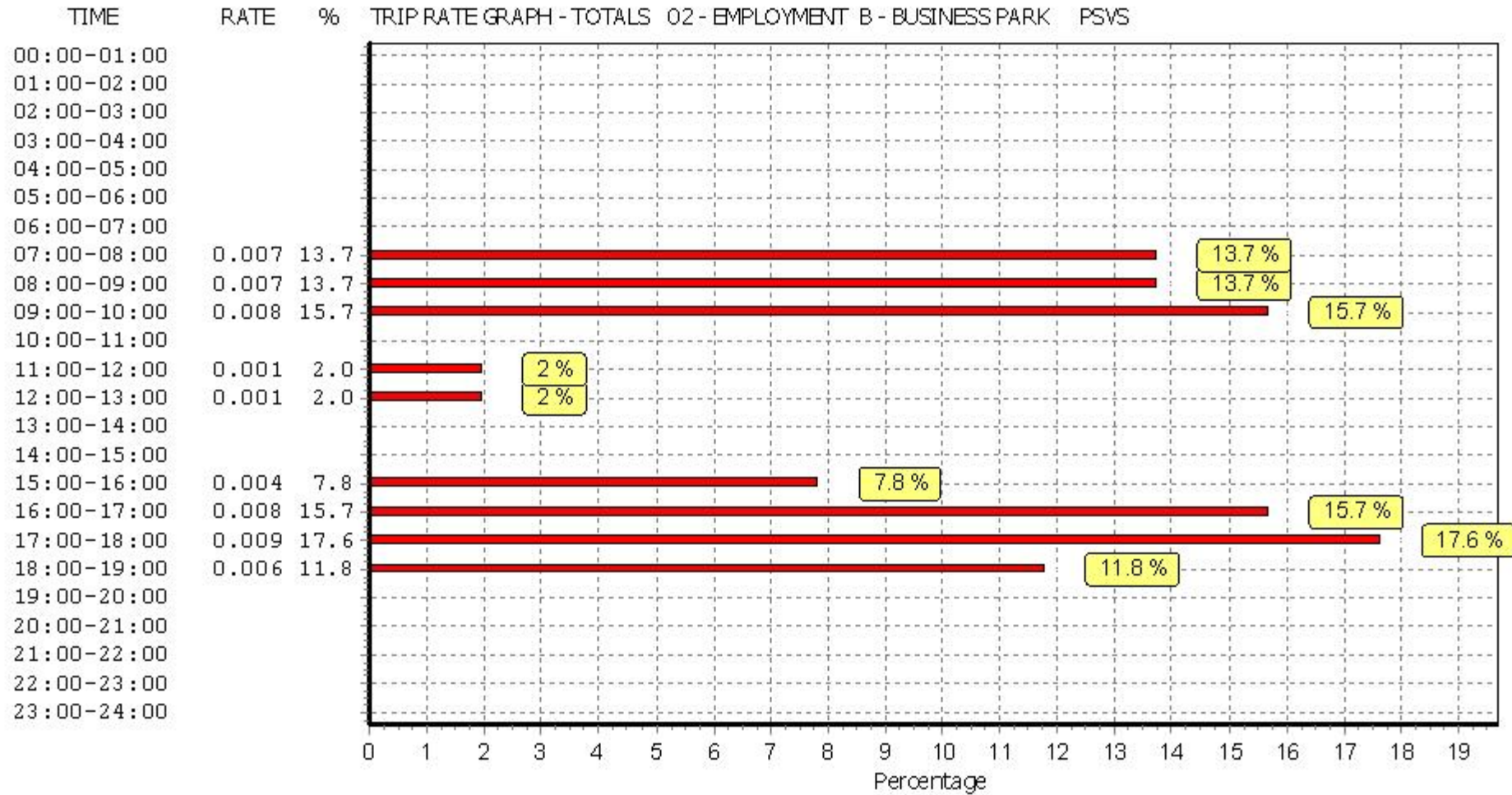
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This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period,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



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TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	13040	0.025	10	13040	0.000	10	13040	0.025
08:00 - 09:00	10	13040	0.043	10	13040	0.005	10	13040	0.048
09:00 - 10:00	10	13040	0.008	10	13040	0.000	10	13040	0.008
10:00 - 11:00	10	13040	0.008	10	13040	0.003	10	13040	0.011
11:00 - 12:00	10	13040	0.006	10	13040	0.002	10	13040	0.008
12:00 - 13:00	10	13040	0.003	10	13040	0.004	10	13040	0.007
13:00 - 14:00	10	13040	0.008	10	13040	0.007	10	13040	0.015
14:00 - 15:00	10	13040	0.004	10	13040	0.005	10	13040	0.009
15:00 - 16:00	10	13040	0.002	10	13040	0.008	10	13040	0.010
16:00 - 17:00	10	13040	0.004	10	13040	0.015	10	13040	0.019
17:00 - 18:00	10	13040	0.007	10	13040	0.051	10	13040	0.058
18:00 - 19:00	9	13467	0.000	9	13467	0.017	9	13467	0.017
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.118			0.117			0.235

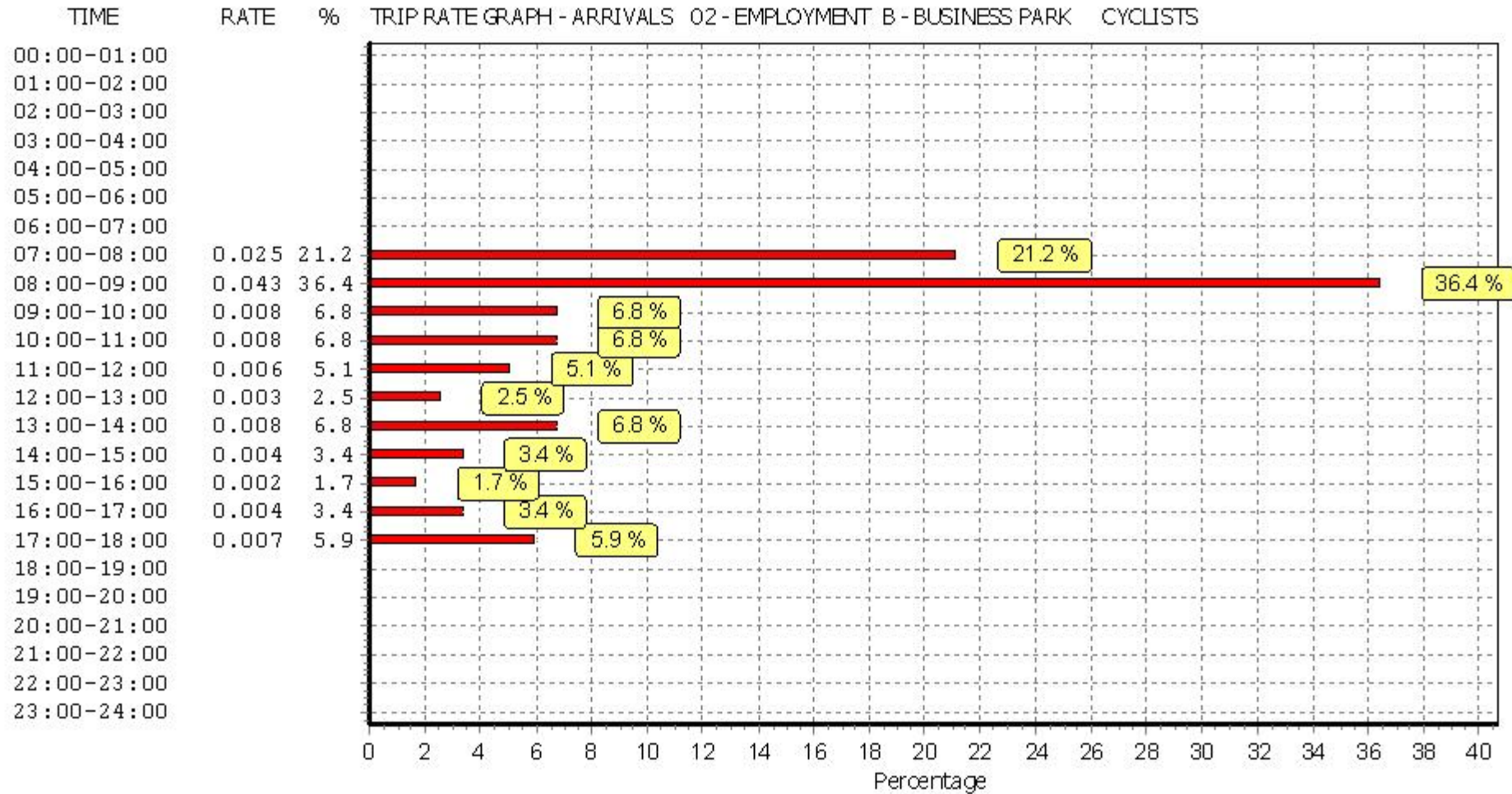
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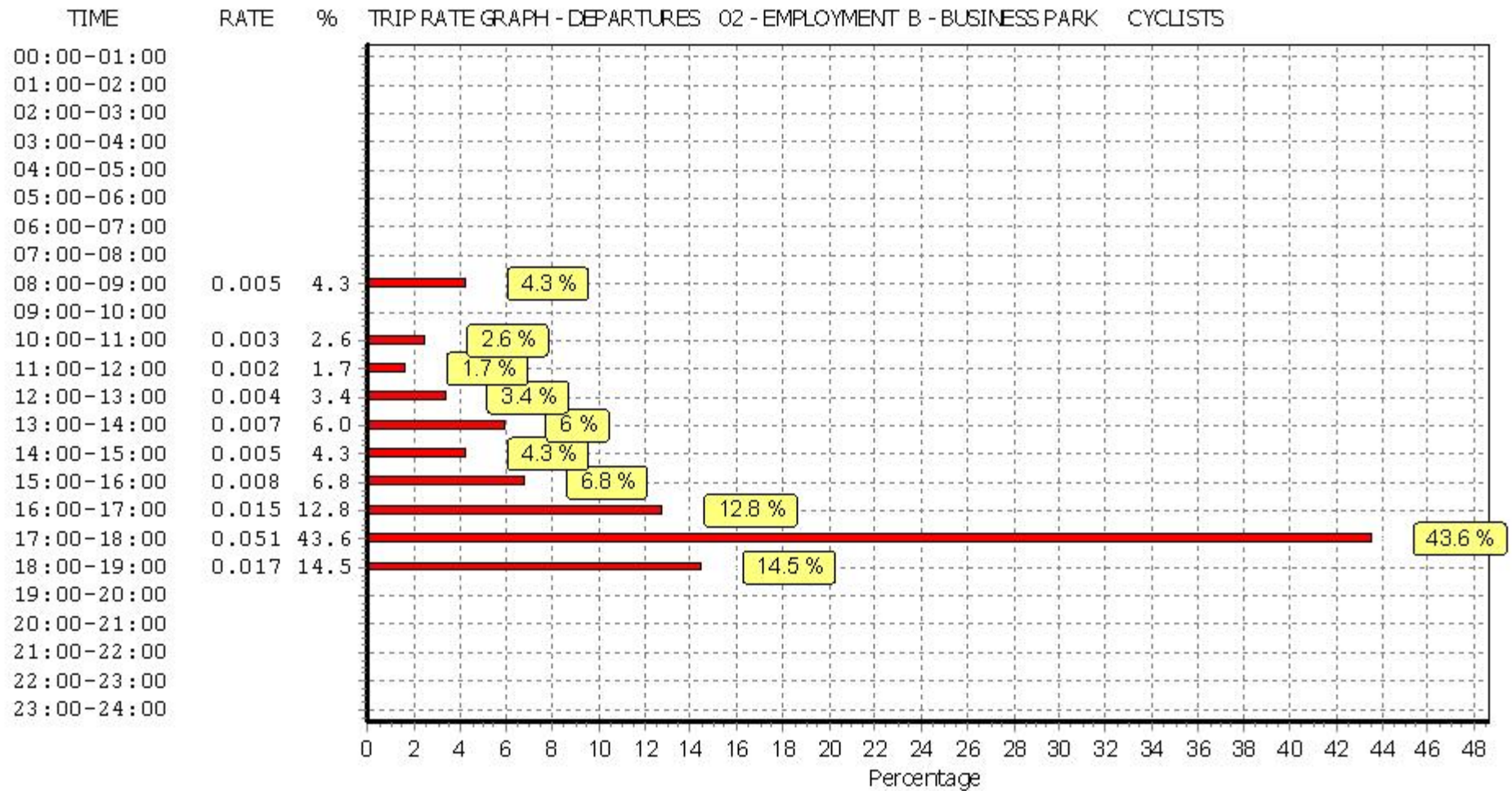
Parameter summary

Trip rate parameter range selected: 1281 - 55000 (units: sqm)
 Survey date date range: 01/01/09 - 28/11/16
 Number of weekdays (Monday-Friday): 10
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

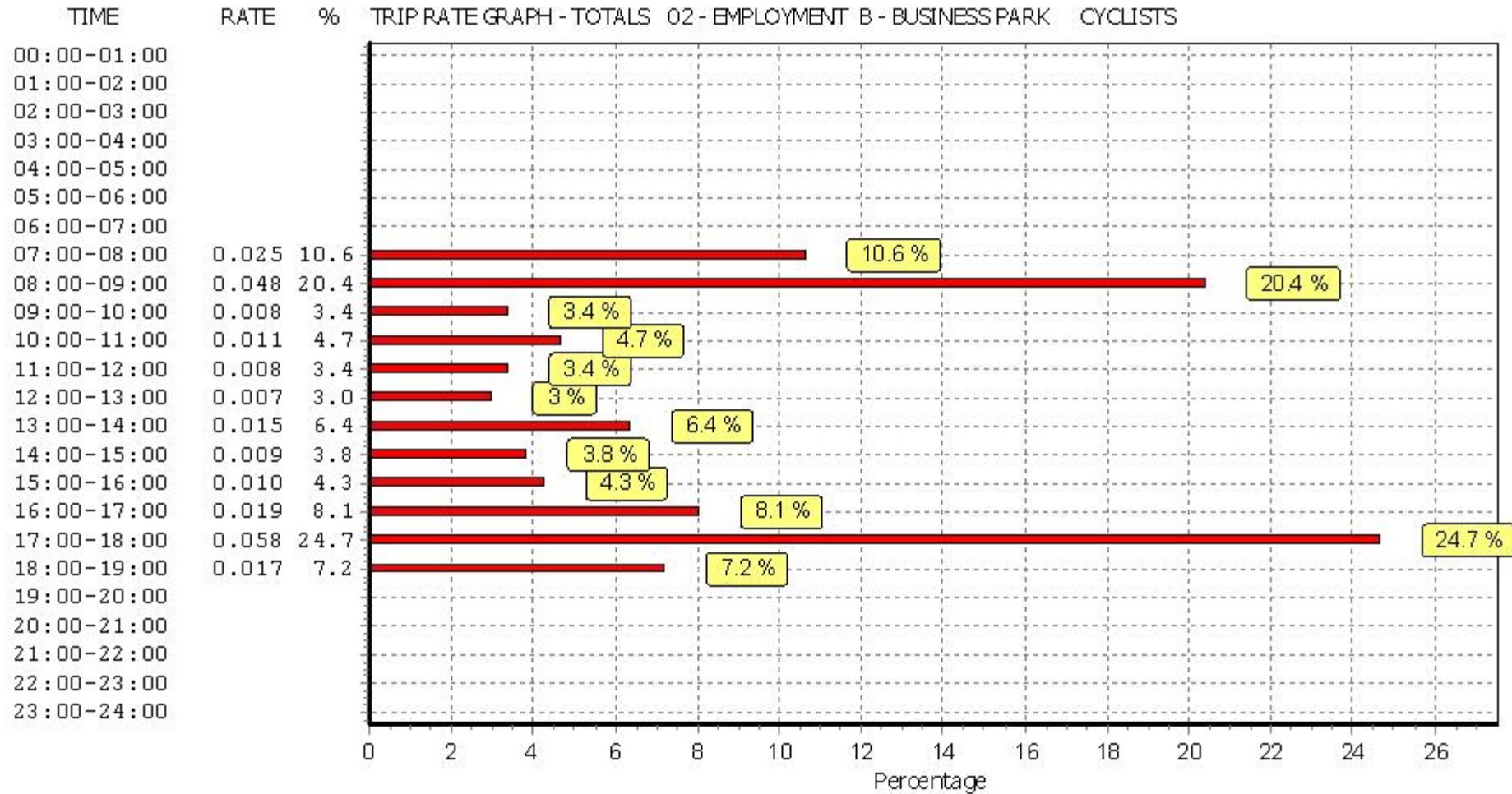
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Calculation Reference: AUDIT-638801-170821-0807

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : D - INDUSTRIAL ESTATE
 VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	CW CORNWALL	1 days
	DC DORSET	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
09	NORTH	
	CB CUMBRIA	1 days
11	SCOTLAND	
	AG ANGUS	1 days
	HI HIGHLAND	1 days
17	ULSTER (NORTHERN IRELAND)	
	AR ARMAGH	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: 4600 to 70000 (units: sqm)
 Range Selected by User: 552 to 234115 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 04/04/17

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	3 days
Tuesday	2 days
Wednesday	1 days
Friday	1 days

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

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	4
Neighbourhood Centre (PPS6 Local Centre)	2
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:

Residential Zone	1
Village	2
Out of Town	1
No Sub Category	3

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

Secondary Filtering selection:

Use Class:

B1	1 days
B2	5 days
B8	1 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	1 days
5,001 to 10,000	2 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	4 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	5 days

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

Travel Plan:

No	7 days
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This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	7 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	AG-02-D-01 WESTWAY	INDUSTRIAL EST.	ANGUS
	ARBROATH Edge of Town Residential Zone Total Gross floor area: 64889 sqm Survey date: FRIDAY 25/05/12		
	Survey Type: MANUAL		
2	AR-02-D-01 HAMILTONSBAWN ROAD	INDUSTRIAL ESTATE	ARMAGH
	ARMAGH Edge of Town No Sub Category Total Gross floor area: 11548 sqm Survey date: TUESDAY 08/06/10		
	Survey Type: MANUAL		
3	CB-02-D-04 CARLISLE ROAD	INDUSTRIAL ESTATE	CUMBRIA
	BRAMPTON Edge of Town No Sub Category Total Gross floor area: 17708 sqm Survey date: WEDNESDAY 16/12/09		
	Survey Type: MANUAL		
4	CW-02-D-03 LONG ROCK ROAD LONG ROCK NEAR PENZANCE	IND. ESTATE	CORNWALL
	Neighbourhood Centre (PPS6 Local Centre) Village Total Gross floor area: 36500 sqm Survey date: MONDAY 03/10/11		
	Survey Type: MANUAL		
5	DC-02-D-20 OLD BARN FARM ROAD THREE LEGGED CROSS NEAR BOURNEMOUTH	INDUSTRIAL ESTATE	DORSET
	Free Standing (PPS6 Out of Town) Out of Town Total Gross floor area: 70000 sqm Survey date: MONDAY 24/03/14		
	Survey Type: MANUAL		
6	HI-02-D-03 NORTH ROAD INVERLOCHY FORT WILLIAM	IND. ESTATE & BUS. PARK	HIGHLAND
	Edge of Town No Sub Category Total Gross floor area: 35000 sqm Survey date: MONDAY 18/05/09		
	Survey Type: MANUAL		
7	LN-02-D-02 STATION ROAD SWINESHEAD NEAR BOSTON	INDUSTRIAL ESTATE	LINCOLNSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total Gross floor area: 4600 sqm Survey date: TUESDAY 11/12/12		
	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 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	34321	0.328	7	34321	0.097	7	34321	0.425
08:00 - 09:00	7	34321	0.429	7	34321	0.199	7	34321	0.628
09:00 - 10:00	7	34321	0.244	7	34321	0.195	7	34321	0.439
10:00 - 11:00	7	34321	0.191	7	34321	0.178	7	34321	0.369
11:00 - 12:00	7	34321	0.192	7	34321	0.198	7	34321	0.390
12:00 - 13:00	7	34321	0.218	7	34321	0.242	7	34321	0.460
13:00 - 14:00	7	34321	0.254	7	34321	0.226	7	34321	0.480
14:00 - 15:00	7	34321	0.191	7	34321	0.212	7	34321	0.403
15:00 - 16:00	7	34321	0.190	7	34321	0.227	7	34321	0.417
16:00 - 17:00	7	34321	0.251	7	34321	0.331	7	34321	0.582
17:00 - 18:00	7	34321	0.087	7	34321	0.391	7	34321	0.478
18:00 - 19:00	7	34321	0.056	7	34321	0.135	7	34321	0.191
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.631			2.631			5.262

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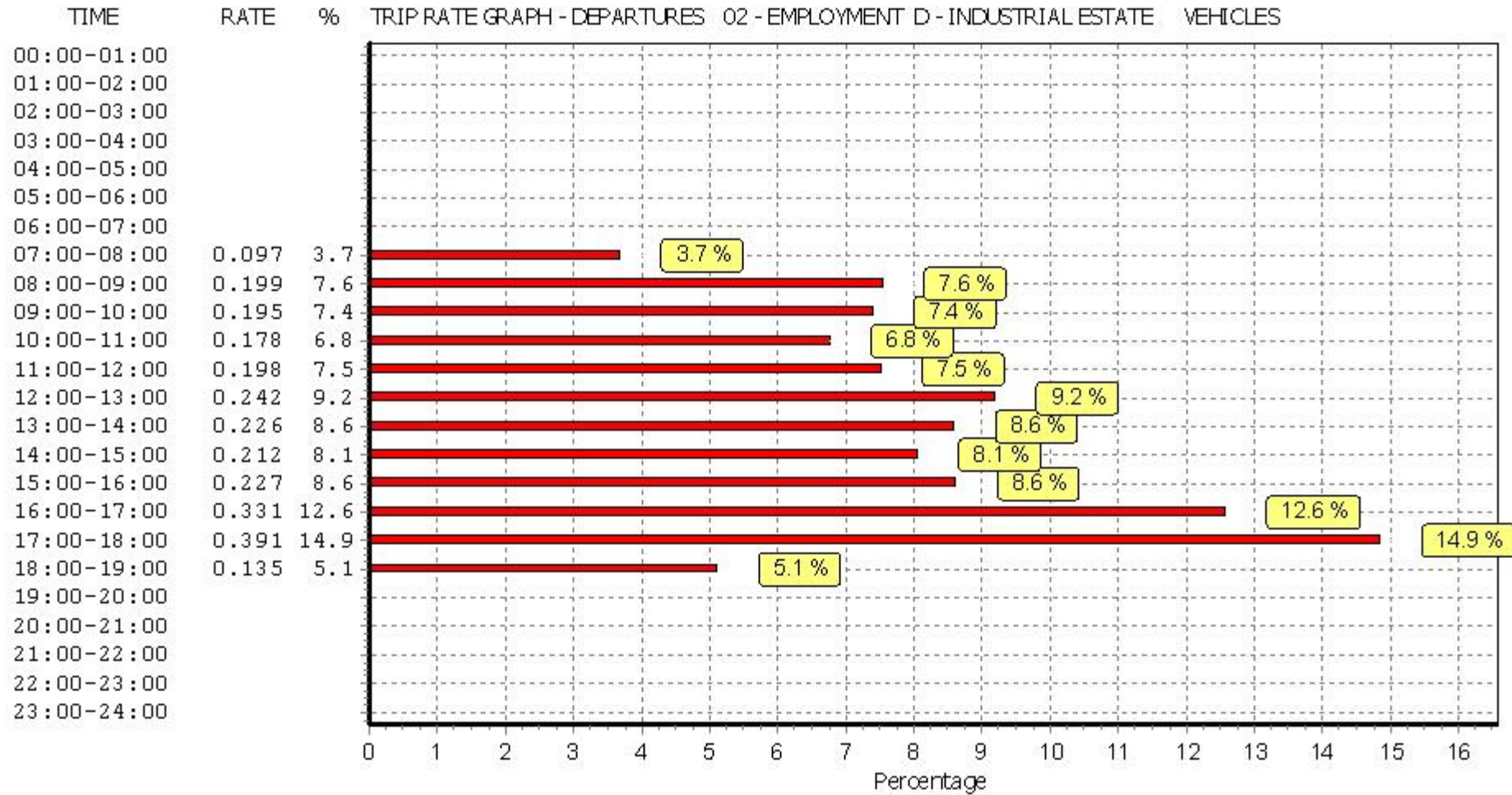
Parameter summary

Trip rate parameter range selected: 4600 - 70000 (units: sqm)
 Survey date date range: 01/01/09 - 04/04/17
 Number of weekdays (Monday-Friday): 7
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

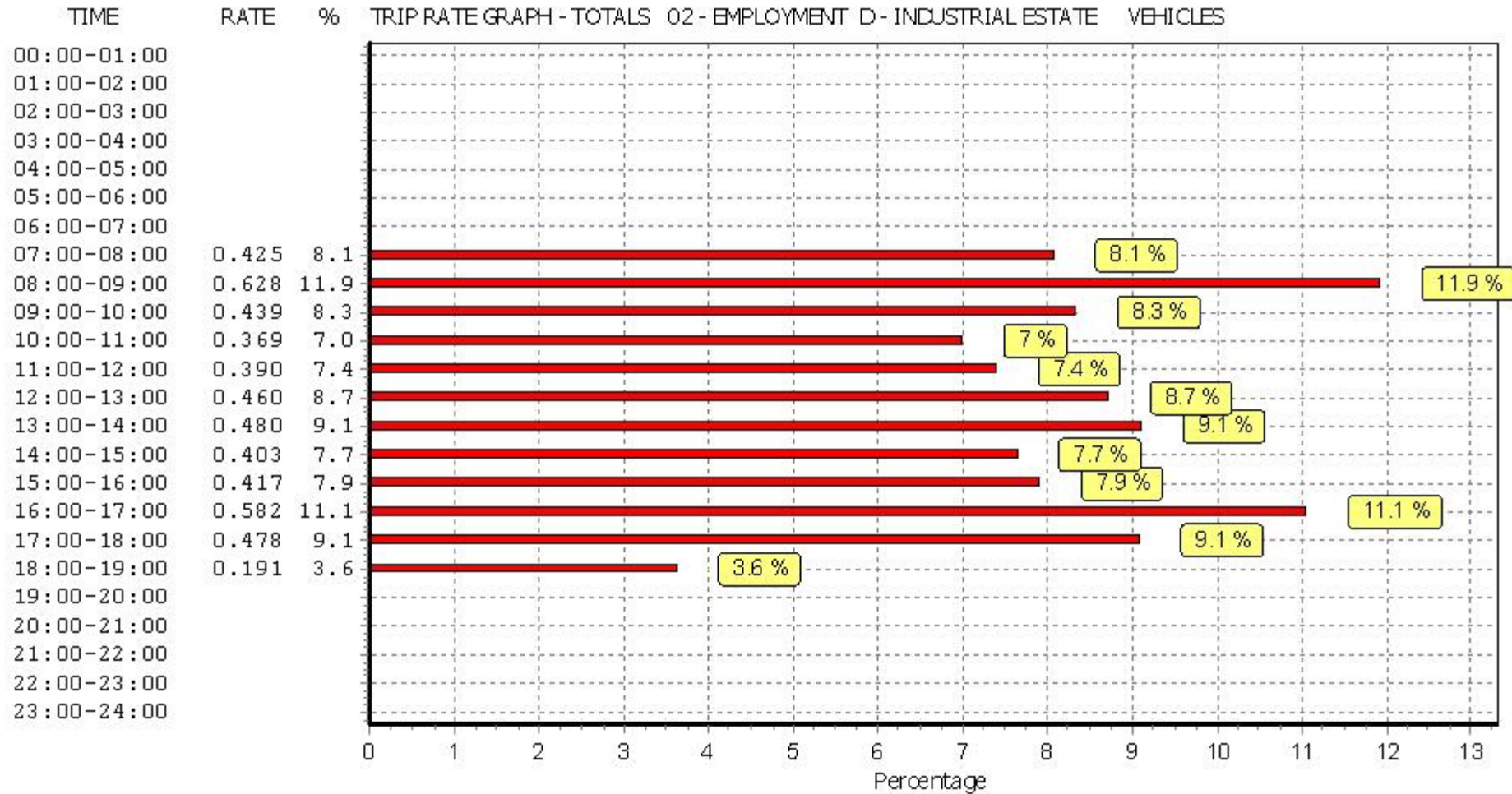
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TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	34321	0.002	7	34321	0.000	7	34321	0.002
08:00 - 09:00	7	34321	0.000	7	34321	0.001	7	34321	0.001
09:00 - 10:00	7	34321	0.002	7	34321	0.002	7	34321	0.004
10:00 - 11:00	7	34321	0.002	7	34321	0.001	7	34321	0.003
11:00 - 12:00	7	34321	0.001	7	34321	0.001	7	34321	0.002
12:00 - 13:00	7	34321	0.001	7	34321	0.001	7	34321	0.002
13:00 - 14:00	7	34321	0.001	7	34321	0.001	7	34321	0.002
14:00 - 15:00	7	34321	0.000	7	34321	0.000	7	34321	0.000
15:00 - 16:00	7	34321	0.000	7	34321	0.001	7	34321	0.001
16:00 - 17:00	7	34321	0.001	7	34321	0.001	7	34321	0.002
17:00 - 18:00	7	34321	0.002	7	34321	0.002	7	34321	0.004
18:00 - 19:00	7	34321	0.001	7	34321	0.001	7	34321	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.012			0.025

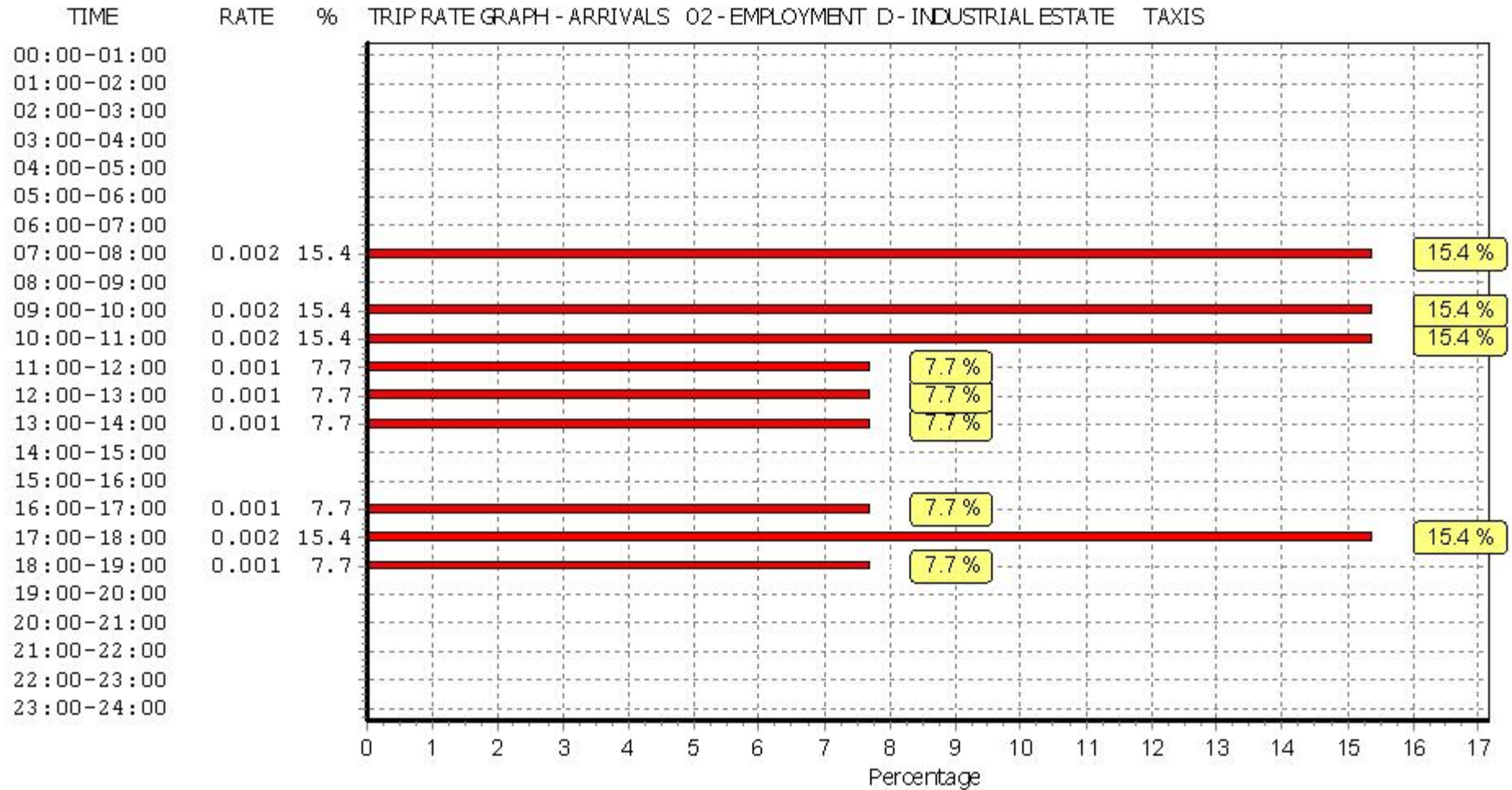
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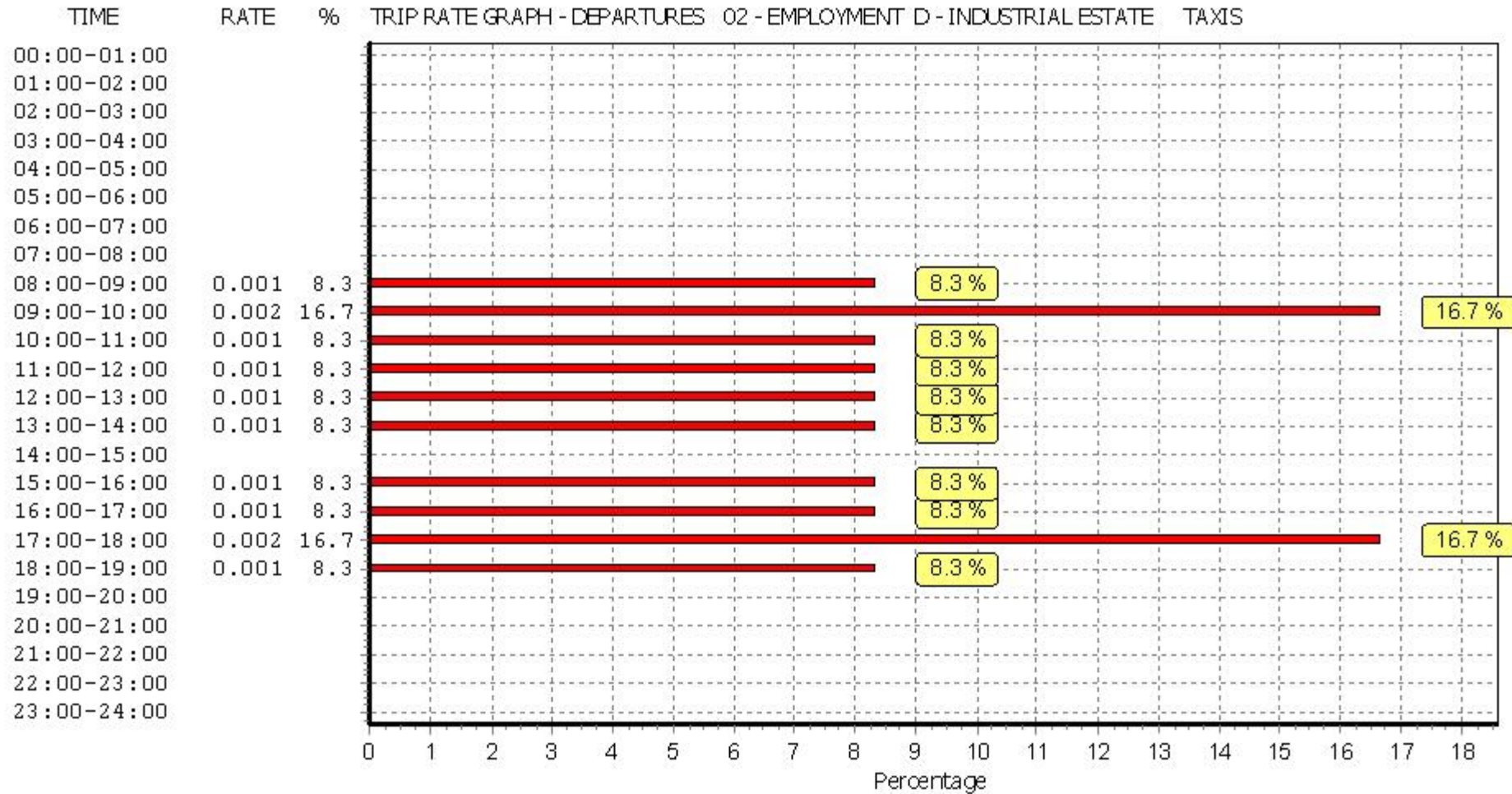
Parameter summary

Trip rate parameter range selected:	4600 - 70000 (units: sqm)
Survey date date range:	01/01/09 - 04/04/17
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

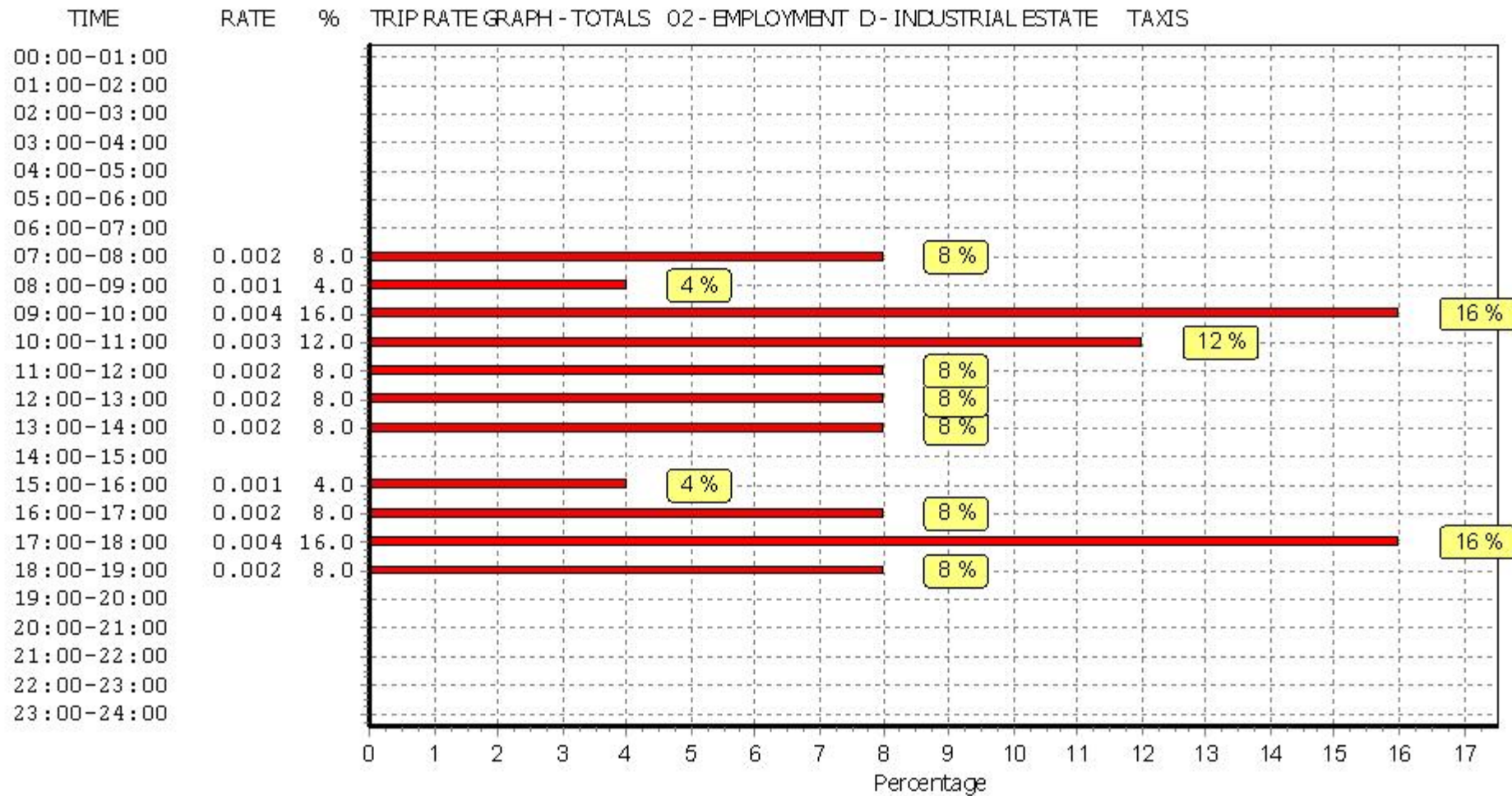
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TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	34321	0.010	7	34321	0.013	7	34321	0.023
08:00 - 09:00	7	34321	0.015	7	34321	0.012	7	34321	0.027
09:00 - 10:00	7	34321	0.016	7	34321	0.016	7	34321	0.032
10:00 - 11:00	7	34321	0.014	7	34321	0.019	7	34321	0.033
11:00 - 12:00	7	34321	0.019	7	34321	0.017	7	34321	0.036
12:00 - 13:00	7	34321	0.010	7	34321	0.013	7	34321	0.023
13:00 - 14:00	7	34321	0.018	7	34321	0.015	7	34321	0.033
14:00 - 15:00	7	34321	0.014	7	34321	0.019	7	34321	0.033
15:00 - 16:00	7	34321	0.015	7	34321	0.018	7	34321	0.033
16:00 - 17:00	7	34321	0.019	7	34321	0.012	7	34321	0.031
17:00 - 18:00	7	34321	0.005	7	34321	0.005	7	34321	0.010
18:00 - 19:00	7	34321	0.002	7	34321	0.001	7	34321	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.157			0.160			0.317

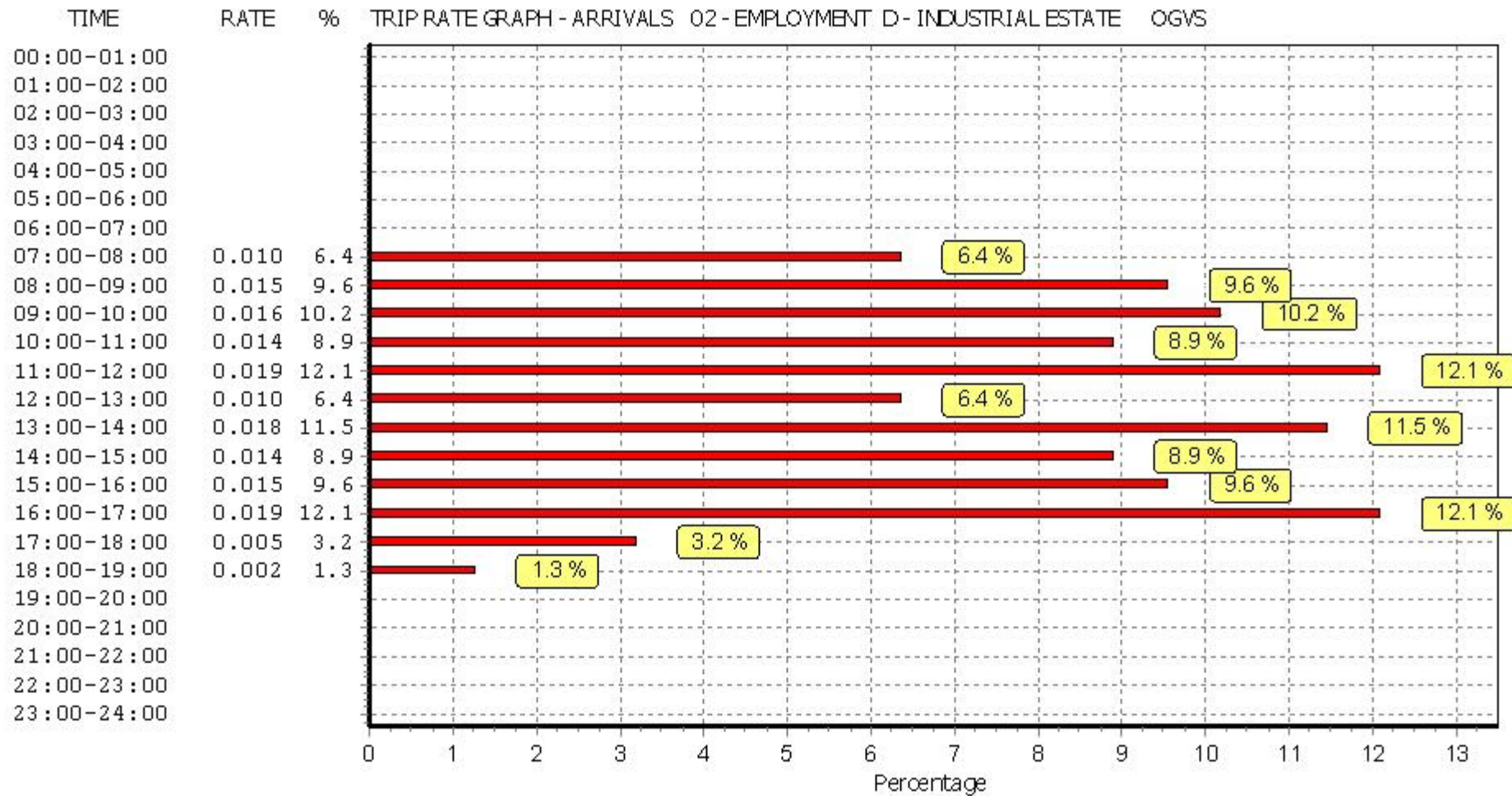
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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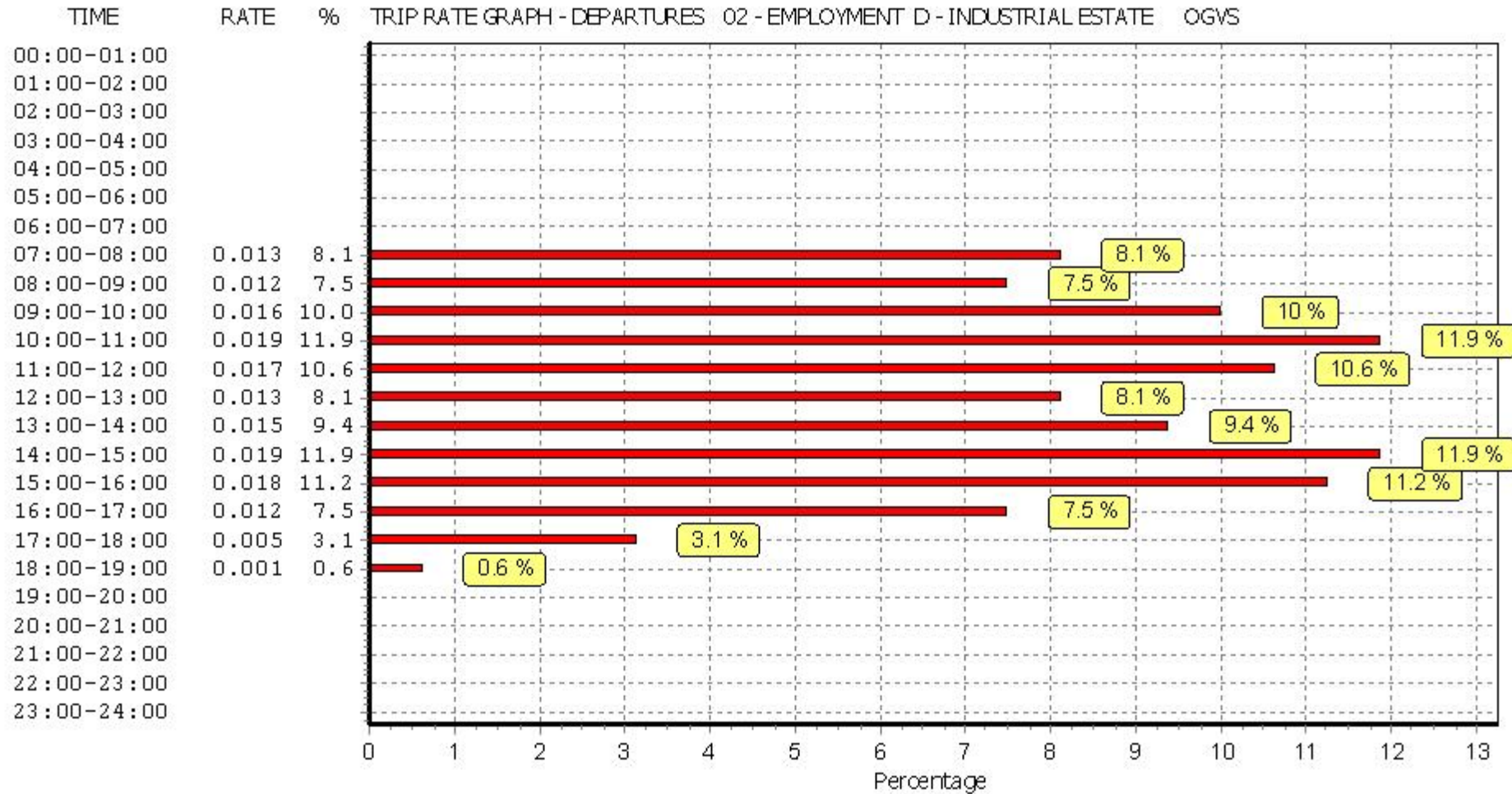
Parameter summary

Trip rate parameter range selected: 4600 - 70000 (units: sqm)
 Survey date date range: 01/01/09 - 04/04/17
 Number of weekdays (Monday-Friday): 7
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

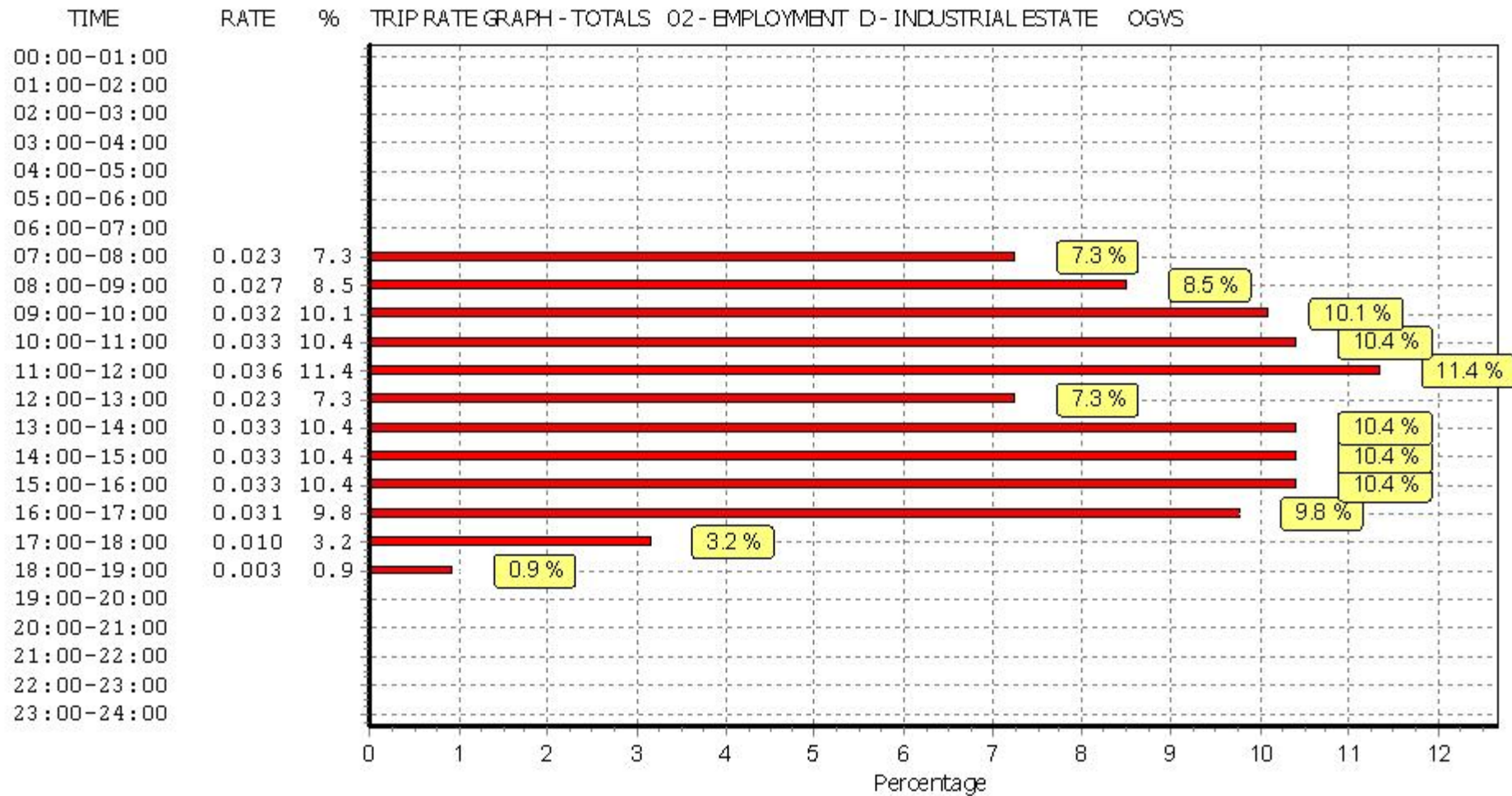
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This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period,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



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TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	34321	0.000	7	34321	0.000	7	34321	0.000
08:00 - 09:00	7	34321	0.000	7	34321	0.000	7	34321	0.000
09:00 - 10:00	7	34321	0.002	7	34321	0.000	7	34321	0.002
10:00 - 11:00	7	34321	0.000	7	34321	0.001	7	34321	0.001
11:00 - 12:00	7	34321	0.000	7	34321	0.001	7	34321	0.001
12:00 - 13:00	7	34321	0.000	7	34321	0.000	7	34321	0.000
13:00 - 14:00	7	34321	0.000	7	34321	0.000	7	34321	0.000
14:00 - 15:00	7	34321	0.000	7	34321	0.000	7	34321	0.000
15:00 - 16:00	7	34321	0.000	7	34321	0.001	7	34321	0.001
16:00 - 17:00	7	34321	0.001	7	34321	0.000	7	34321	0.001
17:00 - 18:00	7	34321	0.002	7	34321	0.000	7	34321	0.002
18:00 - 19:00	7	34321	0.002	7	34321	0.001	7	34321	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.007			0.004			0.011

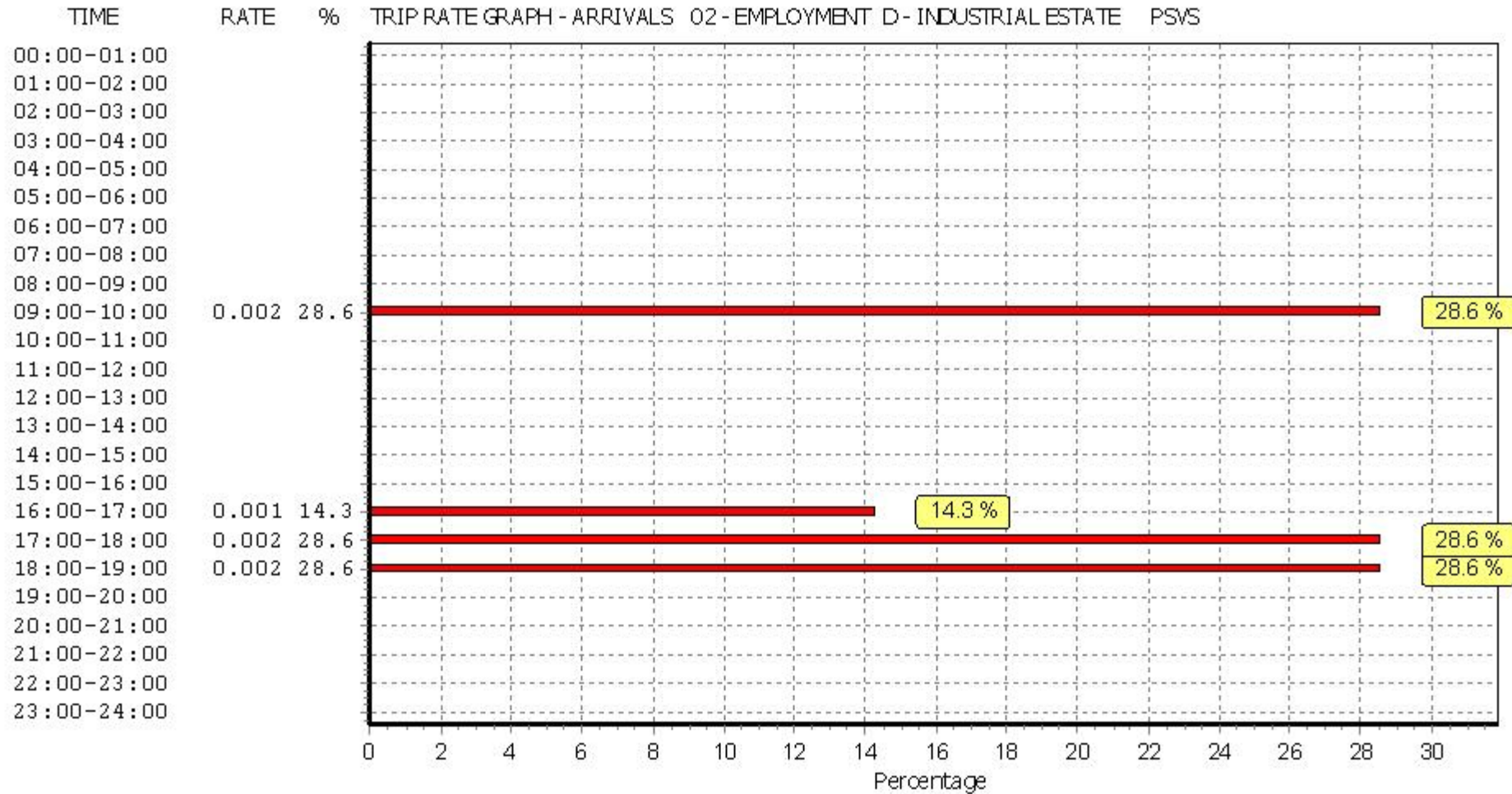
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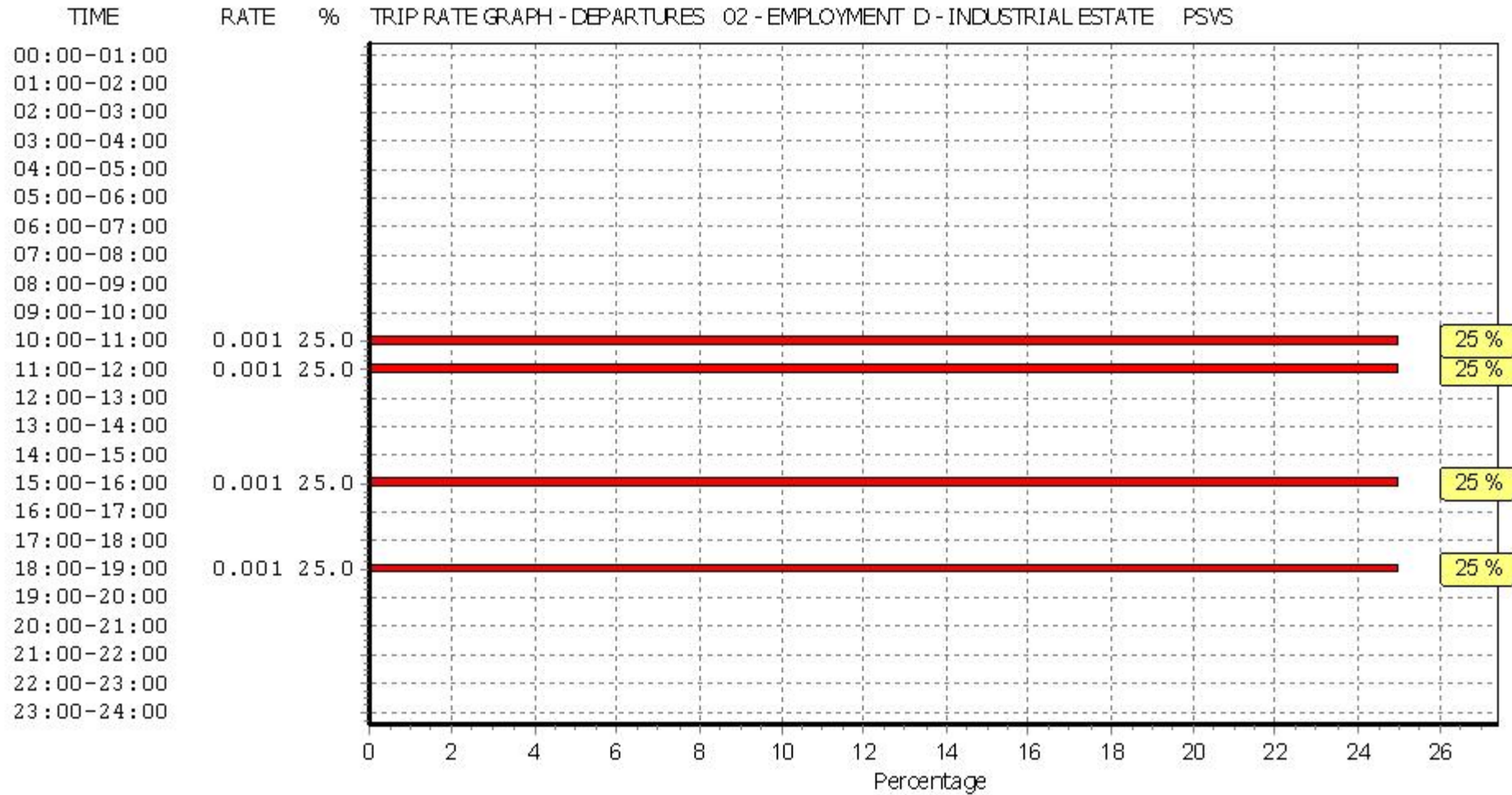
Parameter summary

Trip rate parameter range selected: 4600 - 70000 (units: sqm)
 Survey date date range: 01/01/09 - 04/04/17
 Number of weekdays (Monday-Friday): 7
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

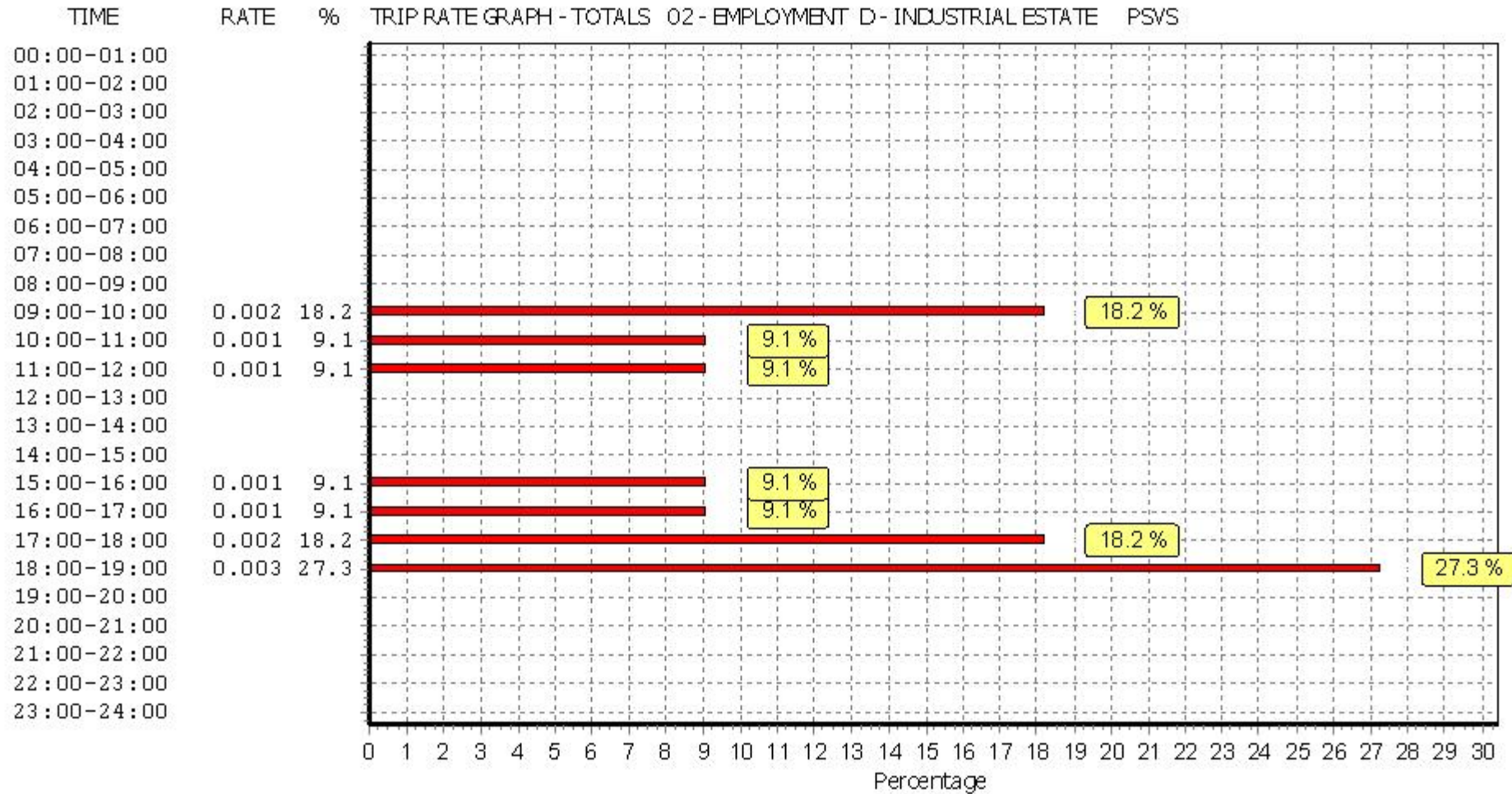
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TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	34321	0.005	7	34321	0.000	7	34321	0.005
08:00 - 09:00	7	34321	0.005	7	34321	0.001	7	34321	0.006
09:00 - 10:00	7	34321	0.003	7	34321	0.001	7	34321	0.004
10:00 - 11:00	7	34321	0.005	7	34321	0.004	7	34321	0.009
11:00 - 12:00	7	34321	0.002	7	34321	0.001	7	34321	0.003
12:00 - 13:00	7	34321	0.001	7	34321	0.002	7	34321	0.003
13:00 - 14:00	7	34321	0.002	7	34321	0.000	7	34321	0.002
14:00 - 15:00	7	34321	0.001	7	34321	0.000	7	34321	0.001
15:00 - 16:00	7	34321	0.000	7	34321	0.001	7	34321	0.001
16:00 - 17:00	7	34321	0.001	7	34321	0.003	7	34321	0.004
17:00 - 18:00	7	34321	0.000	7	34321	0.006	7	34321	0.006
18:00 - 19:00	7	34321	0.000	7	34321	0.004	7	34321	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.025			0.023			0.048

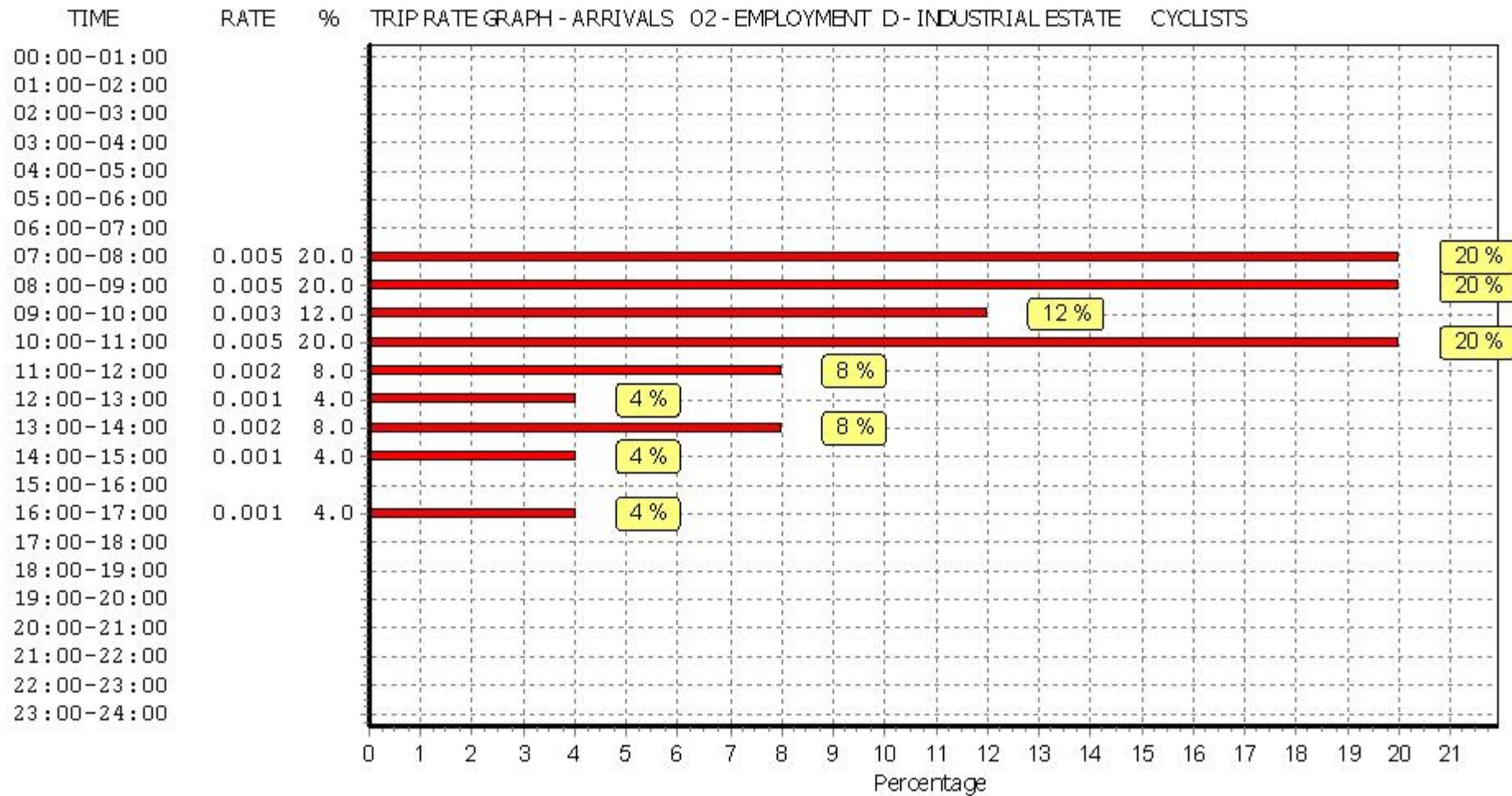
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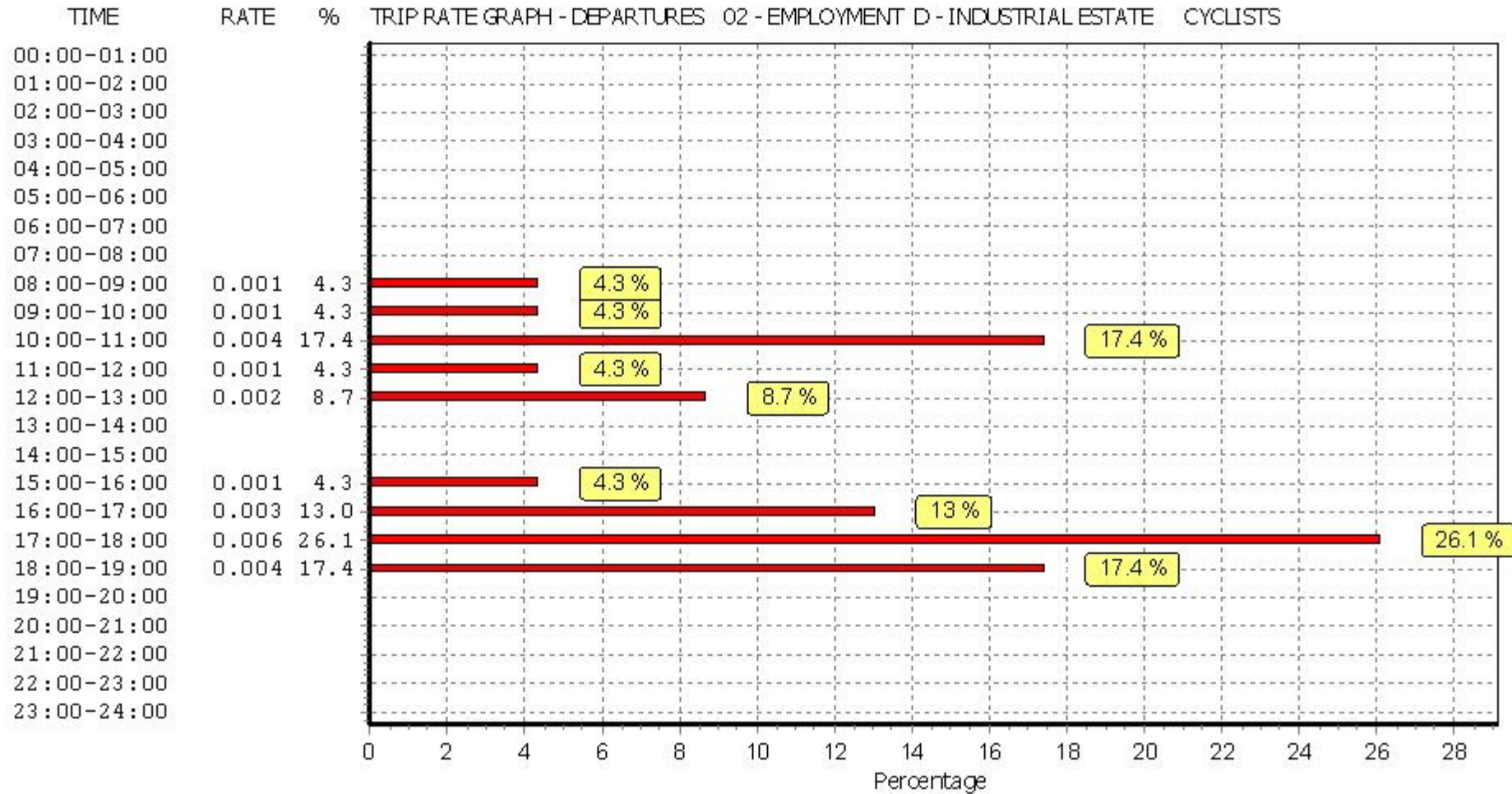
Parameter summary

Trip rate parameter range selected: 4600 - 70000 (units: sqm)
Survey date date range: 01/01/09 - 04/04/17
Number of weekdays (Monday-Friday): 7
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 0

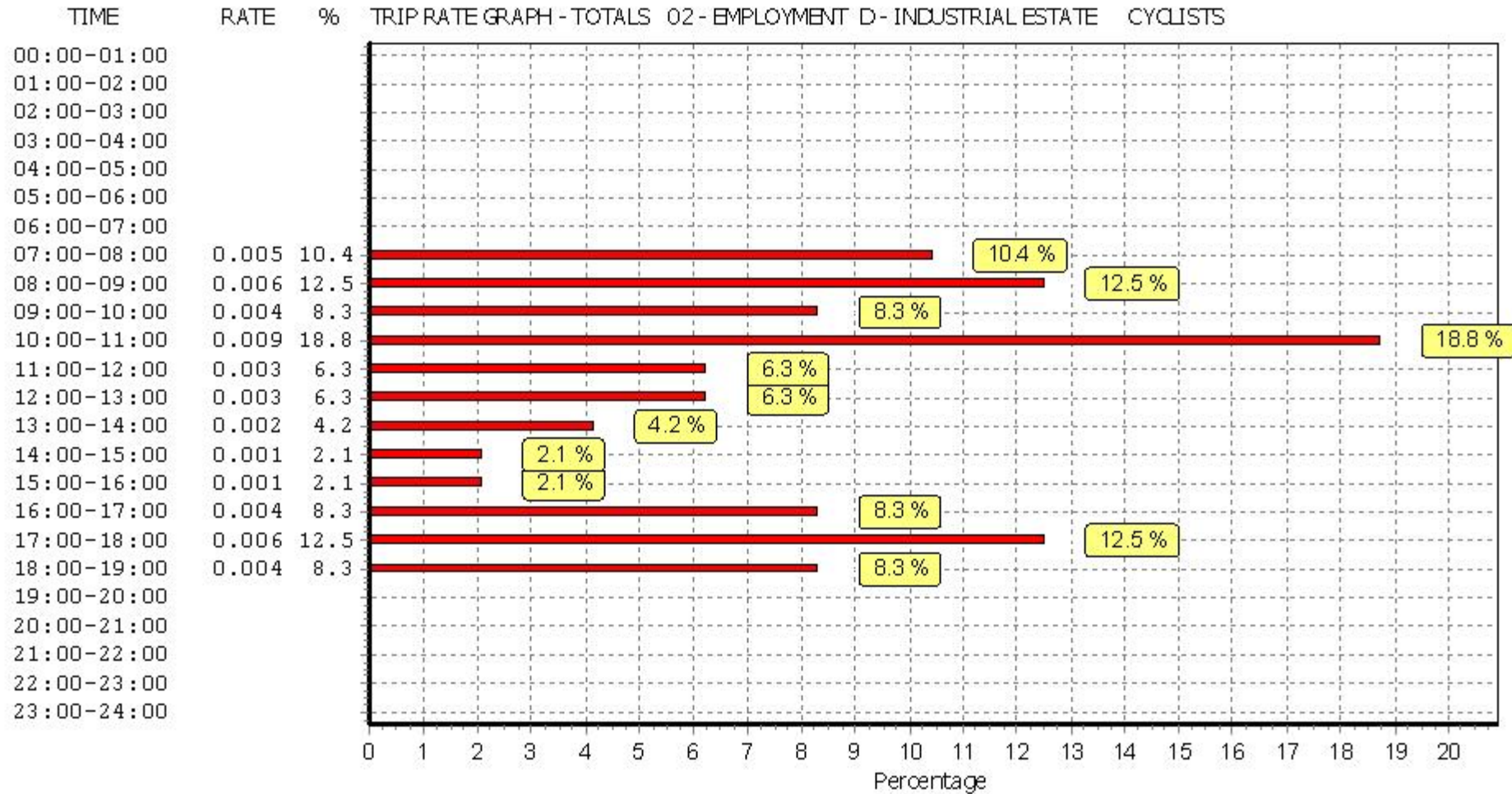
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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Calculation Reference: AUDIT-638801-170821-0845

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
 Category : A - PRIMARY
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	BU BUCKINGHAMSHIRE	1 days
	SC SURREY	1 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
11	SCOTLAND	
	FA FALKIRK	1 days
	FI FIFE	1 days
	SR STIRLING	1 days
14	LEINSTER	
	LU LOUTH	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 pupils
 Actual Range: 208 to 1020 (units:)
 Range Selected by User: 200 to 1020 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 28/09/16

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
Wednesday	4 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	8 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 undertaken using machines.

Selected Locations:

Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	5

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

Selected Location Sub Categories:

Residential Zone	5
Village	3

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

Secondary Filtering selection:

Use Class:

D1 8 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	2 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	6 days

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

Travel Plan:

Yes	2 days
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	8 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	BU-04-A-01 LOWER ROAD STOKE MANDEVILLE NEAR AYLESBURY Neighbourhood Centre (PPS6 Local Centre) Village Total Number of pupils: 208 Survey date: WEDNESDAY 01/10/14	PRIMARY SCHOOL	BUCKINGHAMSHIRE	Survey Type: MANUAL
2	FA-04-A-03 GLENDEVON DRIVE MADDISTON FALKIRK Edge of Town Residential Zone Total Number of pupils: 452 Survey date: MONDAY 03/06/13	PRIMARY SCHOOL	FALKIRK	Survey Type: MANUAL
3	FI-04-A-01 NORTHBANK ROAD CAIRNEYHILL NEAR DUNFERMLINE Neighbourhood Centre (PPS6 Local Centre) Village Total Number of pupils: 285 Survey date: WEDNESDAY 27/05/15	PRIMARY SCHOOL	FIFE	Survey Type: MANUAL
4	LN-04-A-01 GONERBY HILL FOOT GRANTHAM Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Number of pupils: 312 Survey date: WEDNESDAY 12/06/13	PRIMARY SCHOOL	LINCOLNSHIRE	Survey Type: MANUAL
5	LU-04-A-02 BRYANSTOWN BRYANSTOWN MANOR DROGHEDA Edge of Town Residential Zone Total Number of pupils: 1020 Survey date: FRIDAY 19/06/15	PRIMARY SCHOOL	LOUTH	Survey Type: MANUAL
6	SC-04-A-01 SCHOOL LANE PIRBRIGHT NEAR WOKING Neighbourhood Centre (PPS6 Local Centre) Village Total Number of pupils: 414 Survey date: THURSDAY 22/11/12	PRIMARY SCHOOL	SURREY	Survey Type: MANUAL
7	SF-04-A-03 ENSTONE ROAD KIRKLEY LOWESTOFT Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Number of pupils: 234 Survey date: WEDNESDAY 10/12/14	PRIMARY SCHOOL	SUFFOLK	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	SR-04-A-01	PRIMARY SCHOOL	STIRLING
	PULLAR AVENUE		
	BRIDGE OF ALLAN		
	STIRLING		
	Edge of Town		
	Residential Zone		
	Total Number of pupils:	386	
	Survey date: MONDAY	16/06/14	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/A - PRIMARY
VEHICLES

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	1	312	0.000	1	312	0.000	1	312	0.000
06:00 - 07:00	1	312	0.013	1	312	0.003	1	312	0.016
07:00 - 08:00	8	414	0.019	8	414	0.005	8	414	0.024
08:00 - 09:00	8	414	0.196	8	414	0.114	8	414	0.310
09:00 - 10:00	8	414	0.067	8	414	0.092	8	414	0.159
10:00 - 11:00	8	414	0.013	8	414	0.012	8	414	0.025
11:00 - 12:00	8	414	0.027	8	414	0.024	8	414	0.051
12:00 - 13:00	8	414	0.028	8	414	0.031	8	414	0.059
13:00 - 14:00	8	414	0.039	8	414	0.037	8	414	0.076
14:00 - 15:00	8	414	0.078	8	414	0.046	8	414	0.124
15:00 - 16:00	8	414	0.062	8	414	0.125	8	414	0.187
16:00 - 17:00	8	414	0.034	8	414	0.054	8	414	0.088
17:00 - 18:00	8	414	0.014	8	414	0.027	8	414	0.041
18:00 - 19:00	8	414	0.015	8	414	0.015	8	414	0.030
19:00 - 20:00	2	666	0.000	2	666	0.000	2	666	0.000
20:00 - 21:00	1	312	0.000	1	312	0.032	1	312	0.032
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.605			0.617			1.222

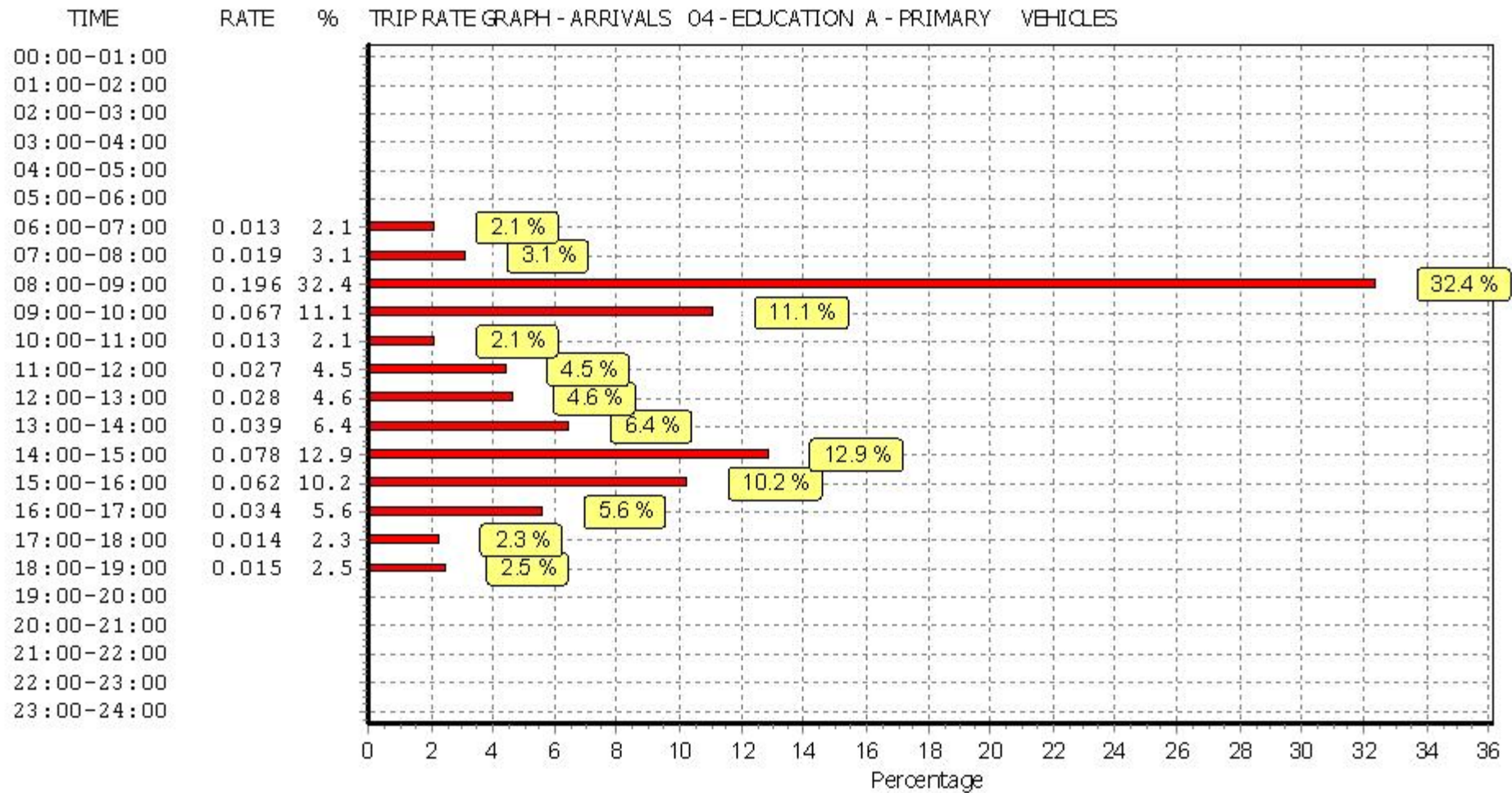
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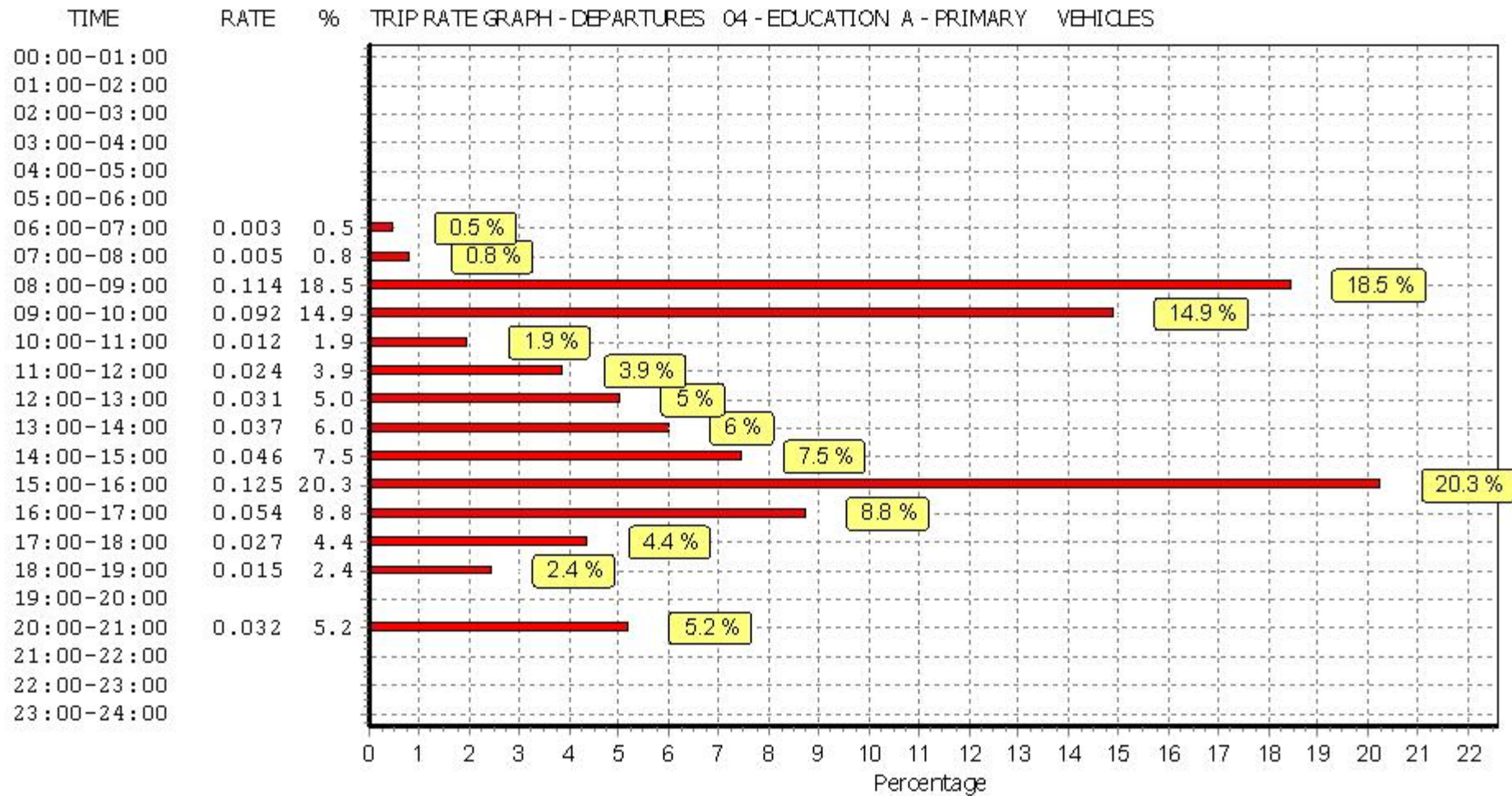
Parameter summary

Trip rate parameter range selected: 208 - 1020 (units:)
 Survey date date range: 01/01/09 - 28/09/16
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

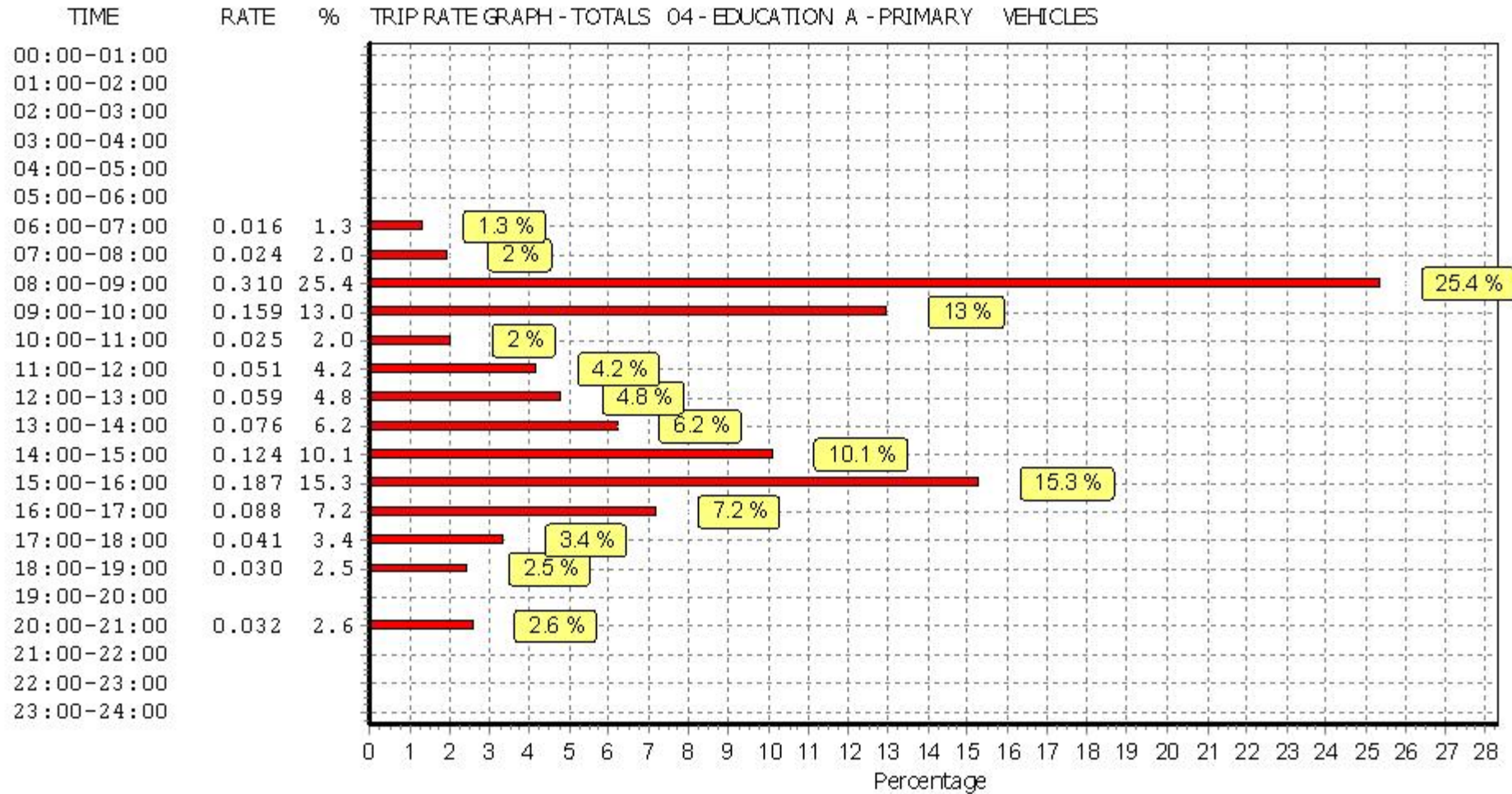
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TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
TAXIS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	1	312	0.000	1	312	0.000	1	312	0.000
06:00 - 07:00	1	312	0.000	1	312	0.000	1	312	0.000
07:00 - 08:00	8	414	0.000	8	414	0.000	8	414	0.000
08:00 - 09:00	8	414	0.002	8	414	0.002	8	414	0.004
09:00 - 10:00	8	414	0.001	8	414	0.002	8	414	0.003
10:00 - 11:00	8	414	0.000	8	414	0.000	8	414	0.000
11:00 - 12:00	8	414	0.000	8	414	0.000	8	414	0.000
12:00 - 13:00	8	414	0.001	8	414	0.000	8	414	0.001
13:00 - 14:00	8	414	0.001	8	414	0.001	8	414	0.002
14:00 - 15:00	8	414	0.002	8	414	0.001	8	414	0.003
15:00 - 16:00	8	414	0.001	8	414	0.002	8	414	0.003
16:00 - 17:00	8	414	0.000	8	414	0.000	8	414	0.000
17:00 - 18:00	8	414	0.000	8	414	0.000	8	414	0.000
18:00 - 19:00	8	414	0.000	8	414	0.000	8	414	0.000
19:00 - 20:00	2	666	0.000	2	666	0.000	2	666	0.000
20:00 - 21:00	1	312	0.000	1	312	0.000	1	312	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.008			0.016

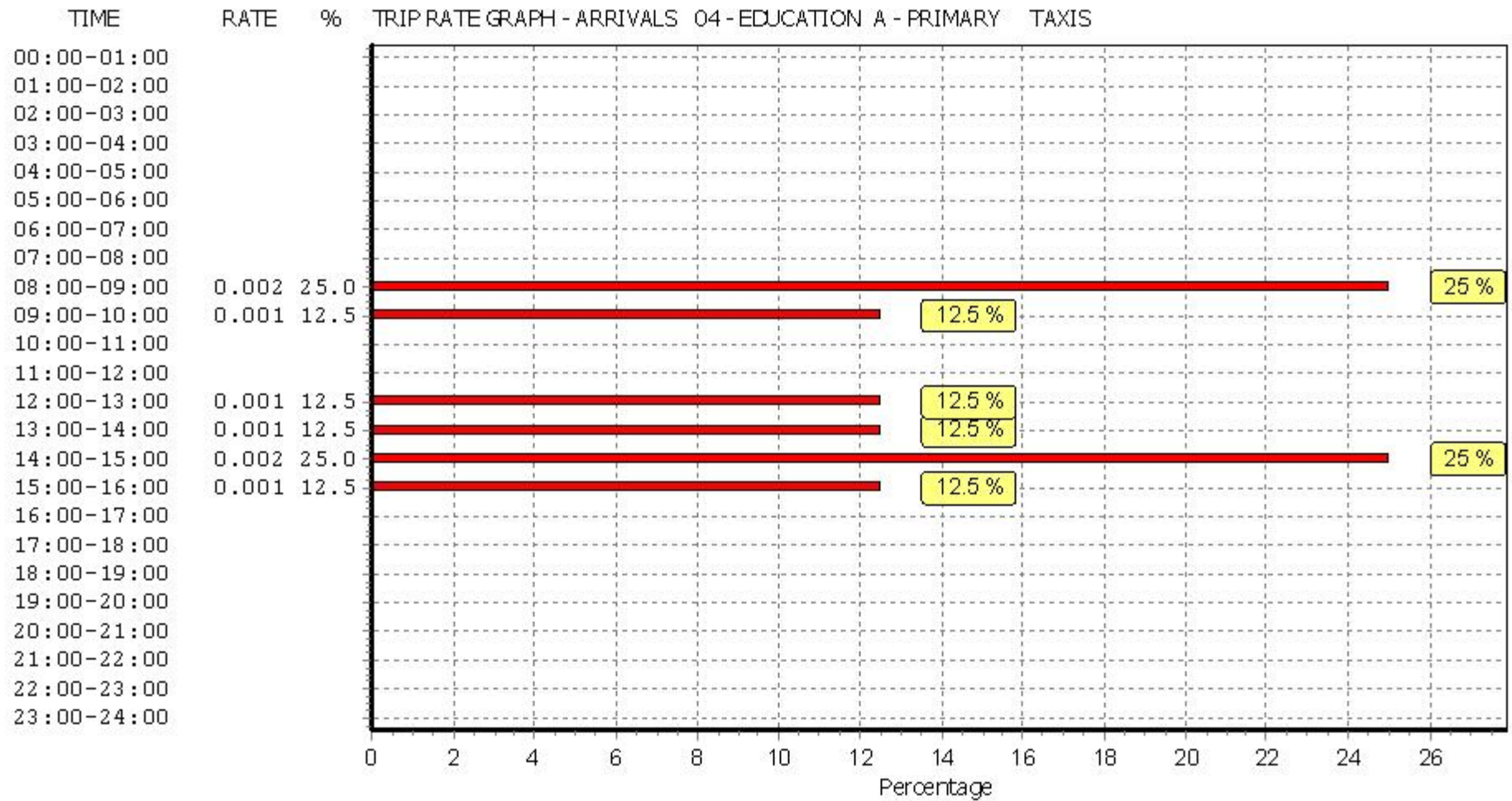
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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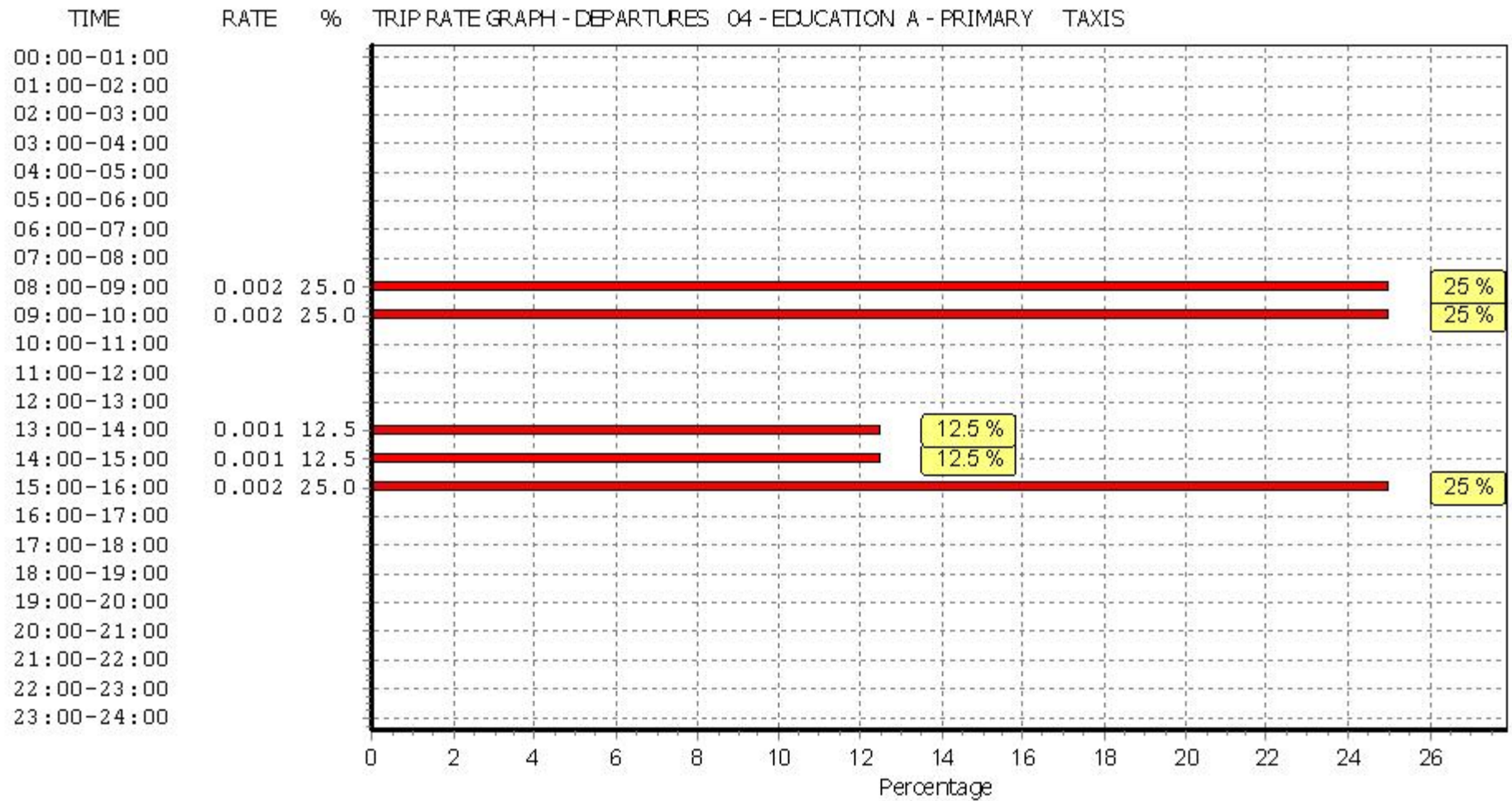
Parameter summary

Trip rate parameter range selected: 208 - 1020 (units:)
 Survey date date range: 01/01/09 - 28/09/16
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

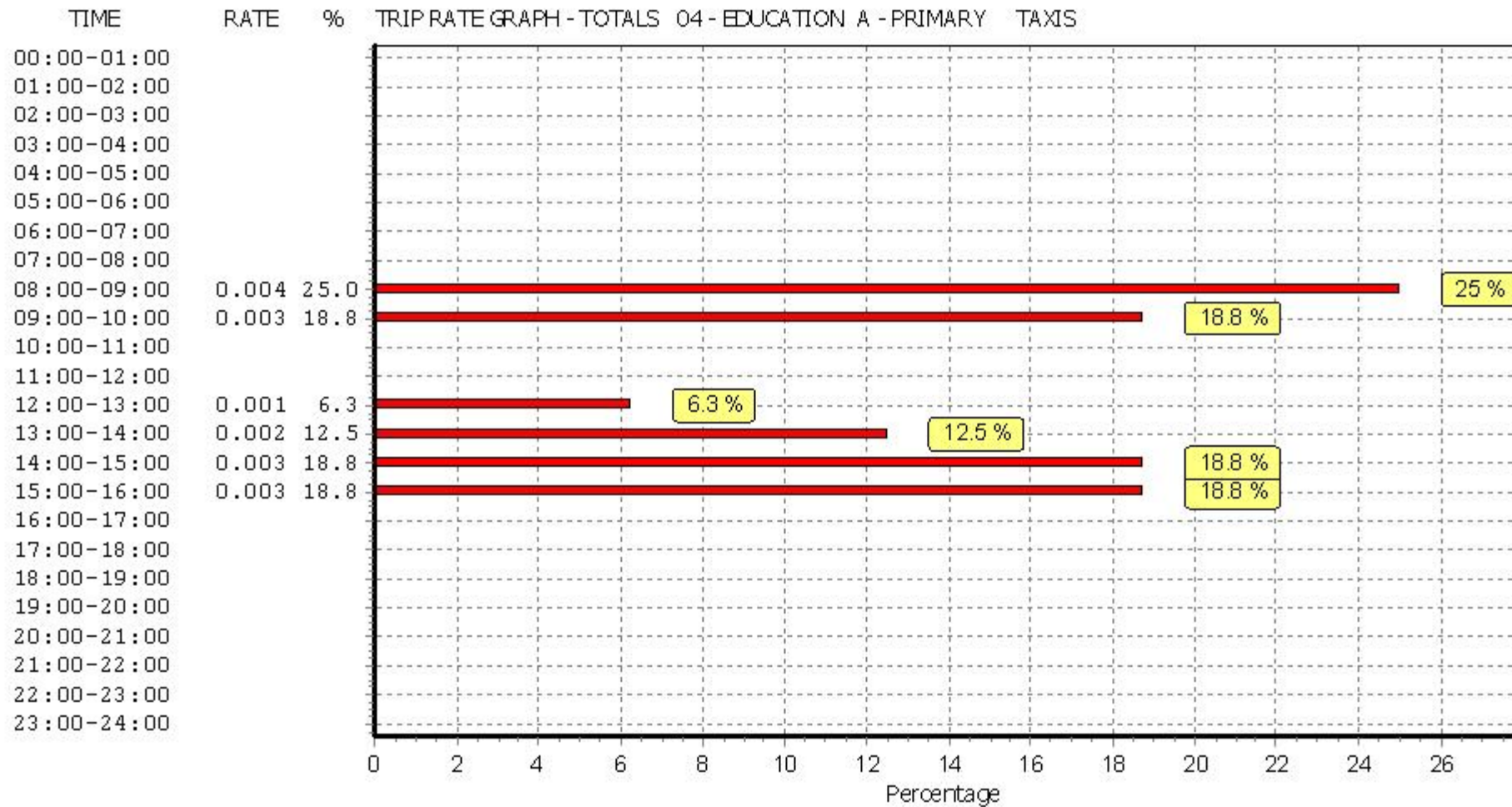
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
OGVS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	1	312	0.000	1	312	0.000	1	312	0.000
06:00 - 07:00	1	312	0.003	1	312	0.003	1	312	0.006
07:00 - 08:00	8	414	0.000	8	414	0.000	8	414	0.000
08:00 - 09:00	8	414	0.000	8	414	0.000	8	414	0.000
09:00 - 10:00	8	414	0.001	8	414	0.001	8	414	0.002
10:00 - 11:00	8	414	0.000	8	414	0.000	8	414	0.000
11:00 - 12:00	8	414	0.000	8	414	0.001	8	414	0.001
12:00 - 13:00	8	414	0.000	8	414	0.000	8	414	0.000
13:00 - 14:00	8	414	0.000	8	414	0.000	8	414	0.000
14:00 - 15:00	8	414	0.000	8	414	0.000	8	414	0.000
15:00 - 16:00	8	414	0.000	8	414	0.000	8	414	0.000
16:00 - 17:00	8	414	0.000	8	414	0.000	8	414	0.000
17:00 - 18:00	8	414	0.000	8	414	0.000	8	414	0.000
18:00 - 19:00	8	414	0.000	8	414	0.000	8	414	0.000
19:00 - 20:00	2	666	0.000	2	666	0.000	2	666	0.000
20:00 - 21:00	1	312	0.000	1	312	0.000	1	312	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.004			0.005			0.009

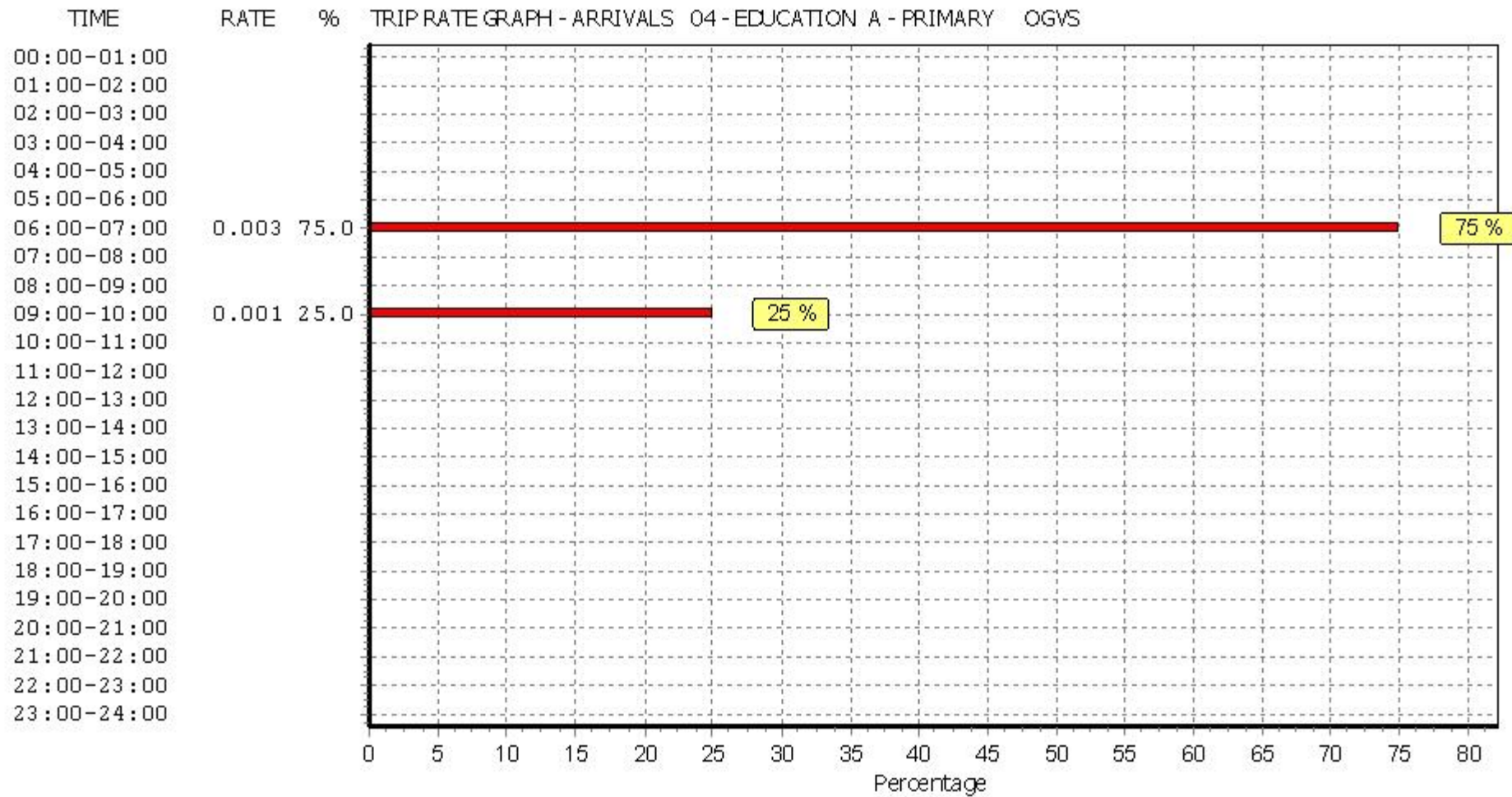
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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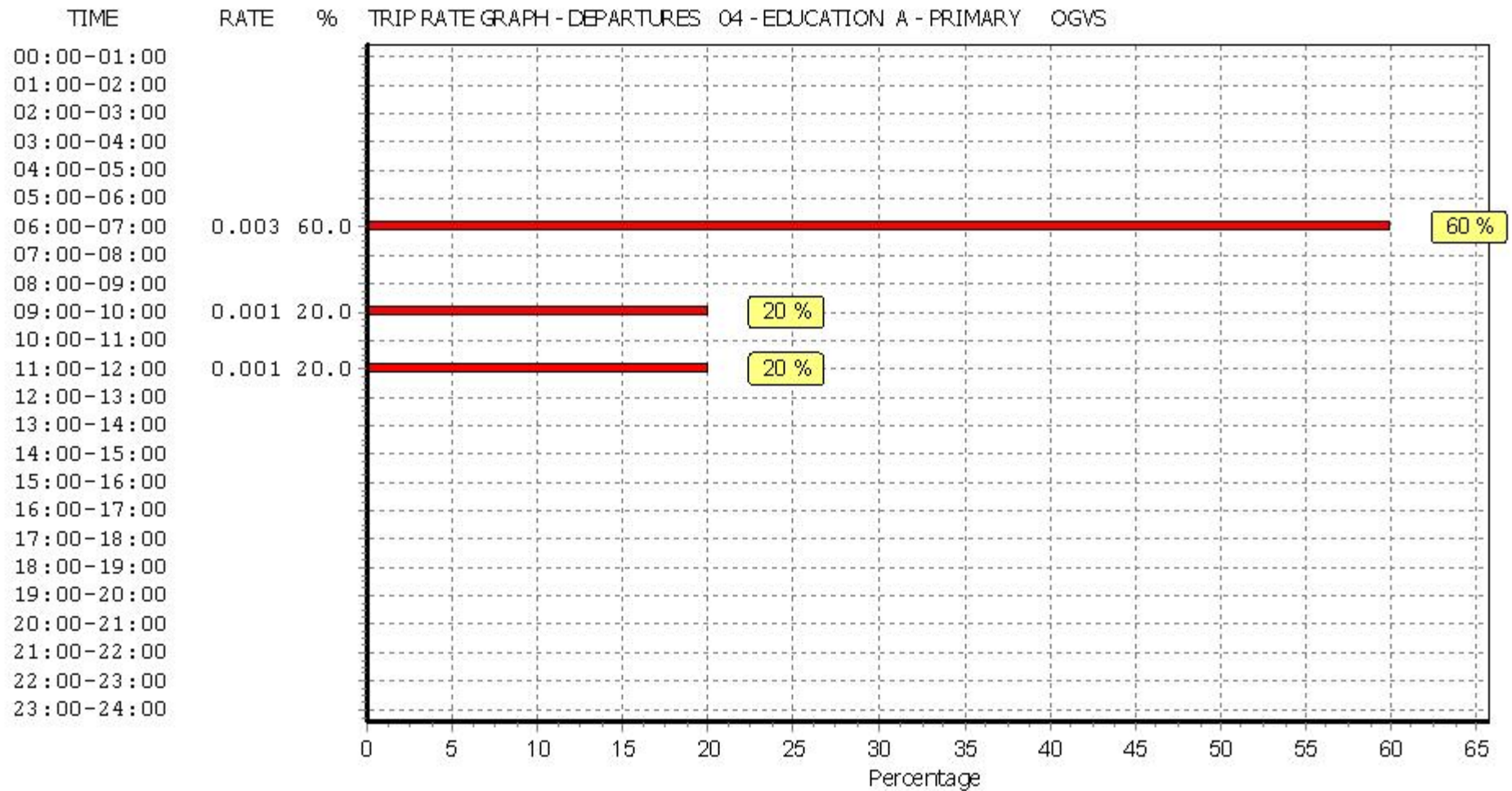
Parameter summary

Trip rate parameter range selected: 208 - 1020 (units:)
 Survey date date range: 01/01/09 - 28/09/16
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

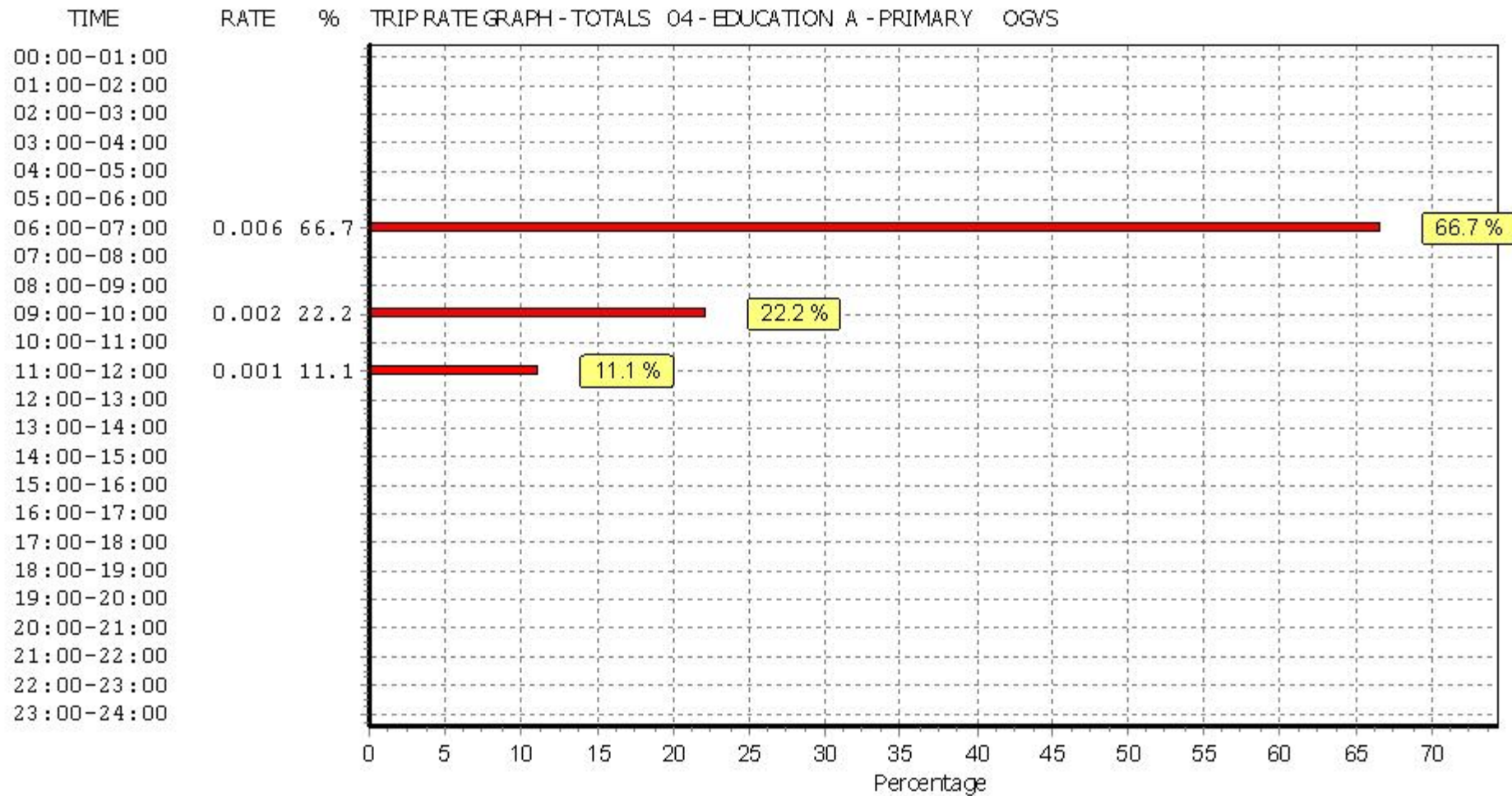
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
PSVS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	1	312	0.000	1	312	0.000	1	312	0.000
06:00 - 07:00	1	312	0.000	1	312	0.000	1	312	0.000
07:00 - 08:00	8	414	0.000	8	414	0.000	8	414	0.000
08:00 - 09:00	8	414	0.001	8	414	0.001	8	414	0.002
09:00 - 10:00	8	414	0.001	8	414	0.000	8	414	0.001
10:00 - 11:00	8	414	0.000	8	414	0.000	8	414	0.000
11:00 - 12:00	8	414	0.001	8	414	0.001	8	414	0.002
12:00 - 13:00	8	414	0.000	8	414	0.001	8	414	0.001
13:00 - 14:00	8	414	0.001	8	414	0.001	8	414	0.002
14:00 - 15:00	8	414	0.001	8	414	0.000	8	414	0.001
15:00 - 16:00	8	414	0.001	8	414	0.002	8	414	0.003
16:00 - 17:00	8	414	0.000	8	414	0.000	8	414	0.000
17:00 - 18:00	8	414	0.000	8	414	0.000	8	414	0.000
18:00 - 19:00	8	414	0.000	8	414	0.000	8	414	0.000
19:00 - 20:00	2	666	0.000	2	666	0.000	2	666	0.000
20:00 - 21:00	1	312	0.000	1	312	0.000	1	312	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.006			0.012

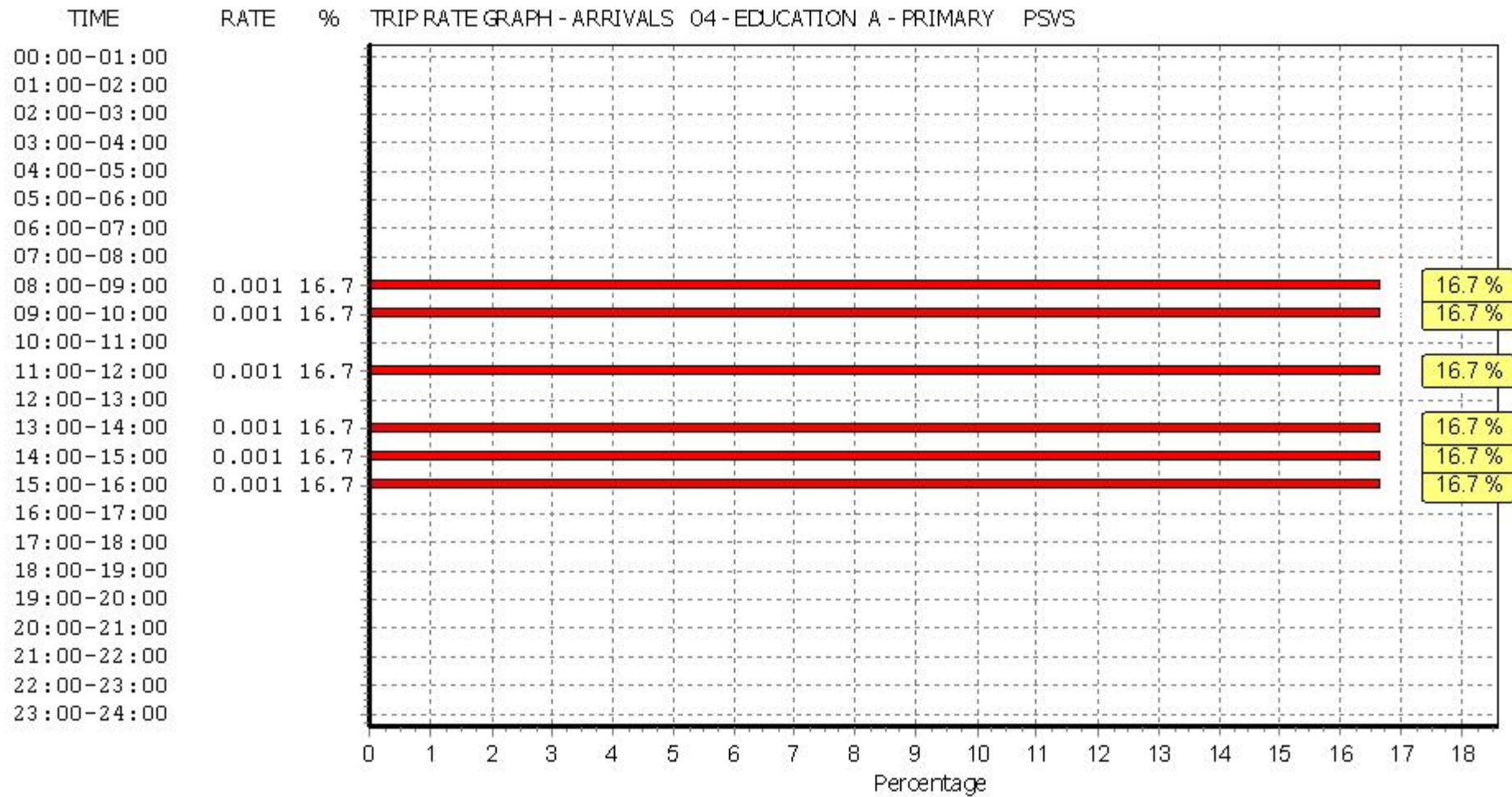
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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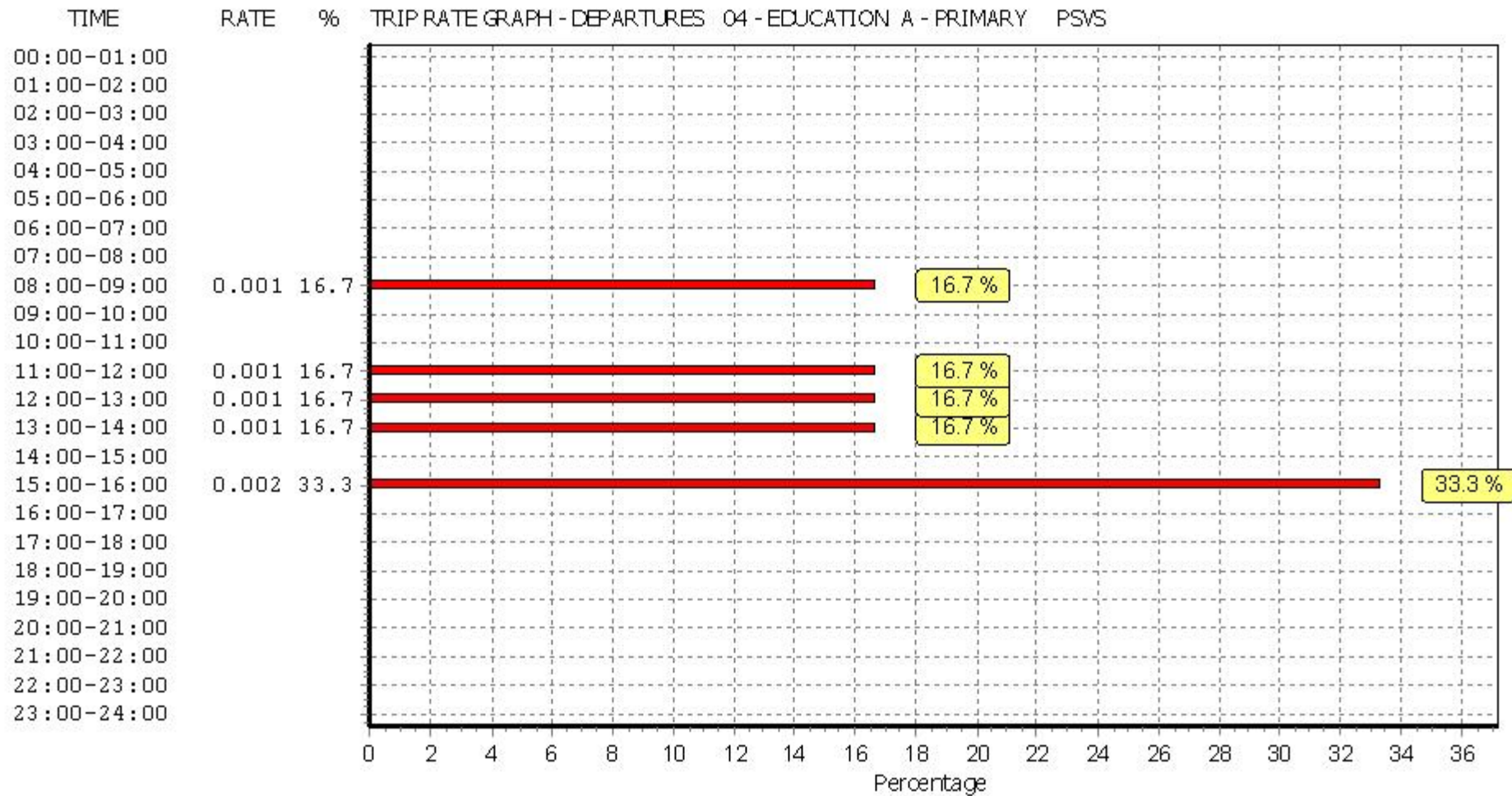
Parameter summary

Trip rate parameter range selected: 208 - 1020 (units:)
 Survey date date range: 01/01/09 - 28/09/16
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

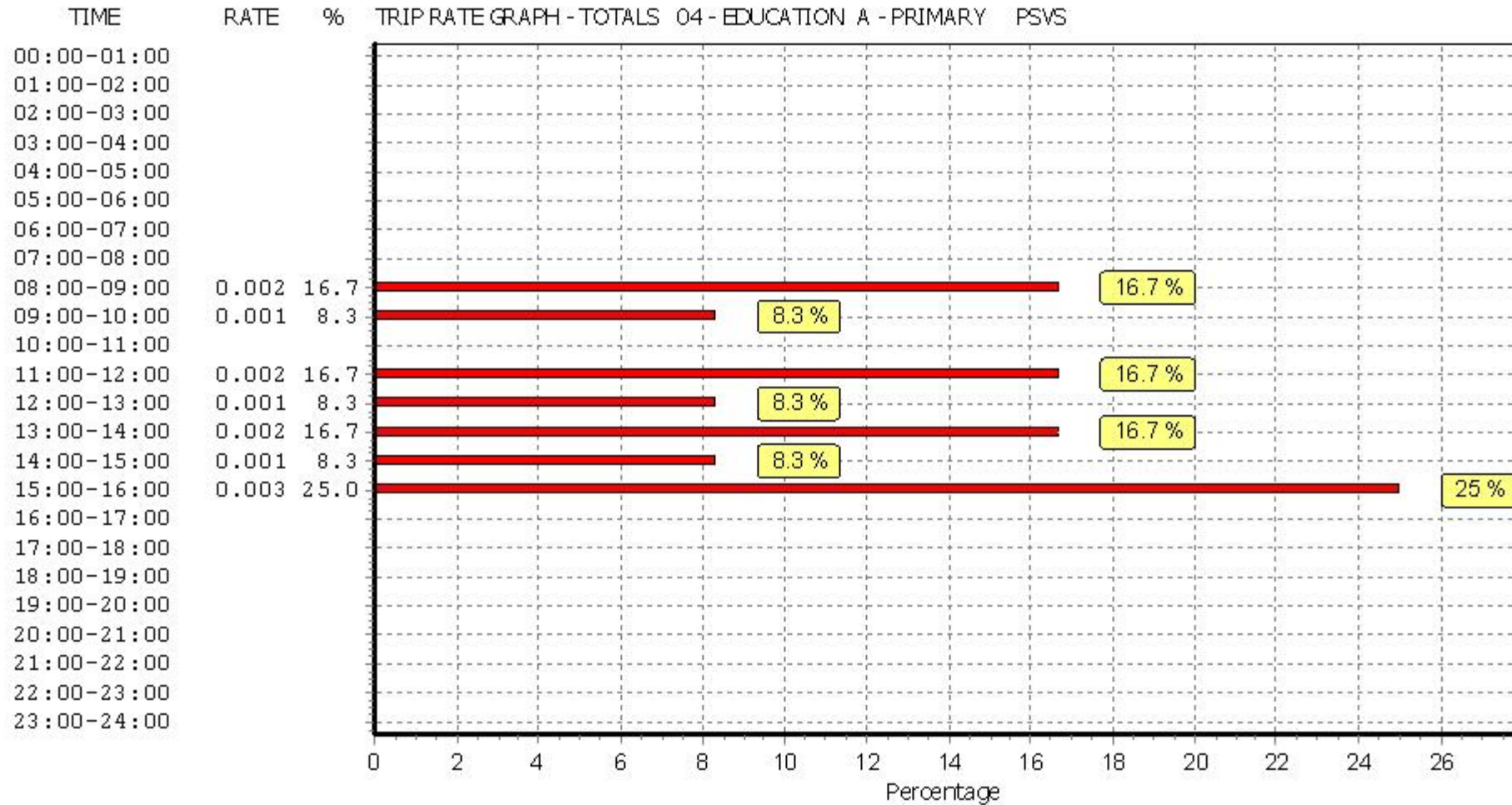
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
CYCLISTS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	1	312	0.000	1	312	0.000	1	312	0.000
06:00 - 07:00	1	312	0.000	1	312	0.000	1	312	0.000
07:00 - 08:00	8	414	0.003	8	414	0.000	8	414	0.003
08:00 - 09:00	8	414	0.029	8	414	0.005	8	414	0.034
09:00 - 10:00	8	414	0.004	8	414	0.005	8	414	0.009
10:00 - 11:00	8	414	0.000	8	414	0.001	8	414	0.001
11:00 - 12:00	8	414	0.000	8	414	0.002	8	414	0.002
12:00 - 13:00	8	414	0.002	8	414	0.002	8	414	0.004
13:00 - 14:00	8	414	0.001	8	414	0.000	8	414	0.001
14:00 - 15:00	8	414	0.003	8	414	0.003	8	414	0.006
15:00 - 16:00	8	414	0.005	8	414	0.023	8	414	0.028
16:00 - 17:00	8	414	0.001	8	414	0.005	8	414	0.006
17:00 - 18:00	8	414	0.000	8	414	0.001	8	414	0.001
18:00 - 19:00	8	414	0.000	8	414	0.000	8	414	0.000
19:00 - 20:00	2	666	0.000	2	666	0.000	2	666	0.000
20:00 - 21:00	1	312	0.000	1	312	0.000	1	312	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.048			0.047			0.095

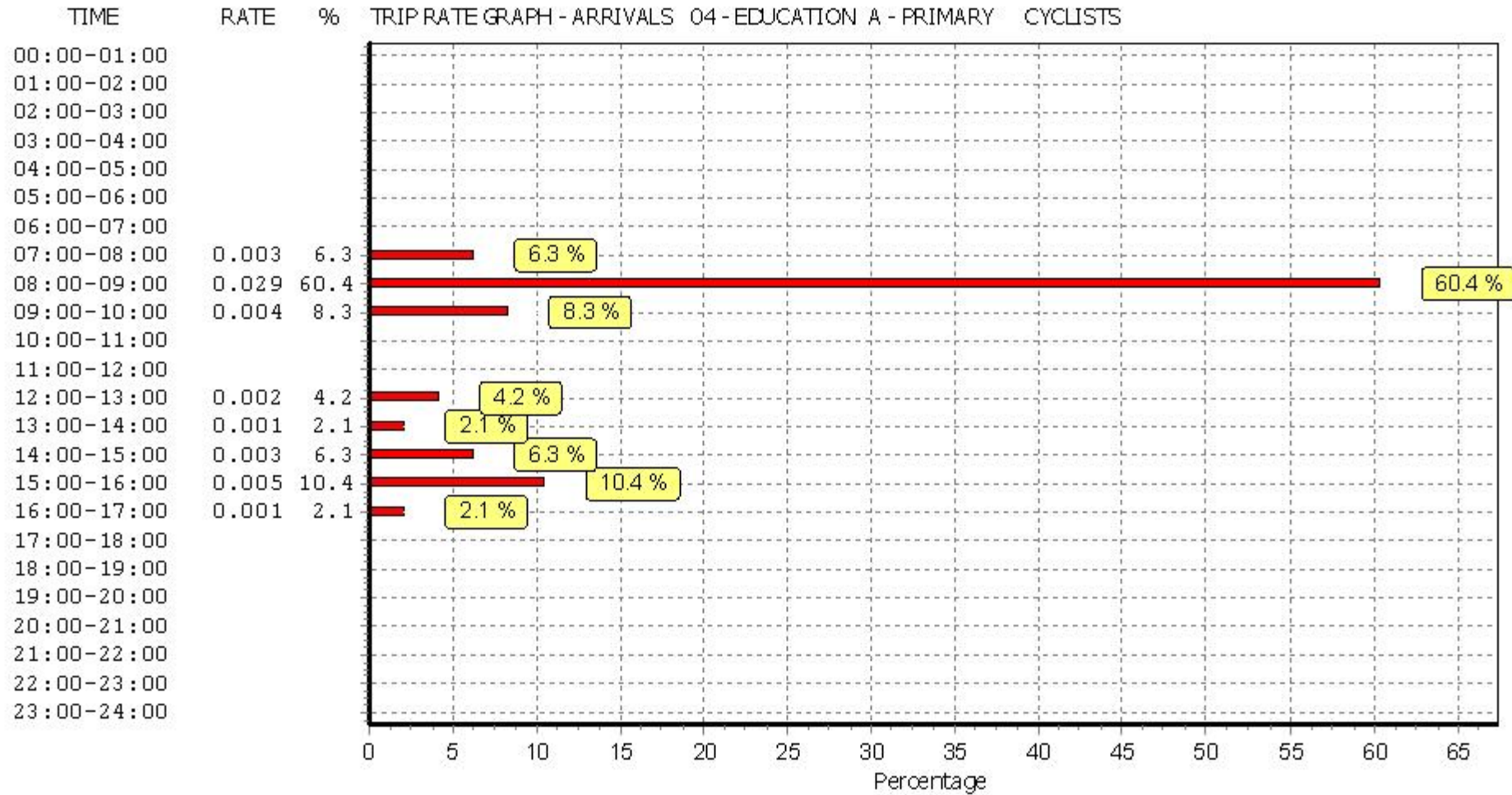
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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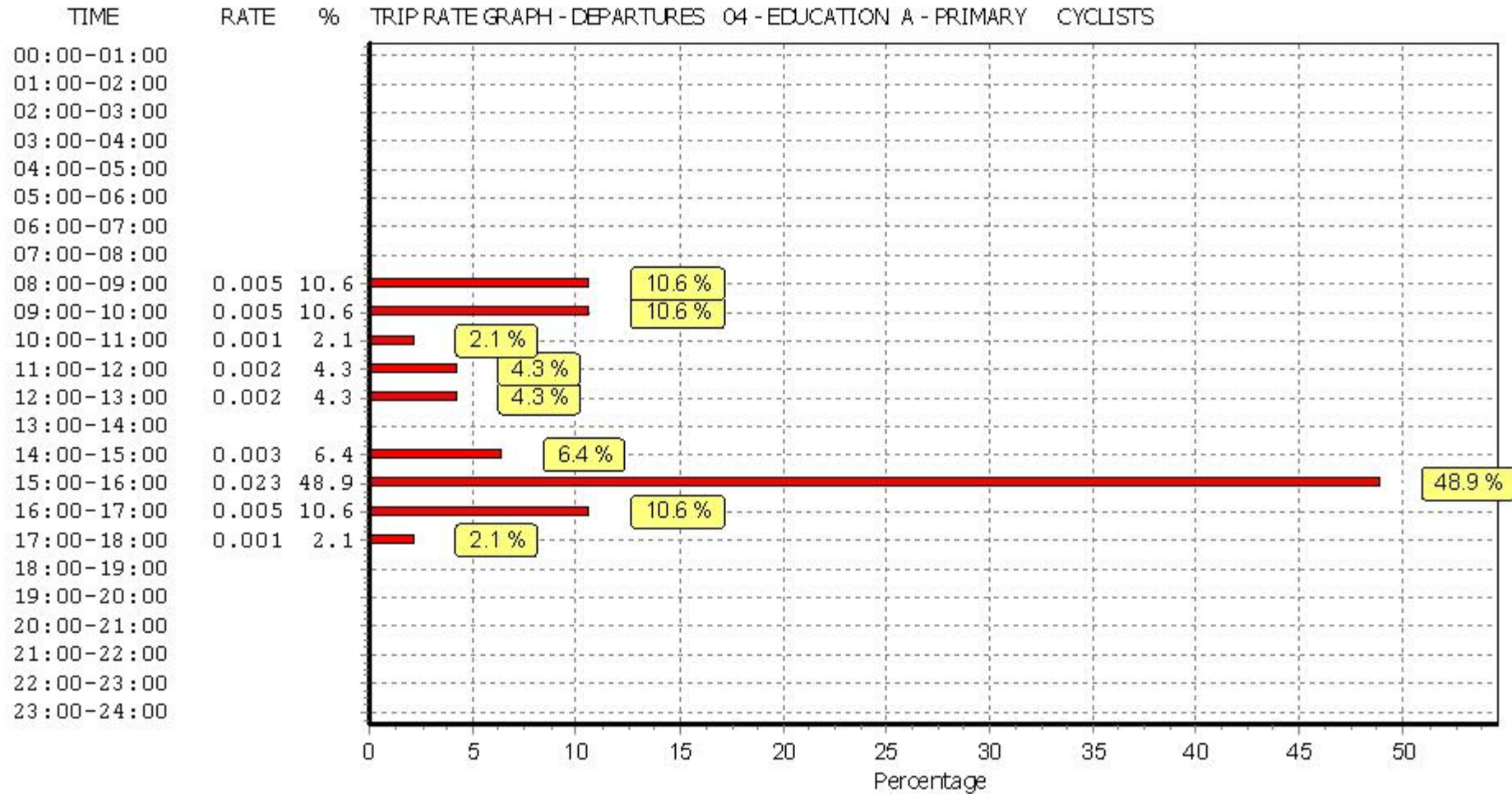
Parameter summary

Trip rate parameter range selected: 208 - 1020 (units:)
 Survey date date range: 01/01/09 - 28/09/16
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

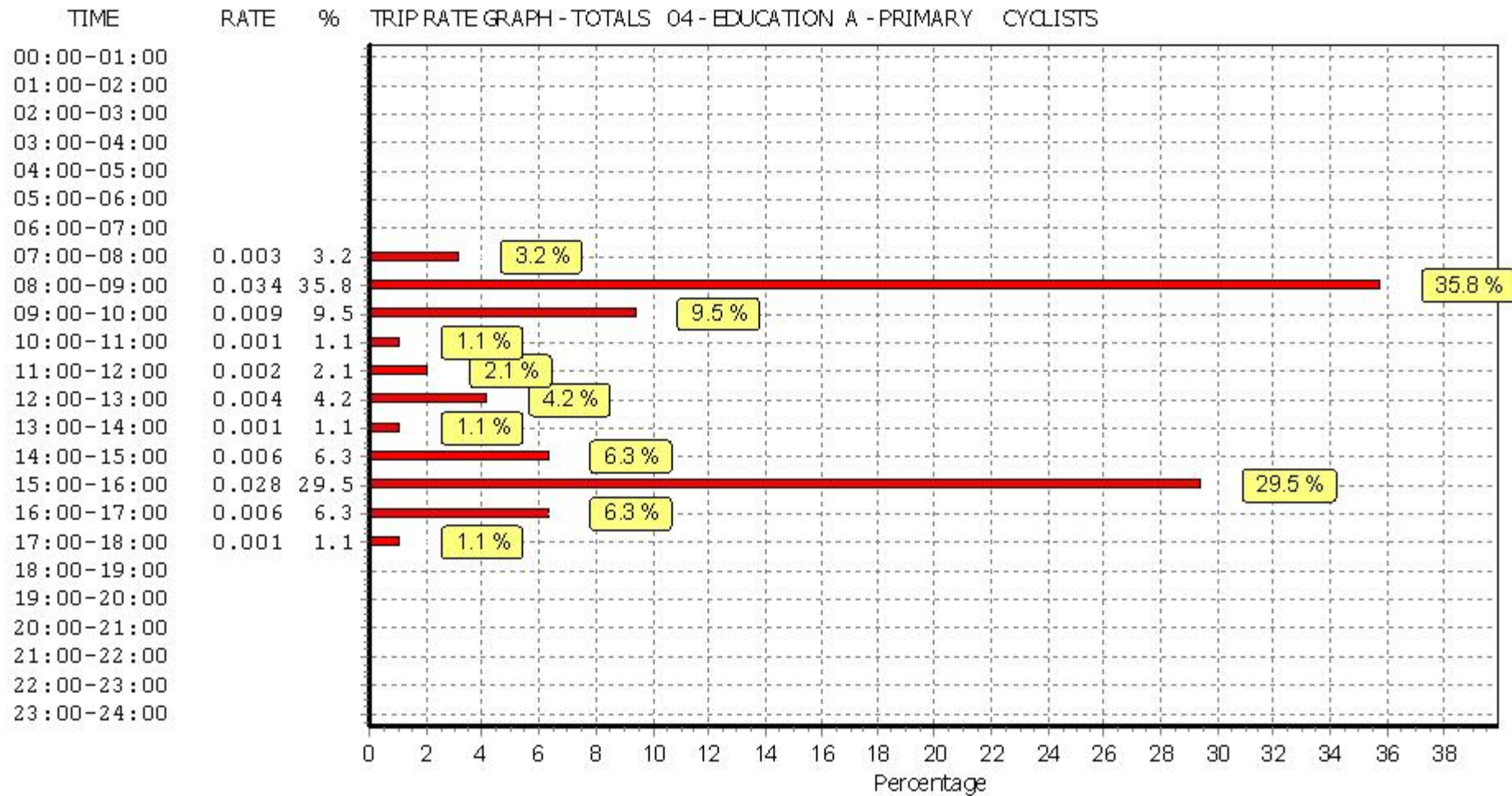
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
CARS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	1	312	0.000	1	312	0.000	1	312	0.000
06:00 - 07:00	1	312	0.006	1	312	0.000	1	312	0.006
07:00 - 08:00	8	414	0.013	8	414	0.002	8	414	0.015
08:00 - 09:00	8	414	0.125	8	414	0.073	8	414	0.198
09:00 - 10:00	8	414	0.043	8	414	0.058	8	414	0.101
10:00 - 11:00	8	414	0.005	8	414	0.006	8	414	0.011
11:00 - 12:00	8	414	0.014	8	414	0.011	8	414	0.025
12:00 - 13:00	8	414	0.015	8	414	0.018	8	414	0.033
13:00 - 14:00	8	414	0.031	8	414	0.027	8	414	0.058
14:00 - 15:00	8	414	0.048	8	414	0.033	8	414	0.081
15:00 - 16:00	8	414	0.033	8	414	0.075	8	414	0.108
16:00 - 17:00	8	414	0.015	8	414	0.025	8	414	0.040
17:00 - 18:00	8	414	0.008	8	414	0.017	8	414	0.025
18:00 - 19:00	8	414	0.004	8	414	0.005	8	414	0.009
19:00 - 20:00	2	666	0.000	2	666	0.000	2	666	0.000
20:00 - 21:00	1	312	0.000	1	312	0.032	1	312	0.032
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.360			0.382			0.742

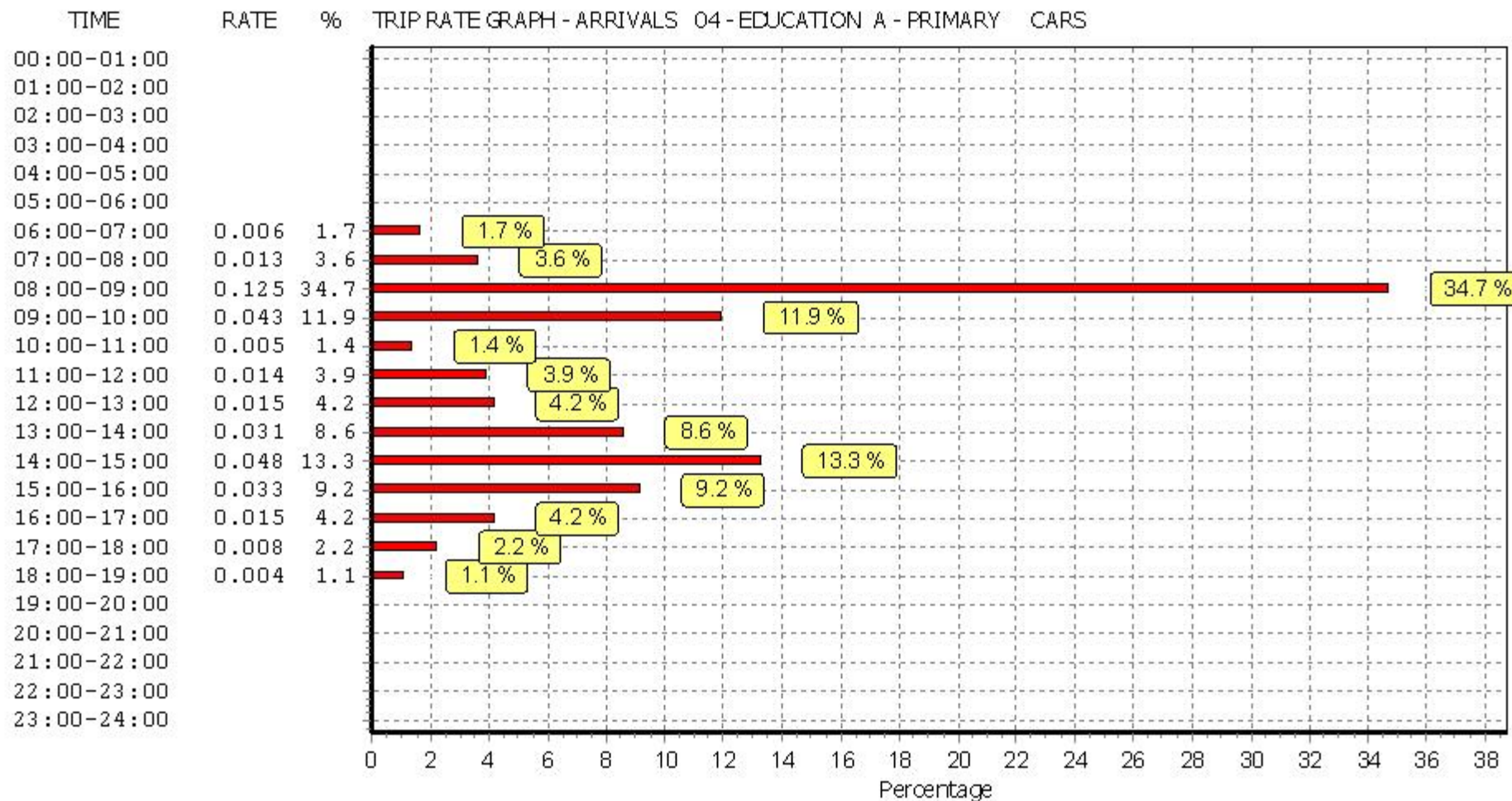
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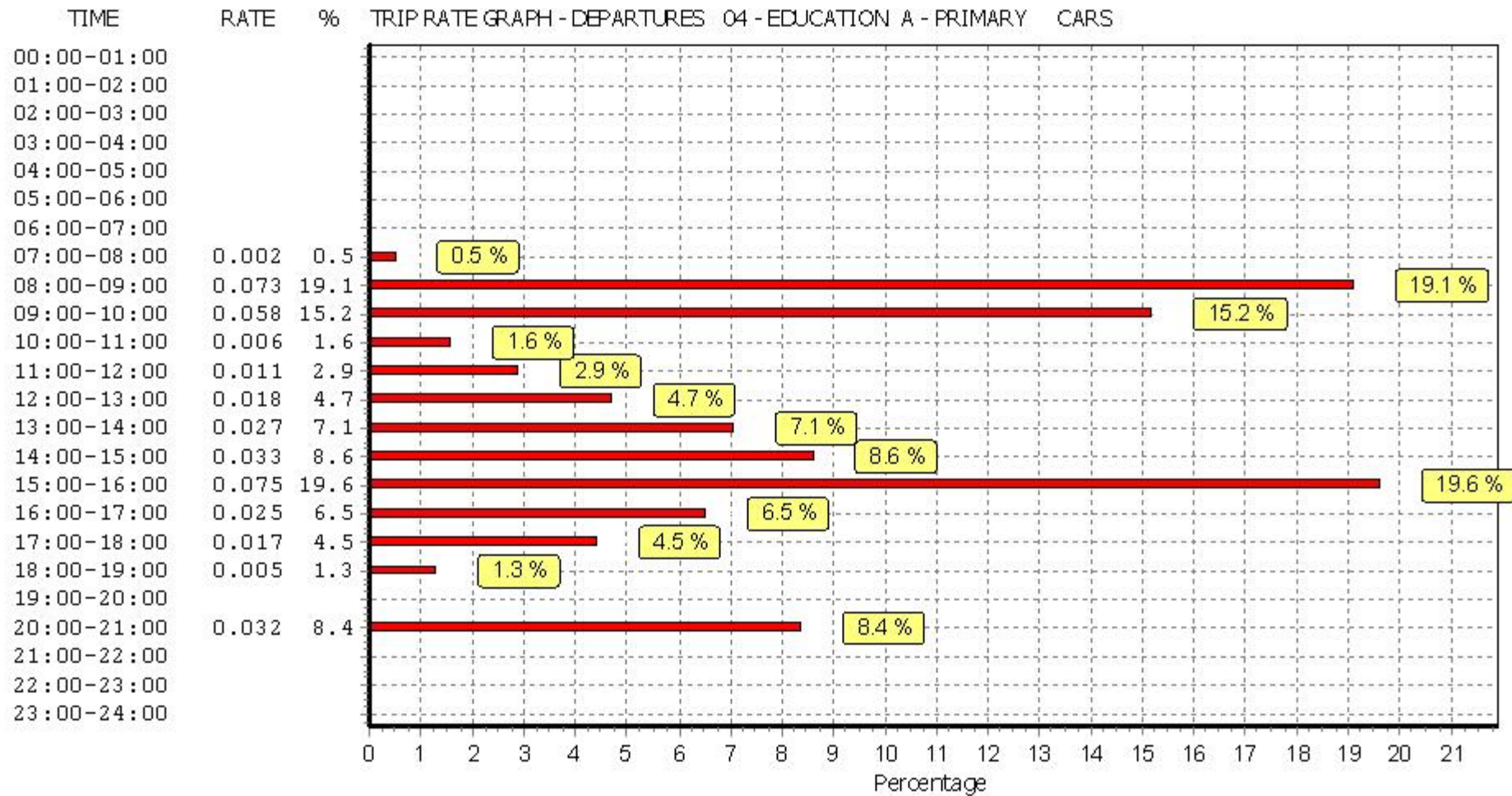
Parameter summary

Trip rate parameter range selected: 208 - 1020 (units:)
 Survey date date range: 01/01/09 - 28/09/16
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

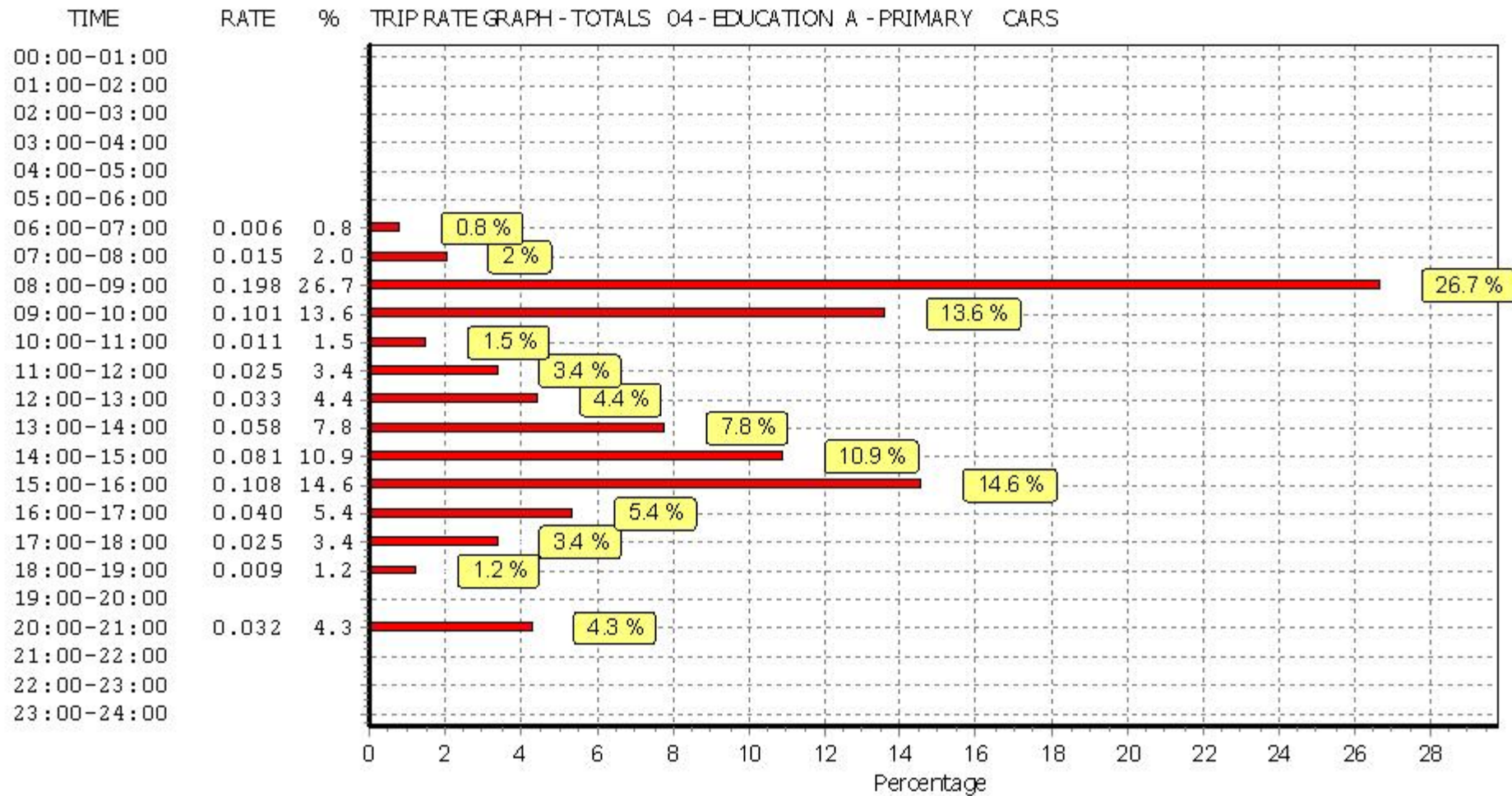
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TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

LGVS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	1	312	0.000	1	312	0.000	1	312	0.000
06:00 - 07:00	1	312	0.003	1	312	0.000	1	312	0.003
07:00 - 08:00	8	414	0.000	8	414	0.000	8	414	0.000
08:00 - 09:00	8	414	0.003	8	414	0.002	8	414	0.005
09:00 - 10:00	8	414	0.003	8	414	0.003	8	414	0.006
10:00 - 11:00	8	414	0.002	8	414	0.002	8	414	0.004
11:00 - 12:00	8	414	0.004	8	414	0.004	8	414	0.008
12:00 - 13:00	8	414	0.002	8	414	0.002	8	414	0.004
13:00 - 14:00	8	414	0.002	8	414	0.002	8	414	0.004
14:00 - 15:00	8	414	0.002	8	414	0.003	8	414	0.005
15:00 - 16:00	8	414	0.001	8	414	0.002	8	414	0.003
16:00 - 17:00	8	414	0.001	8	414	0.002	8	414	0.003
17:00 - 18:00	8	414	0.000	8	414	0.000	8	414	0.000
18:00 - 19:00	8	414	0.000	8	414	0.000	8	414	0.000
19:00 - 20:00	2	666	0.000	2	666	0.000	2	666	0.000
20:00 - 21:00	1	312	0.000	1	312	0.000	1	312	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.023			0.022			0.045

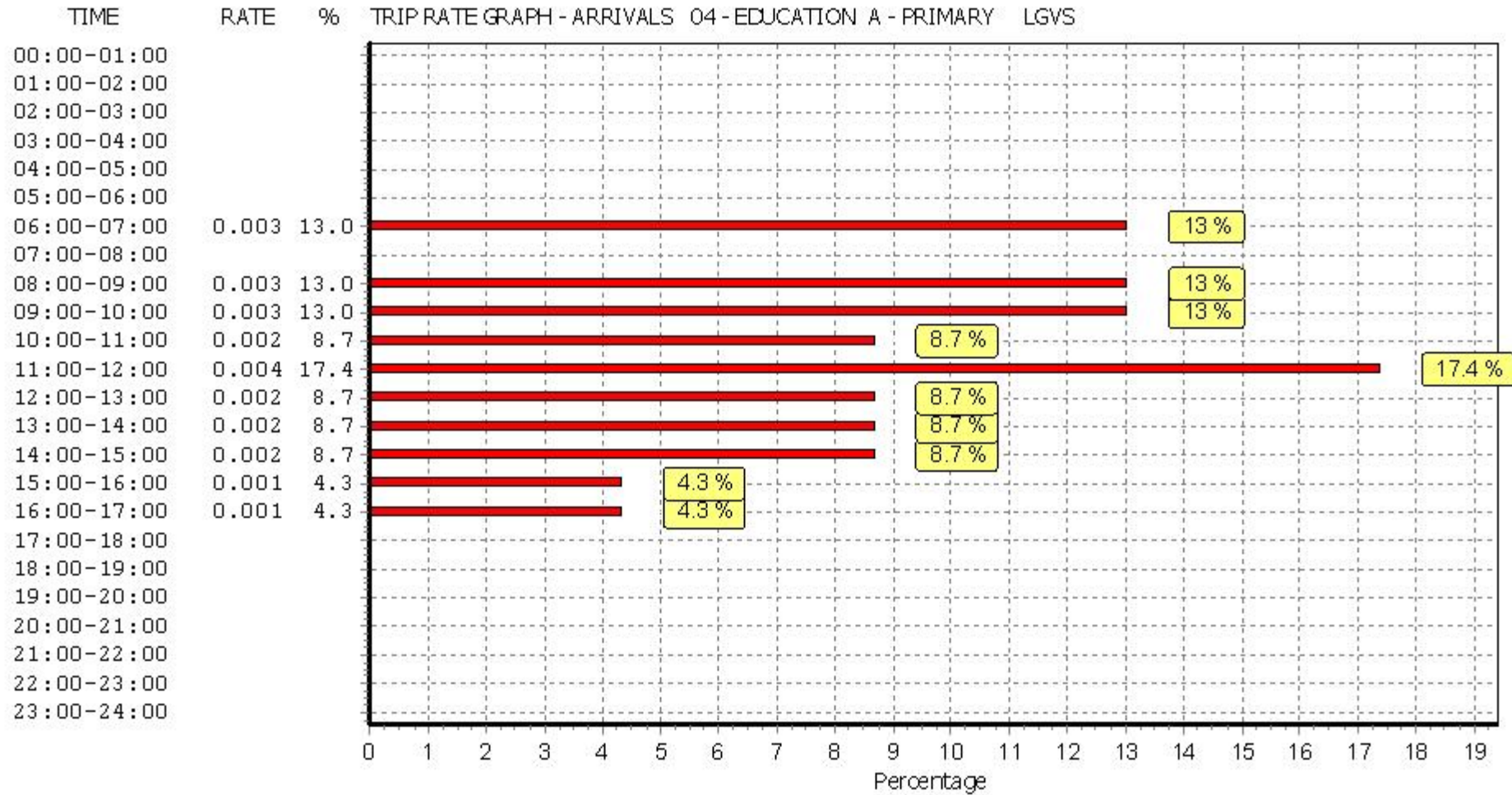
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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

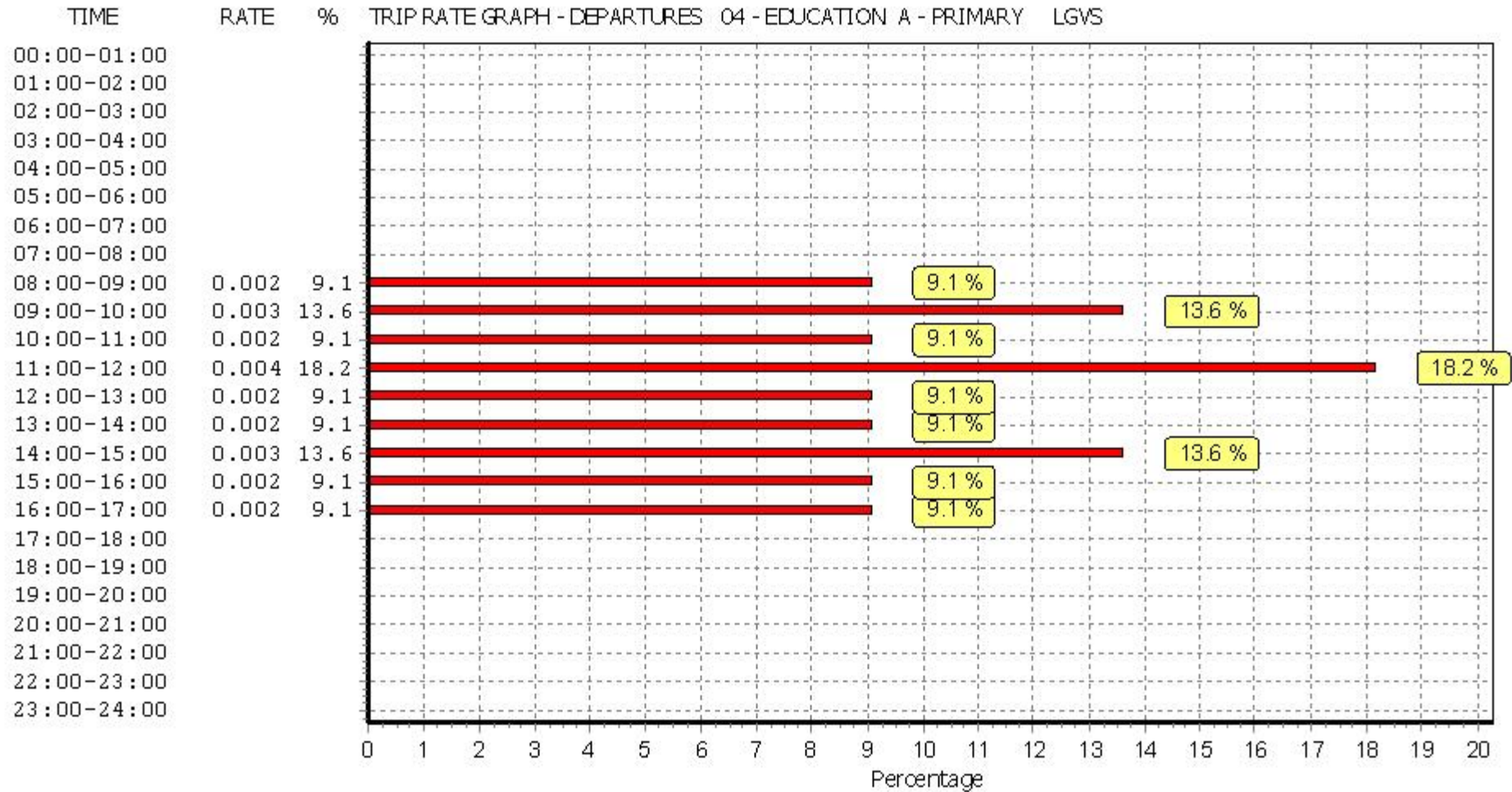
Parameter summary

Trip rate parameter range selected: 208 - 1020 (units:)
 Survey date date range: 01/01/09 - 28/09/16
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

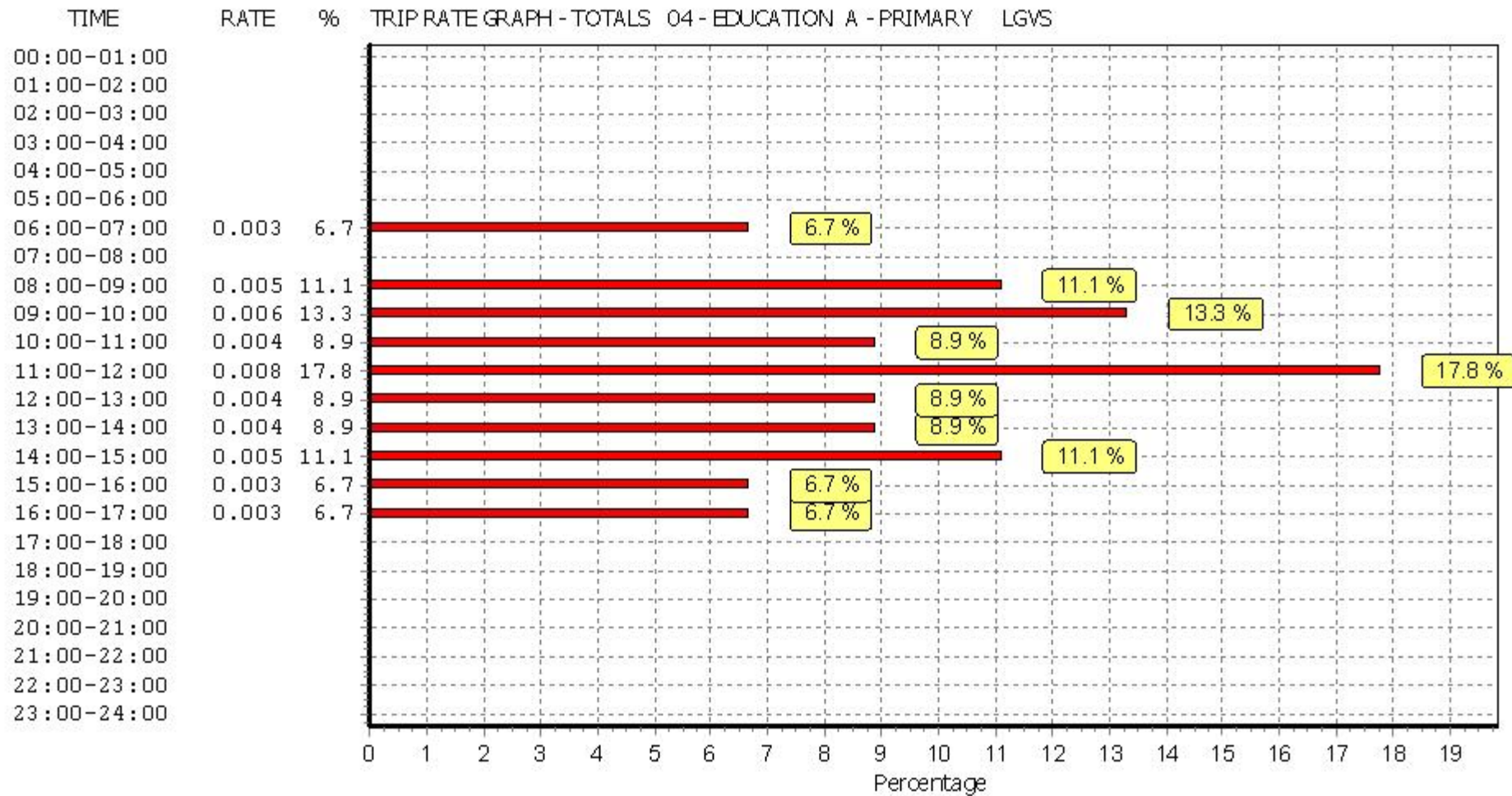
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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.



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



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TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MOTOR CYCLES

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	1	312	0.000	1	312	0.000	1	312	0.000
06:00 - 07:00	1	312	0.000	1	312	0.000	1	312	0.000
07:00 - 08:00	8	414	0.000	8	414	0.000	8	414	0.000
08:00 - 09:00	8	414	0.000	8	414	0.000	8	414	0.000
09:00 - 10:00	8	414	0.000	8	414	0.000	8	414	0.000
10:00 - 11:00	8	414	0.000	8	414	0.000	8	414	0.000
11:00 - 12:00	8	414	0.000	8	414	0.000	8	414	0.000
12:00 - 13:00	8	414	0.000	8	414	0.000	8	414	0.000
13:00 - 14:00	8	414	0.000	8	414	0.000	8	414	0.000
14:00 - 15:00	8	414	0.000	8	414	0.000	8	414	0.000
15:00 - 16:00	8	414	0.000	8	414	0.000	8	414	0.000
16:00 - 17:00	8	414	0.000	8	414	0.000	8	414	0.000
17:00 - 18:00	8	414	0.000	8	414	0.000	8	414	0.000
18:00 - 19:00	8	414	0.000	8	414	0.000	8	414	0.000
19:00 - 20:00	2	666	0.000	2	666	0.000	2	666	0.000
20:00 - 21:00	1	312	0.000	1	312	0.000	1	312	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

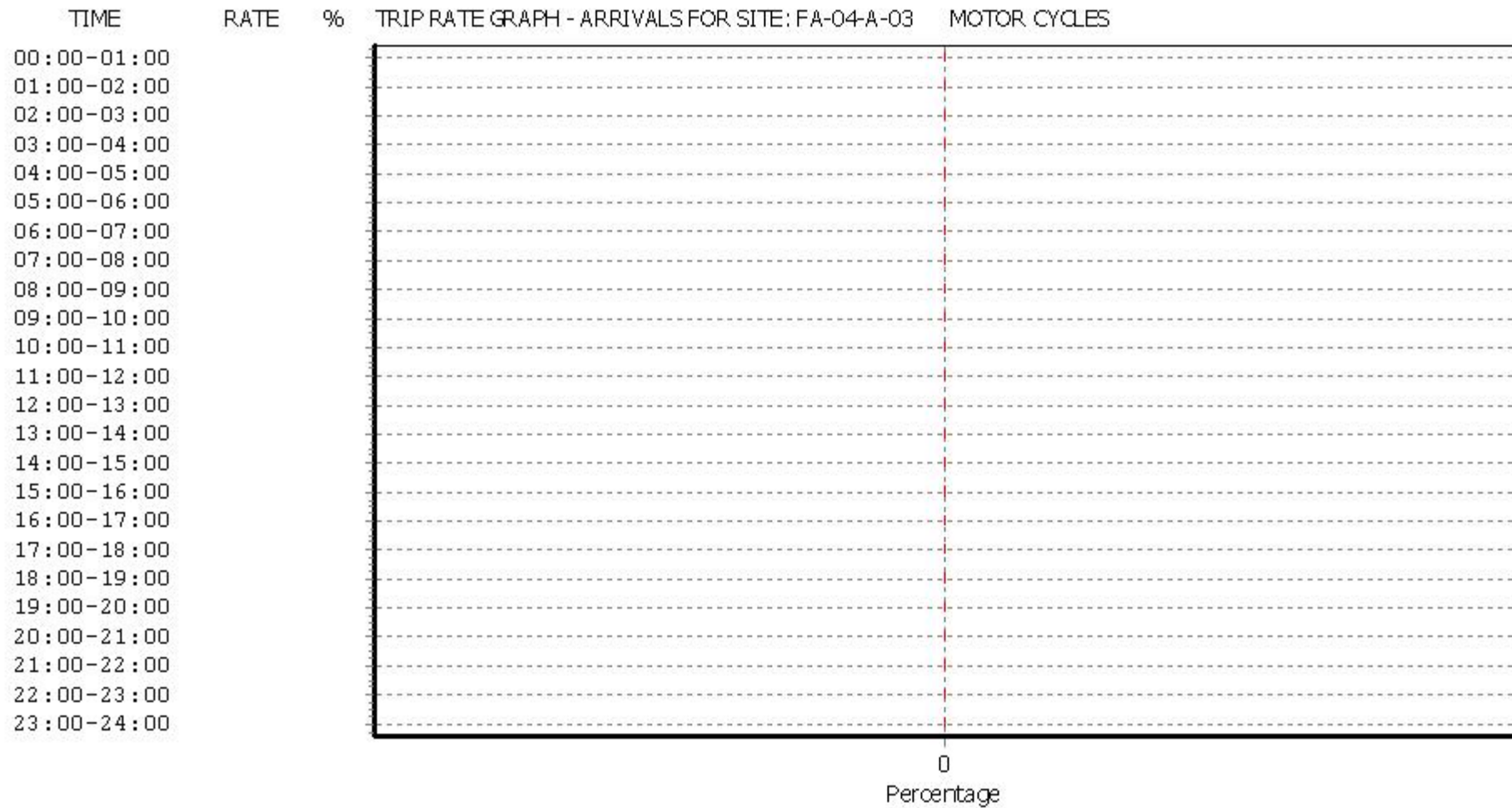
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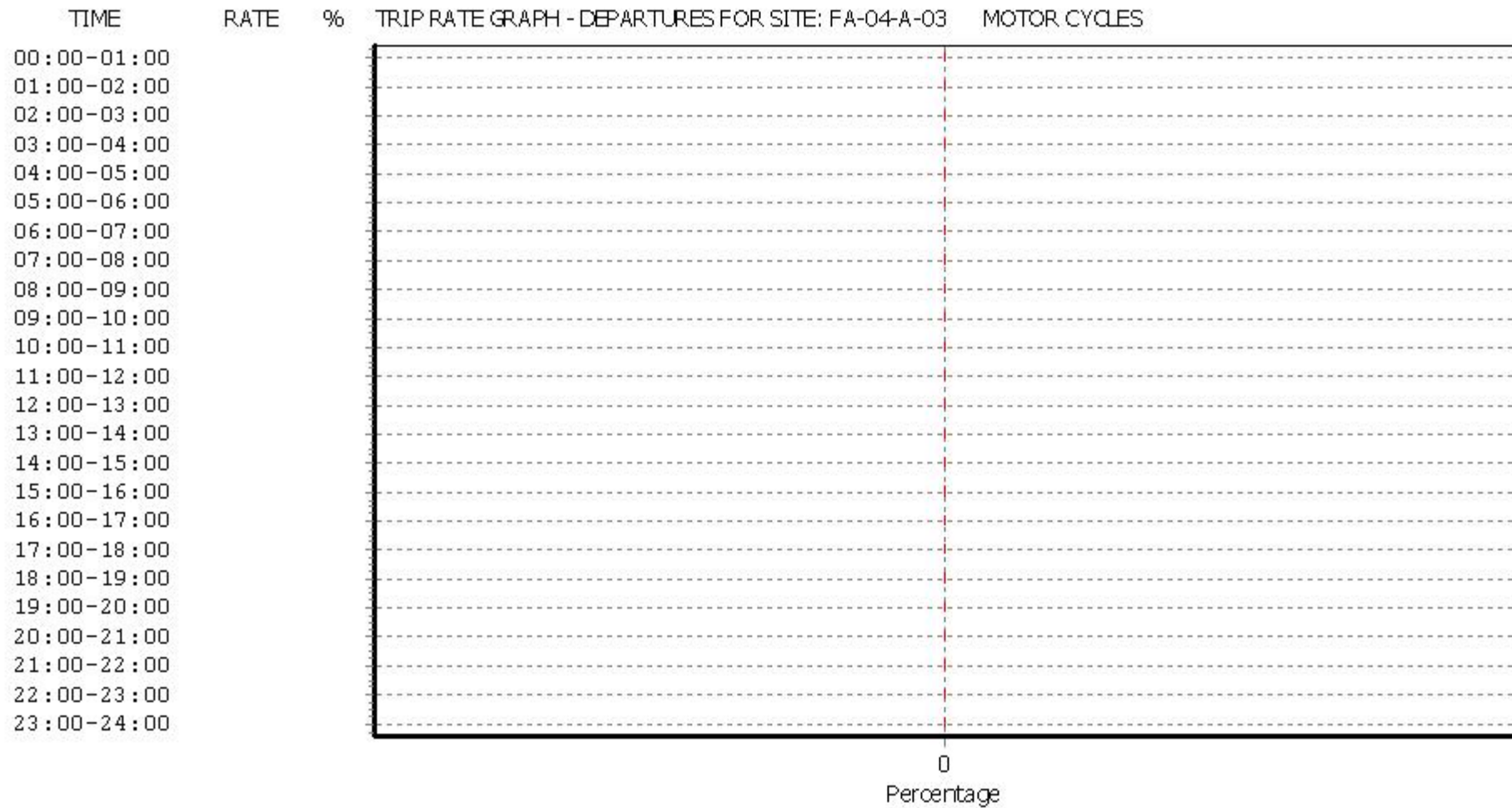
Parameter summary

Trip rate parameter range selected: 208 - 1020 (units:)
 Survey date date range: 01/01/09 - 28/09/16
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

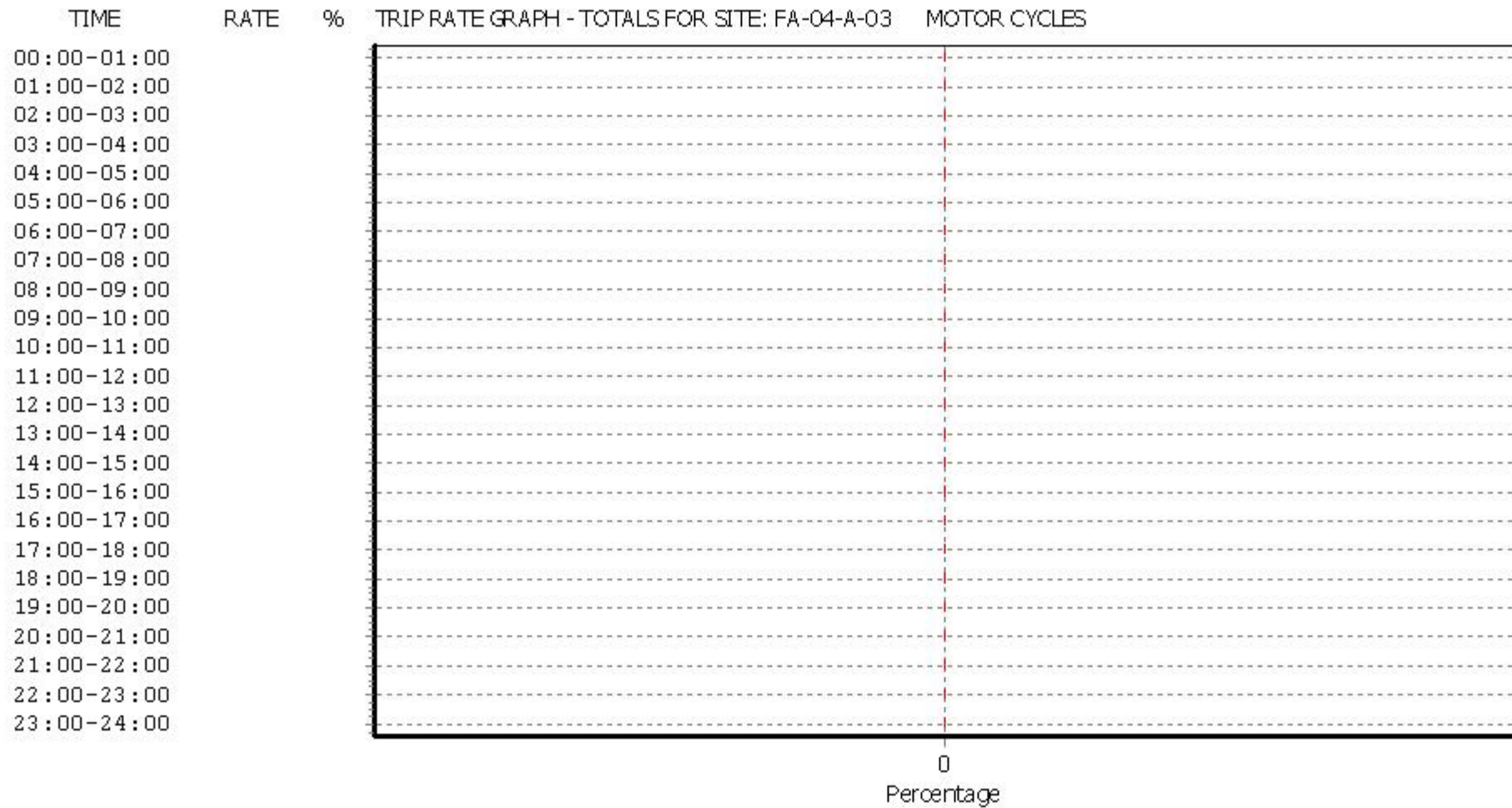
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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Calculation Reference: AUDIT-638801-170822-0843

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	SC SURREY	1 days
	WS WEST SUSSEX	2 days
03	SOUTH WEST	
	SM SOMERSET	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	3 days
09	NORTH	
	DH DURHAM	1 days
11	SCOTLAND	
	FA FALKIRK	2 days
	HI HIGHLAND	1 days
	PK PERTH & KINROSS	1 days
12	CONNAUGHT	
	RO ROSCOMMON	3 days
13	MUNSTER	
	WA WATERFORD	1 days
14	LEINSTER	
	CC CARLOW	1 days
	KD KILDARE	1 days
	WX WEXFORD	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	CV CAVAN	1 days
	DN DONEGAL	1 days
17	ULSTER (NORTHERN IRELAND)	
	AN ANTRIM	3 days
	AR ARMAGH	1 days
	DO DOWN	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: 22 to 805 (units:)
 Range Selected by User: 20 to 4334 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 28/03/17

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:

Tuesday	12 days
Wednesday	8 days
Thursday	11 days

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

Selected survey types:

Manual count	31 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	15
Edge of Town	16

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	23
No Sub Category	8

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	31 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	10 days
5,001 to 10,000	8 days
10,001 to 15,000	5 days
15,001 to 20,000	4 days
20,001 to 25,000	4 days

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

Secondary Filtering selection (Cont.):

Population within 5 miles:

5,000 or Less	3 days
5,001 to 25,000	6 days
25,001 to 50,000	6 days
50,001 to 75,000	5 days
75,001 to 100,000	9 days
100,001 to 125,000	2 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	9 days
1.1 to 1.5	21 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	3 days
No	28 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	31 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	AN-03-A-07 CASTLE WAY	SEMI DETACHED/TERRACED HOUSING	ANTRIM
	ANTRIM Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 55 Survey date: TUESDAY 20/12/11		
	Survey Type: MANUAL		
2	AN-03-A-08 BALLINDERRY ROAD	HOUSES & FLATS	ANTRIM
	LISBURN Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 204 Survey date: TUESDAY 29/10/13		
	Survey Type: MANUAL		
3	AN-03-A-09 SLOEFIELD DRIVE	DETACHED & SEMI -DETACHED	ANTRIM
	CARRICKFERGUS Edge of Town No Sub Category Total Number of dwellings: 151 Survey date: WEDNESDAY 12/10/16		
	Survey Type: MANUAL		
4	AR-03-A-01 BIRCHDALE MANOR	MIXED HOUSES	ARMAGH
	LURGAN Edge of Town Residential Zone Total Number of dwellings: 153 Survey date: TUESDAY 15/06/10		
	Survey Type: MANUAL		
5	CC-03-A-01 R417 ANTHY ROAD	DETACHED HOUSES	CARLOW
	CARLOW Edge of Town Residential Zone Total Number of dwellings: 23 Survey date: WEDNESDAY 25/05/16		
	Survey Type: MANUAL		
6	CV-03-A-01 DUBLIN ROAD	DETACHED	CAVAN
	CAVAN Edge of Town No Sub Category Total Number of dwellings: 37 Survey date: TUESDAY 18/12/12		
	Survey Type: MANUAL		
7	DH-03-A-01 GREENFIELDS ROAD	SEMI DETACHED	DURHAM
	BISHOP AUCKLAND Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 50 Survey date: TUESDAY 28/03/17		
	Survey Type: MANUAL		

LIST OF SITES relevant to selection parameters (Cont.)

8	DN-03-A-05 GORTLEE ROAD GORTLEE LETTERKENNY Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 146 Survey date: WEDNESDAY 03/09/14	DETACHED/SEMI -DETACHED	DONEGAL	Survey Type: MANUAL
9	DO-03-A-03 OLD MILL HEIGHTS DUNDONALD BELFAST Edge of Town Residential Zone Total Number of dwellings: 79 Survey date: WEDNESDAY 23/10/13	DETACHED/SEMI DETACHED	DOWN	Survey Type: MANUAL
10	FA-03-A-01 MANDELA AVENUE FALKIRK Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 37 Survey date: THURSDAY 30/05/13	SEMI -DETACHED/TERRACED	FALKIRK	Survey Type: MANUAL
11	FA-03-A-02 ROSEBANK AVENUE & SPRINGFIELD DRIVE FALKIRK Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 161 Survey date: WEDNESDAY 29/05/13	MIXED HOUSES	FALKIRK	Survey Type: MANUAL
12	HC-03-A-18 CANADA WAY LIPHOOK Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 62 Survey date: TUESDAY 29/11/16	HOUSES & FLATS	HAMPSHIRE	Survey Type: MANUAL
13	HI-03-A-14 KING BRUDE ROAD SCORGUIE INVERNESS Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 40 Survey date: WEDNESDAY 23/03/16	SEMI -DETACHED & TERRACED	HIGHLAND	Survey Type: MANUAL
14	KD-03-A-02 CEDARWOOD PARK MORRISTOWN ROAD NEWBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 71 Survey date: TUESDAY 12/05/09	TERRACED/SEMI -D.	KILDARE	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15	LN-03-A-03	SEMI DETACHED	LINCOLNSHIRE
	ROOKERY LANE BOULTHAM LINCOLN Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 22 Survey date: TUESDAY 18/09/12 Survey Type: MANUAL		
16	NF-03-A-01	SEMI DET. & BUNGALOWS	NORFOLK
	YARMOUTH ROAD CAISTER-ON-SEA Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 27 Survey date: TUESDAY 16/10/12 Survey Type: MANUAL		
17	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		
18	NY-03-A-10	HOUSES AND FLATS	NORTH YORKSHIRE
	BOROUGHBRIDGE ROAD RIPON Edge of Town No Sub Category Total Number of dwellings: 71 Survey date: TUESDAY 17/09/13 Survey Type: MANUAL		
19	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		
20	PK-03-A-01	DETAC. & BUNGALOWS	PERTH & KINROSS
	TULLYLUMB TERRACE GORNHILL PERTH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 36 Survey date: WEDNESDAY 11/05/11 Survey Type: MANUAL		
21	RO-03-A-01	MIXED HOUSES	ROSCOMMON
	GALWAY ROAD ROSCOMMON Edge of Town No Sub Category Total Number of dwellings: 80 Survey date: THURSDAY 07/05/09 Survey Type: MANUAL		
22	RO-03-A-02	SEMI DET. & BUNGALOWS	ROSCOMMON
	SLIGO ROAD BALLAGHADERREEN Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 31 Survey date: THURSDAY 14/07/11 Survey Type: MANUAL		

LIST OF SITES relevant to selection parameters (Cont.)

23	RO-03-A-03 N61 GREATMEADOW BOYLE Edge of Town No Sub Category	DETACHED HOUSES		ROSCOMMON
	Total Number of dwellings:		23	
	Survey date:	THURSDAY	25/09/14	Survey Type: MANUAL
24	SC-03-A-04 HIGH ROAD	DETACHED & TERRACED		SURREY
	BYFLEET Edge of Town Residential Zone			
	Total Number of dwellings:		71	
	Survey date:	THURSDAY	23/01/14	Survey Type: MANUAL
25	SH-03-A-04 ST MICHAEL'S STREET	TERRACED		SHROPSHIRE
	SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category			
	Total Number of dwellings:		108	
	Survey date:	THURSDAY	11/06/09	Survey Type: MANUAL
26	SH-03-A-05 SANDCROFT SUTTON HILL TELFORD	SEMI -DETACHED/TERRACED		SHROPSHIRE
	Edge of Town Residential Zone			
	Total Number of dwellings:		54	
	Survey date:	THURSDAY	24/10/13	Survey Type: MANUAL
27	SM-03-A-01 WEMBDON ROAD NORTHFIELD BRIDGWATER	DETACHED & SEMI		SOMERSET
	Edge of Town Residential Zone			
	Total Number of dwellings:		33	
	Survey date:	THURSDAY	24/09/15	Survey Type: MANUAL
28	WA-03-A-04 MAYPARK LANE	DETACHED		WATERFORD
	WATERFORD Edge of Town Residential Zone			
	Total Number of dwellings:		280	
	Survey date:	TUESDAY	24/06/14	Survey Type: MANUAL
29	WS-03-A-04 HILLS FARM LANE BROADBRIDGE HEATH HORSHAM	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone			
	Total Number of dwellings:		151	
	Survey date:	THURSDAY	11/12/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

30	WS-03-A-06 ELLIS ROAD S BROADBRIDGE HEATH WEST HORSHAM Edge of Town Residential Zone	MIXED HOUSES	805 02/03/17	WEST SUSSEX	Survey Type: MANUAL
31	WX-03-A-01 CLONARD ROAD	SEMI-DETACHED	34 25/09/14	WEXFORD	Survey Type: MANUAL
	WEXFORD Suburban Area (PPS6 Out of Centre) No Sub Category				

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

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	31	101	0.064	31	101	0.284	31	101	0.348
08:00 - 09:00	31	101	0.158	31	101	0.434	31	101	0.592
09:00 - 10:00	31	101	0.172	31	101	0.229	31	101	0.401
10:00 - 11:00	31	101	0.142	31	101	0.174	31	101	0.316
11:00 - 12:00	31	101	0.154	31	101	0.181	31	101	0.335
12:00 - 13:00	31	101	0.200	31	101	0.182	31	101	0.382
13:00 - 14:00	31	101	0.203	31	101	0.217	31	101	0.420
14:00 - 15:00	31	101	0.205	31	101	0.232	31	101	0.437
15:00 - 16:00	31	101	0.273	31	101	0.188	31	101	0.461
16:00 - 17:00	31	101	0.315	31	101	0.198	31	101	0.513
17:00 - 18:00	31	101	0.424	31	101	0.222	31	101	0.646
18:00 - 19:00	31	101	0.342	31	101	0.209	31	101	0.551
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.652			2.750			5.402

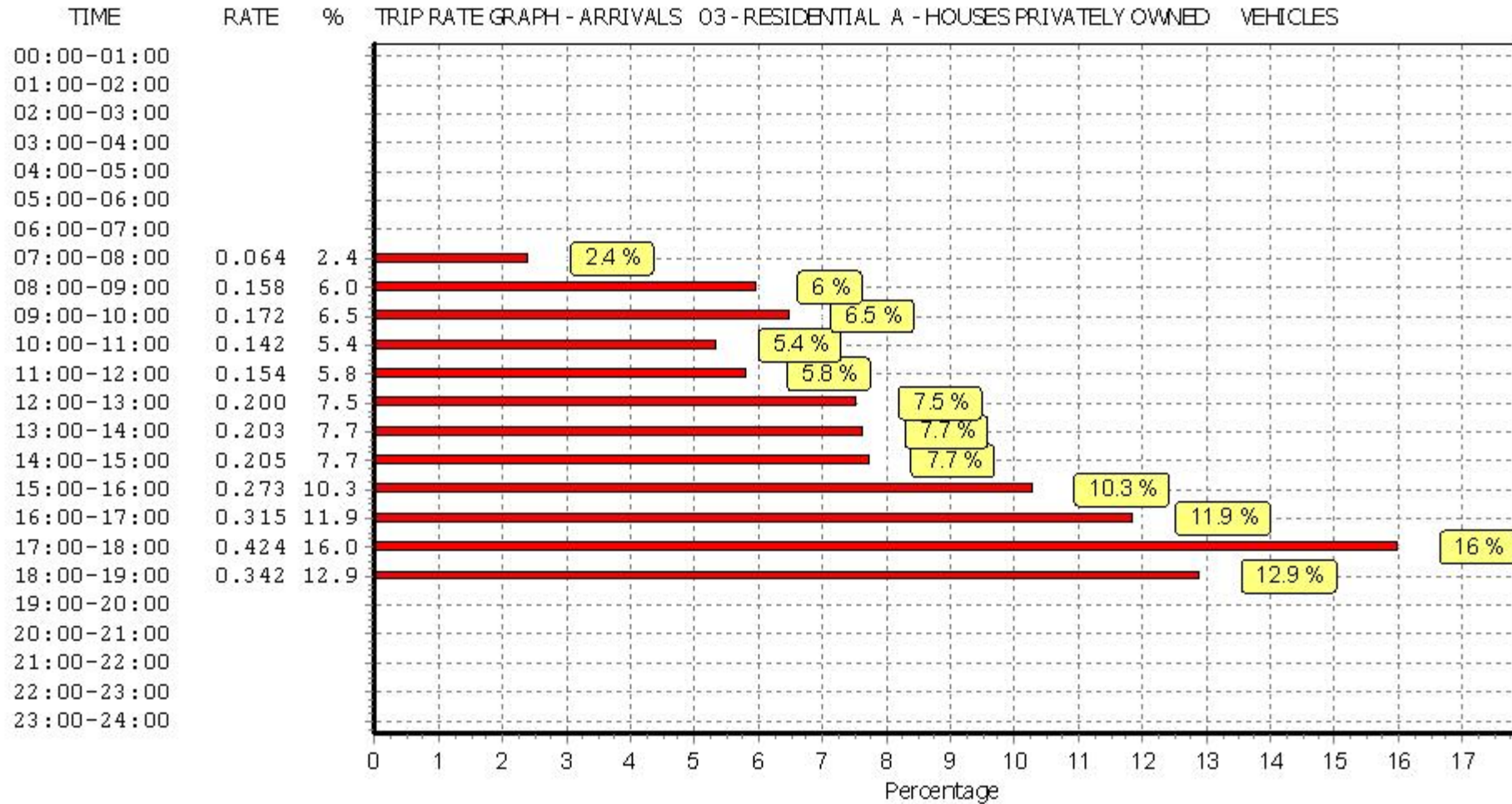
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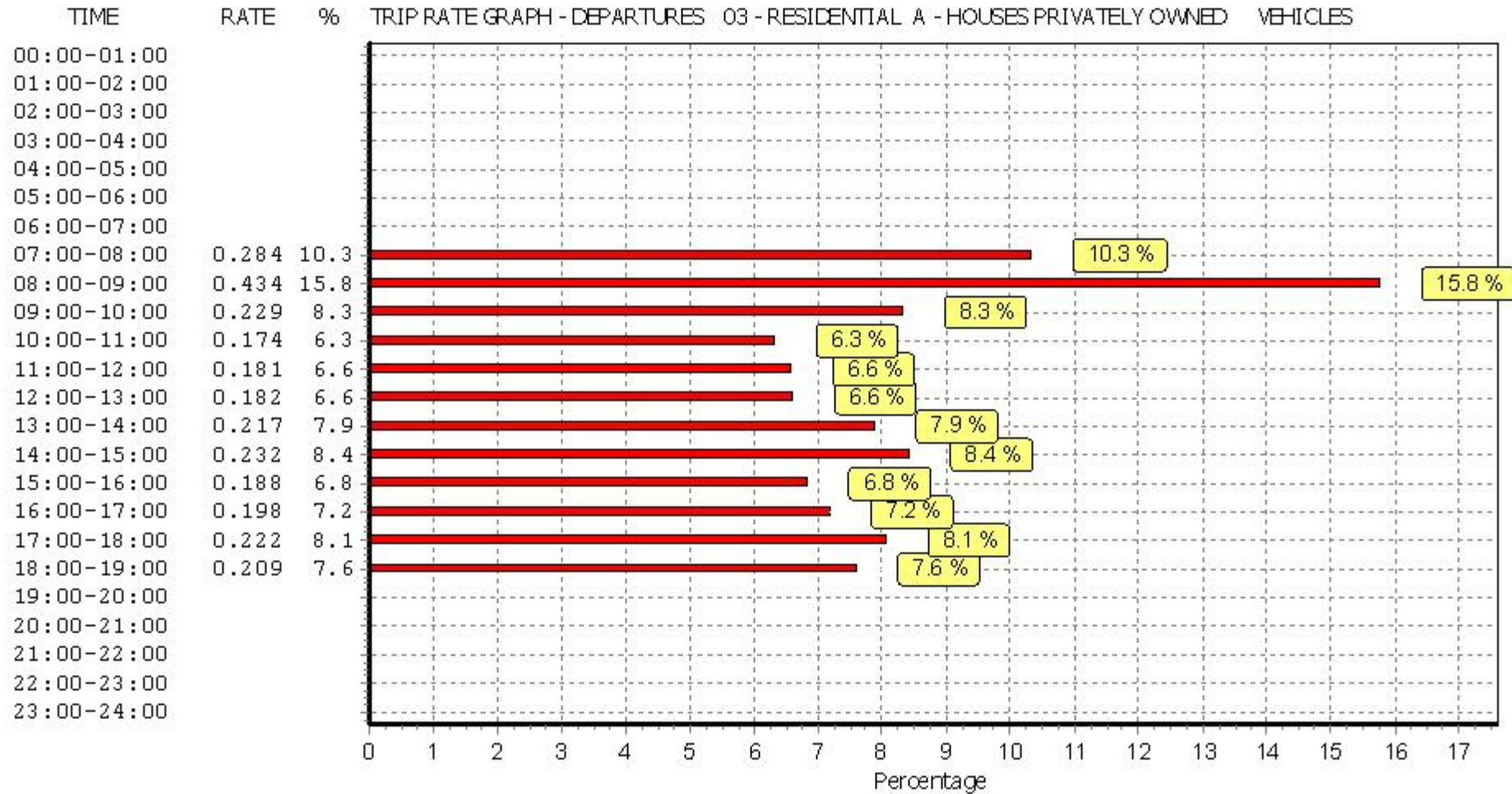
Parameter summary

Trip rate parameter range selected: 22 - 805 (units:)
 Survey date date range: 01/01/09 - 28/03/17
 Number of weekdays (Monday-Friday): 31
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

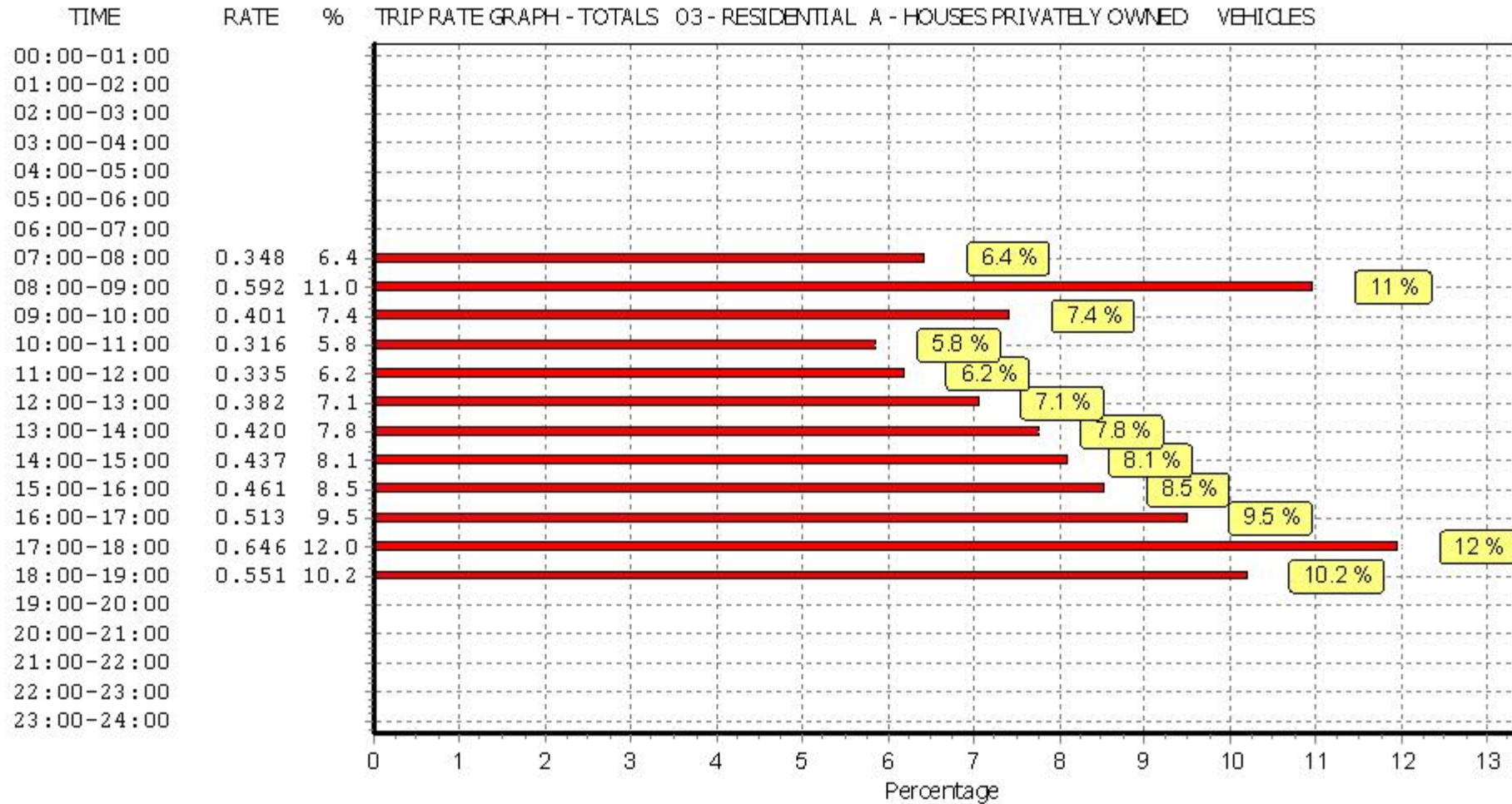
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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

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	31	101	0.003	31	101	0.003	31	101	0.006
08:00 - 09:00	31	101	0.004	31	101	0.004	31	101	0.008
09:00 - 10:00	31	101	0.003	31	101	0.003	31	101	0.006
10:00 - 11:00	31	101	0.003	31	101	0.003	31	101	0.006
11:00 - 12:00	31	101	0.005	31	101	0.004	31	101	0.009
12:00 - 13:00	31	101	0.004	31	101	0.004	31	101	0.008
13:00 - 14:00	31	101	0.004	31	101	0.004	31	101	0.008
14:00 - 15:00	31	101	0.003	31	101	0.003	31	101	0.006
15:00 - 16:00	31	101	0.006	31	101	0.005	31	101	0.011
16:00 - 17:00	31	101	0.004	31	101	0.005	31	101	0.009
17:00 - 18:00	31	101	0.002	31	101	0.002	31	101	0.004
18:00 - 19:00	31	101	0.004	31	101	0.005	31	101	0.009
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.045			0.045			0.090

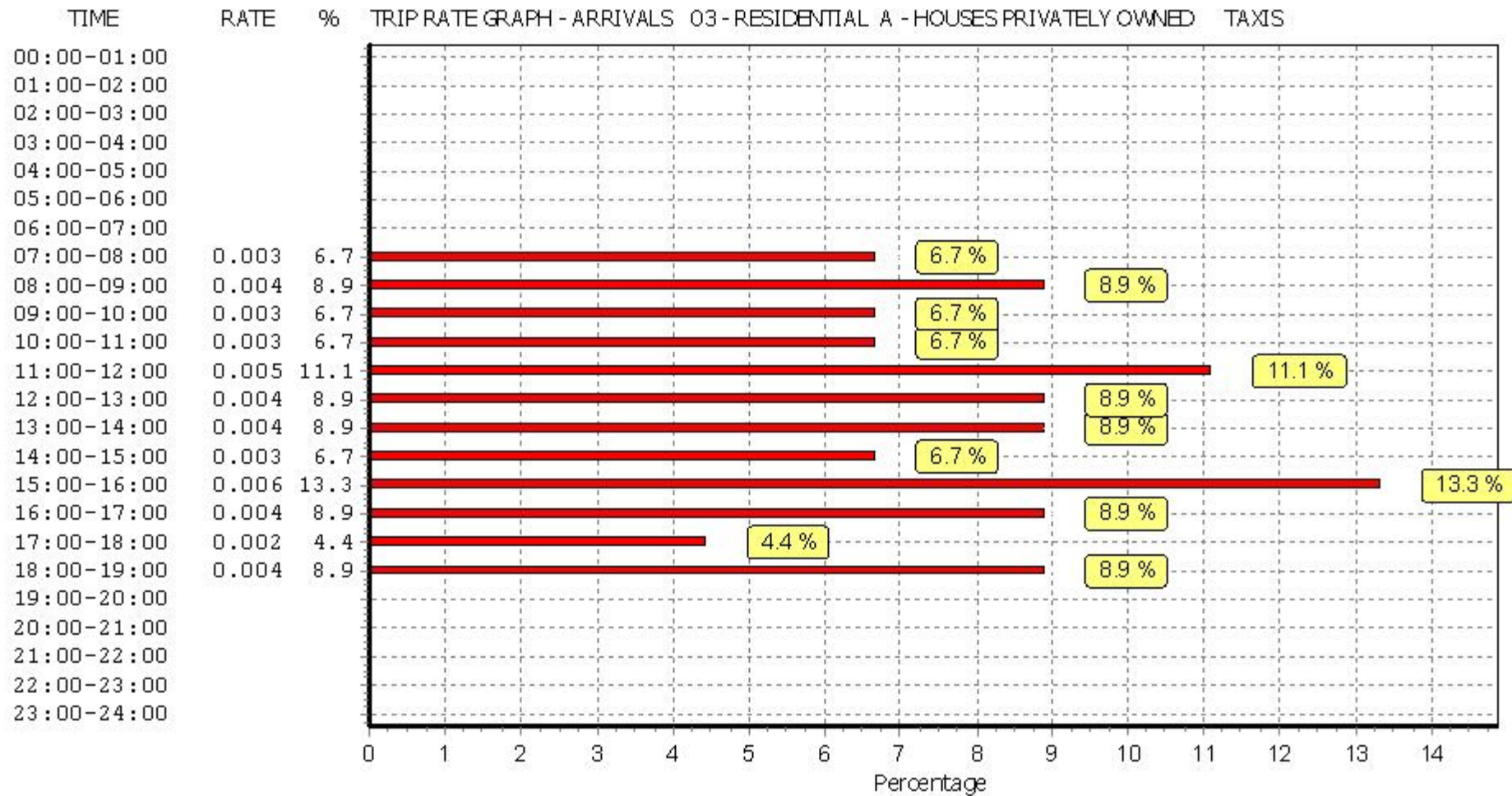
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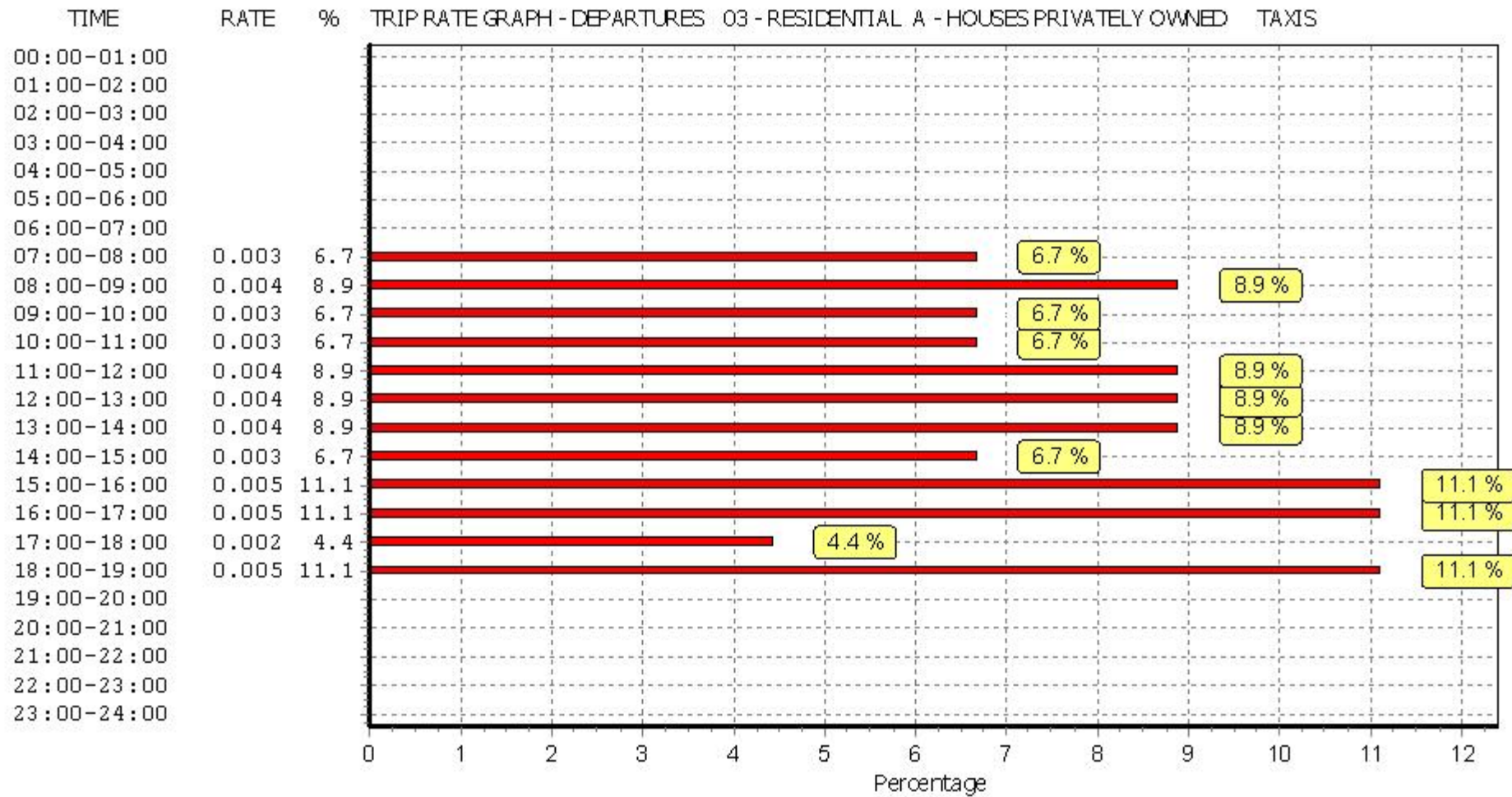
Parameter summary

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 Survey date date range: 01/01/09 - 28/03/17
 Number of weekdays (Monday-Friday): 31
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

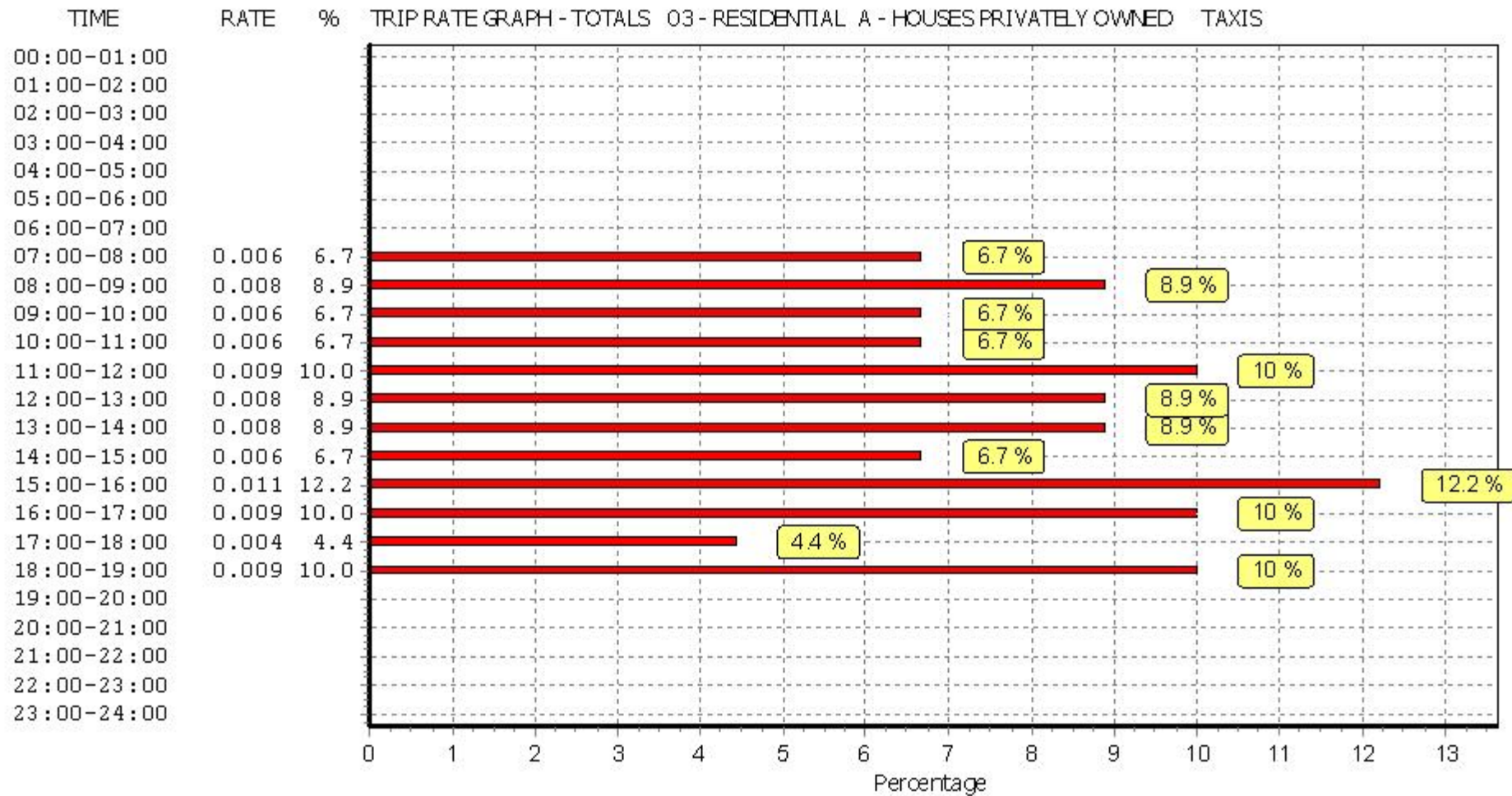
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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

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	31	101	0.000	31	101	0.001	31	101	0.001
08:00 - 09:00	31	101	0.002	31	101	0.002	31	101	0.004
09:00 - 10:00	31	101	0.003	31	101	0.002	31	101	0.005
10:00 - 11:00	31	101	0.002	31	101	0.003	31	101	0.005
11:00 - 12:00	31	101	0.002	31	101	0.001	31	101	0.003
12:00 - 13:00	31	101	0.002	31	101	0.002	31	101	0.004
13:00 - 14:00	31	101	0.002	31	101	0.002	31	101	0.004
14:00 - 15:00	31	101	0.002	31	101	0.002	31	101	0.004
15:00 - 16:00	31	101	0.002	31	101	0.001	31	101	0.003
16:00 - 17:00	31	101	0.001	31	101	0.002	31	101	0.003
17:00 - 18:00	31	101	0.000	31	101	0.000	31	101	0.000
18:00 - 19:00	31	101	0.001	31	101	0.001	31	101	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.019			0.038

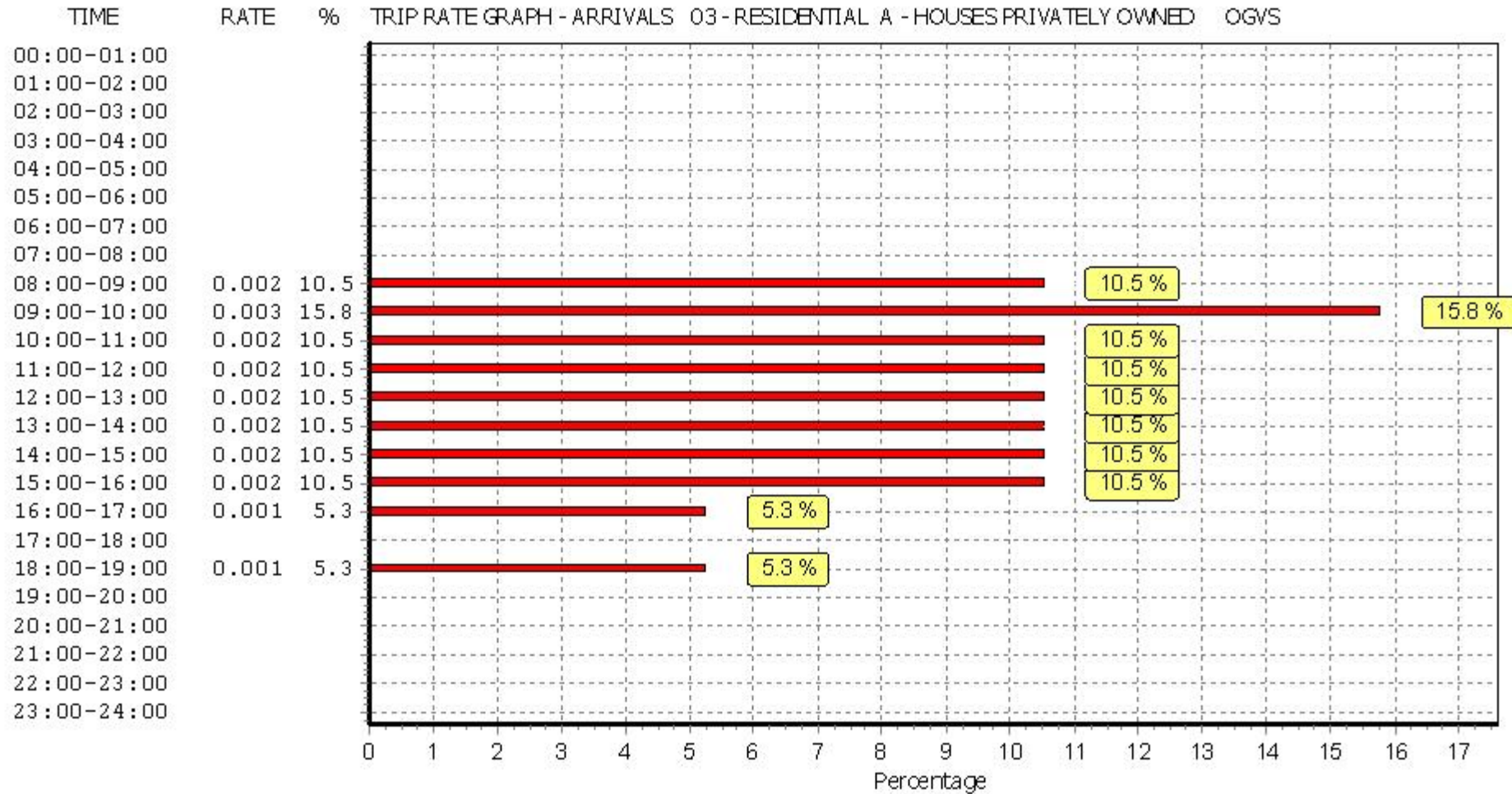
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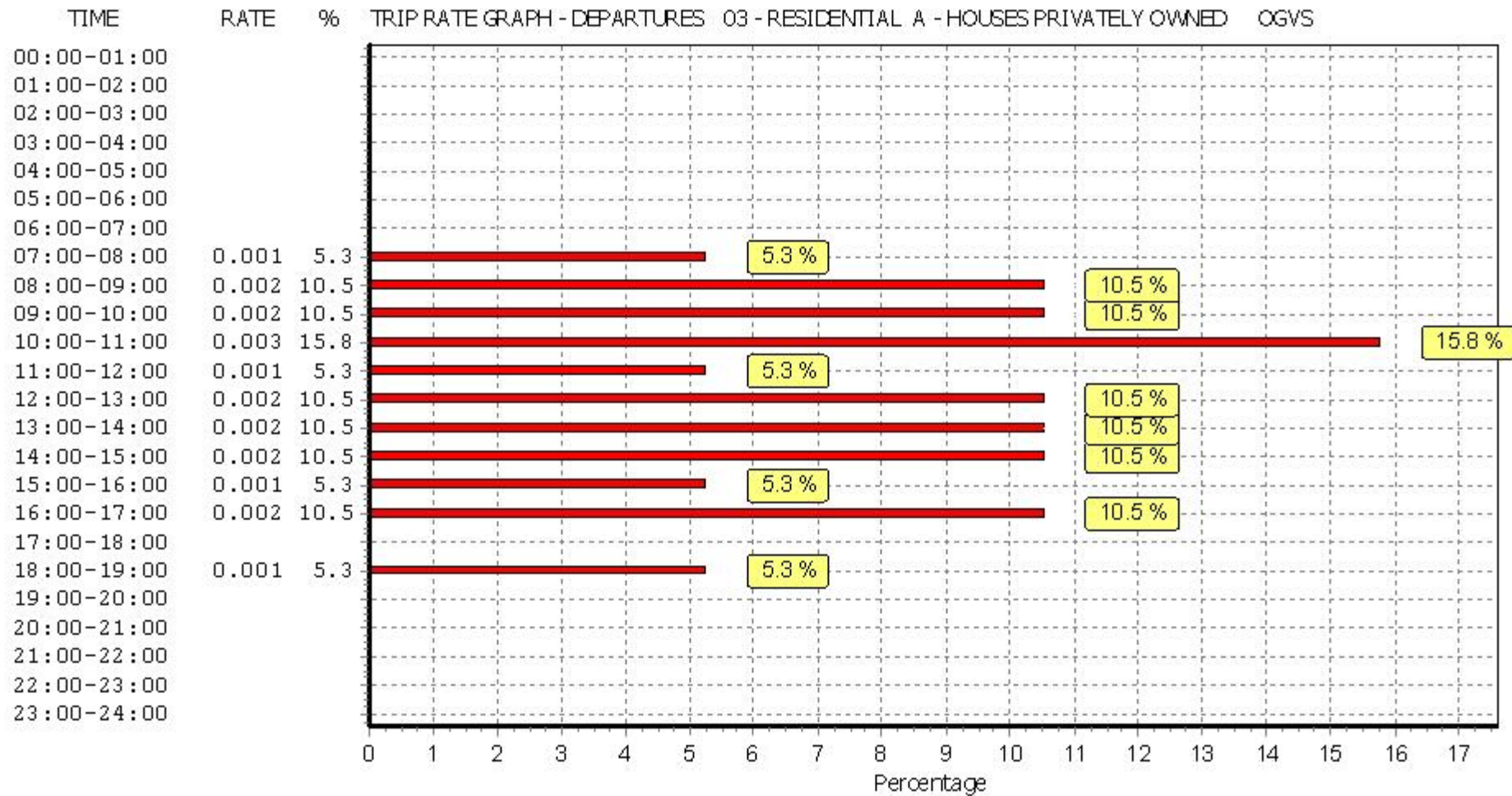
Parameter summary

Trip rate parameter range selected: 22 - 805 (units:)
 Survey date date range: 01/01/09 - 28/03/17
 Number of weekdays (Monday-Friday): 31
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

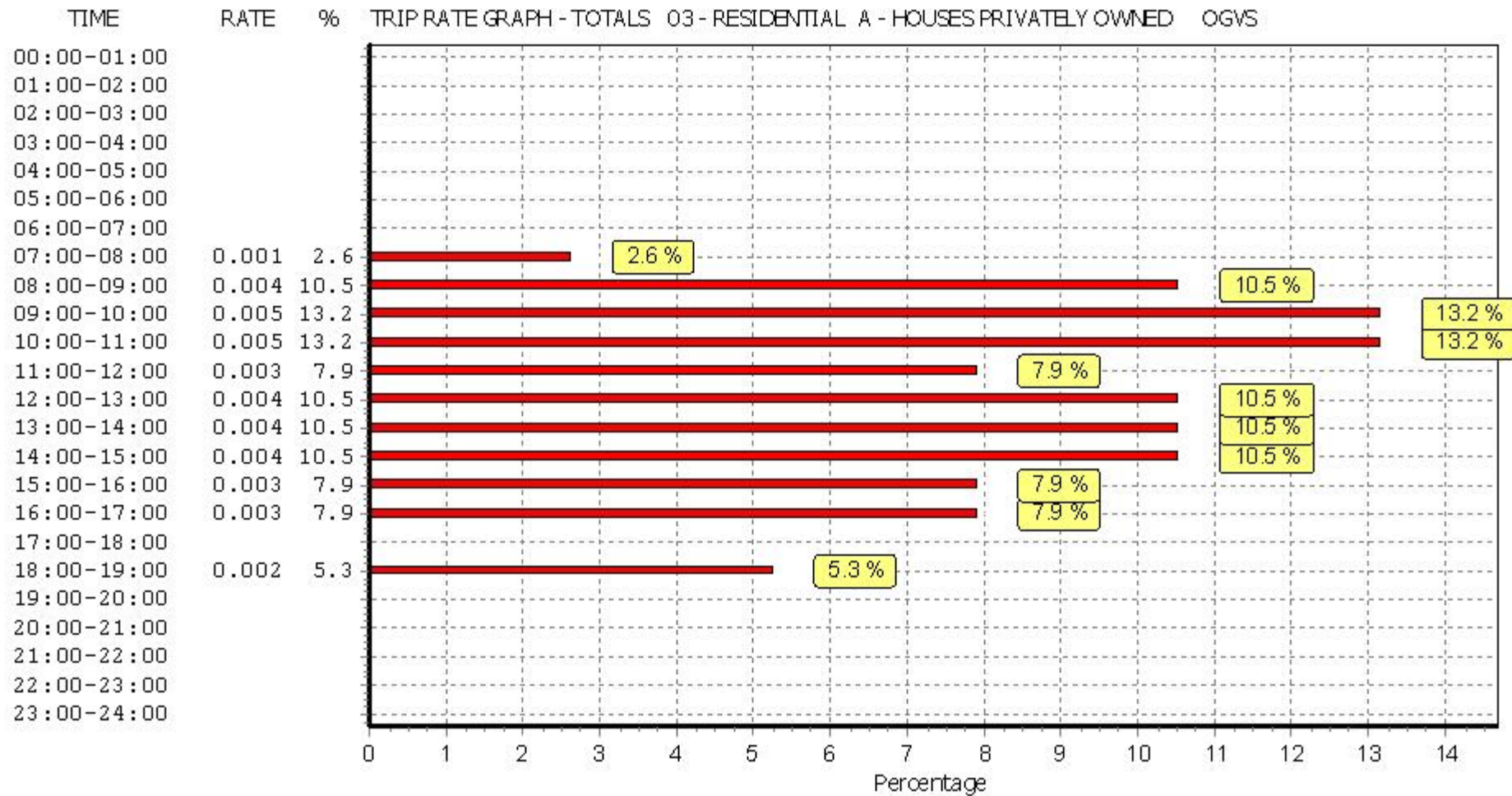
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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

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	31	101	0.000	31	101	0.000	31	101	0.000
08:00 - 09:00	31	101	0.004	31	101	0.004	31	101	0.008
09:00 - 10:00	31	101	0.000	31	101	0.001	31	101	0.001
10:00 - 11:00	31	101	0.000	31	101	0.000	31	101	0.000
11:00 - 12:00	31	101	0.001	31	101	0.001	31	101	0.002
12:00 - 13:00	31	101	0.000	31	101	0.000	31	101	0.000
13:00 - 14:00	31	101	0.000	31	101	0.000	31	101	0.000
14:00 - 15:00	31	101	0.001	31	101	0.001	31	101	0.002
15:00 - 16:00	31	101	0.003	31	101	0.002	31	101	0.005
16:00 - 17:00	31	101	0.001	31	101	0.001	31	101	0.002
17:00 - 18:00	31	101	0.000	31	101	0.000	31	101	0.000
18:00 - 19:00	31	101	0.000	31	101	0.000	31	101	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.010			0.020

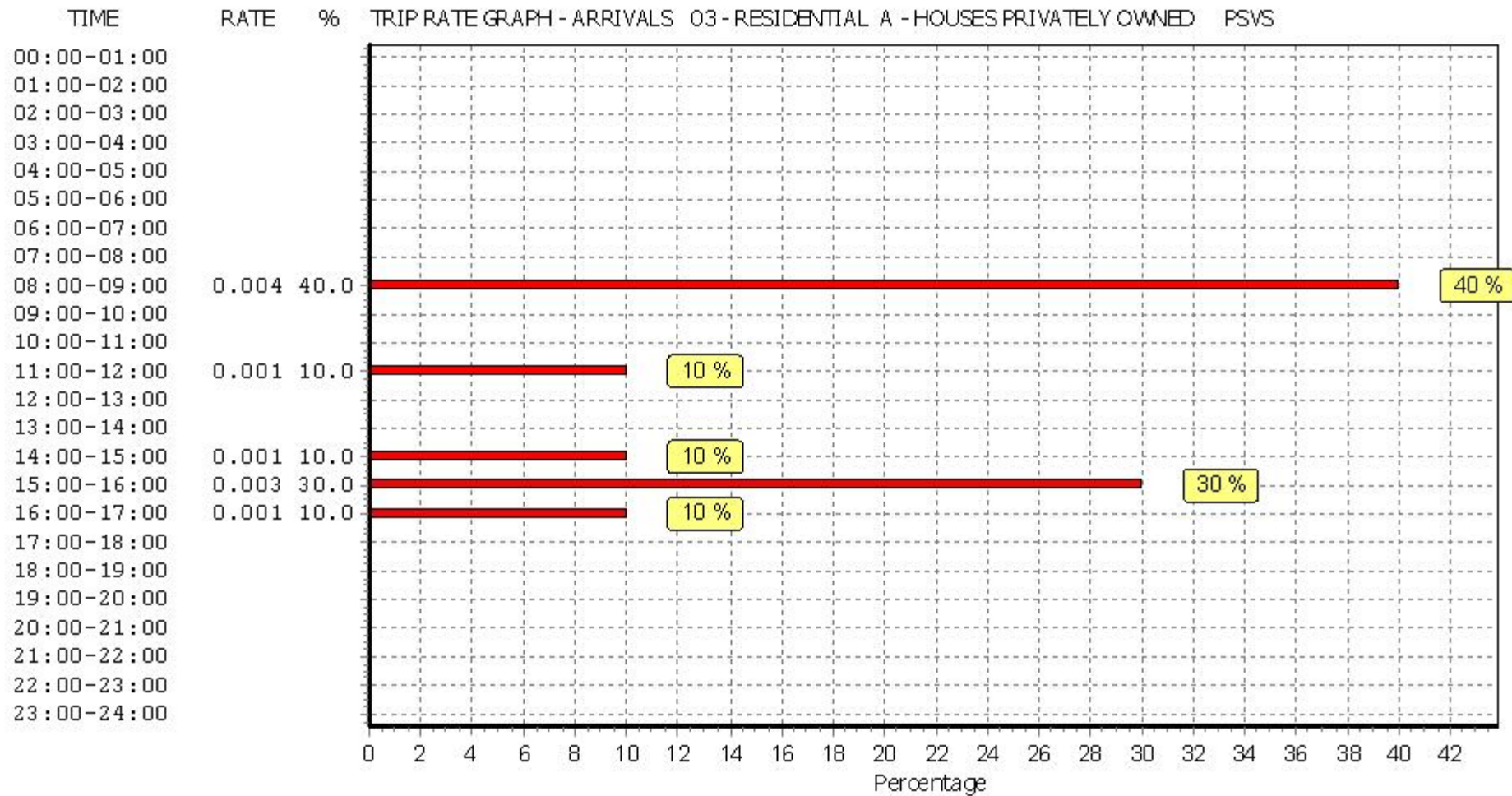
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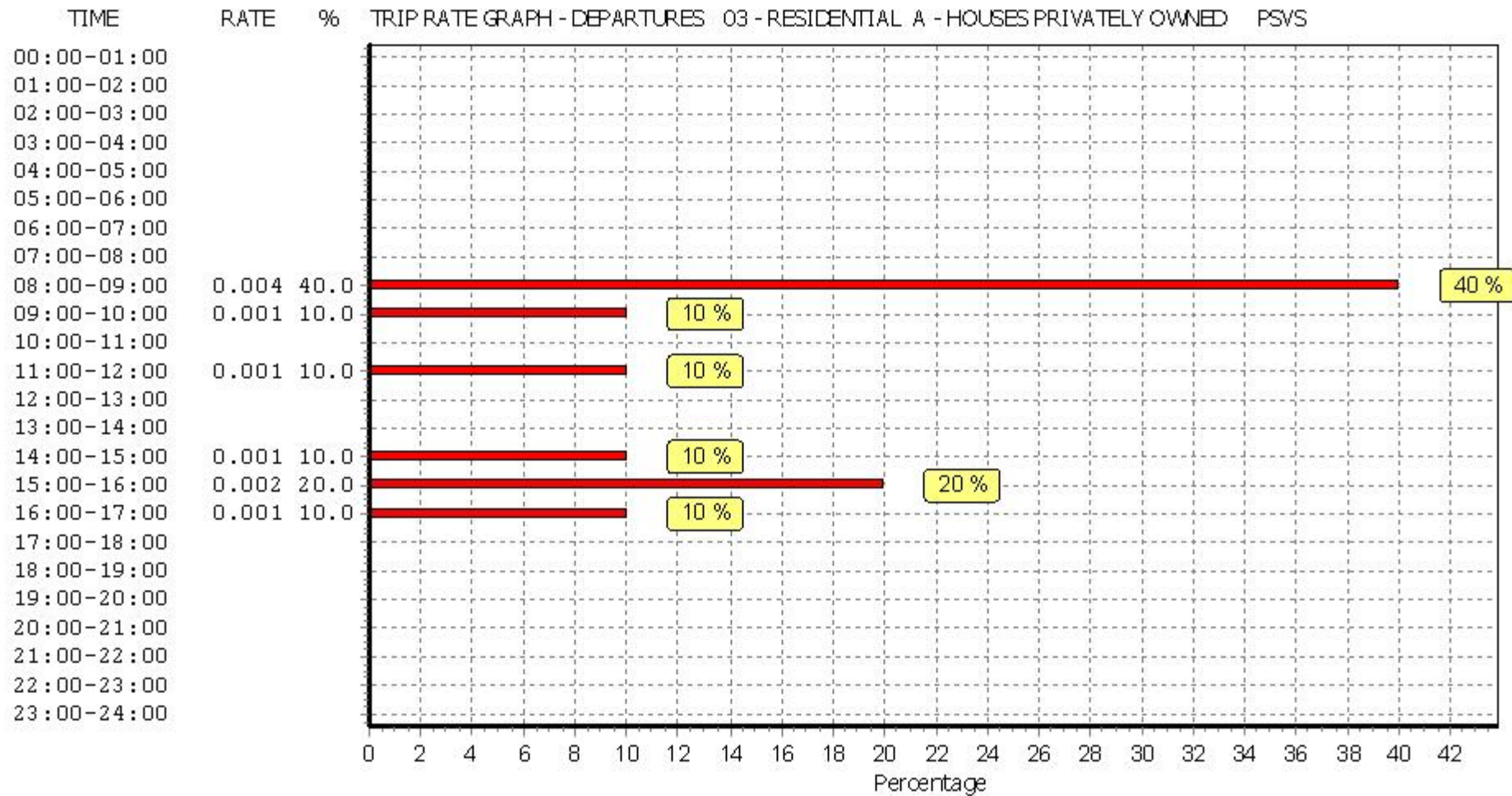
Parameter summary

Trip rate parameter range selected: 22 - 805 (units:)
 Survey date date range: 01/01/09 - 28/03/17
 Number of weekdays (Monday-Friday): 31
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

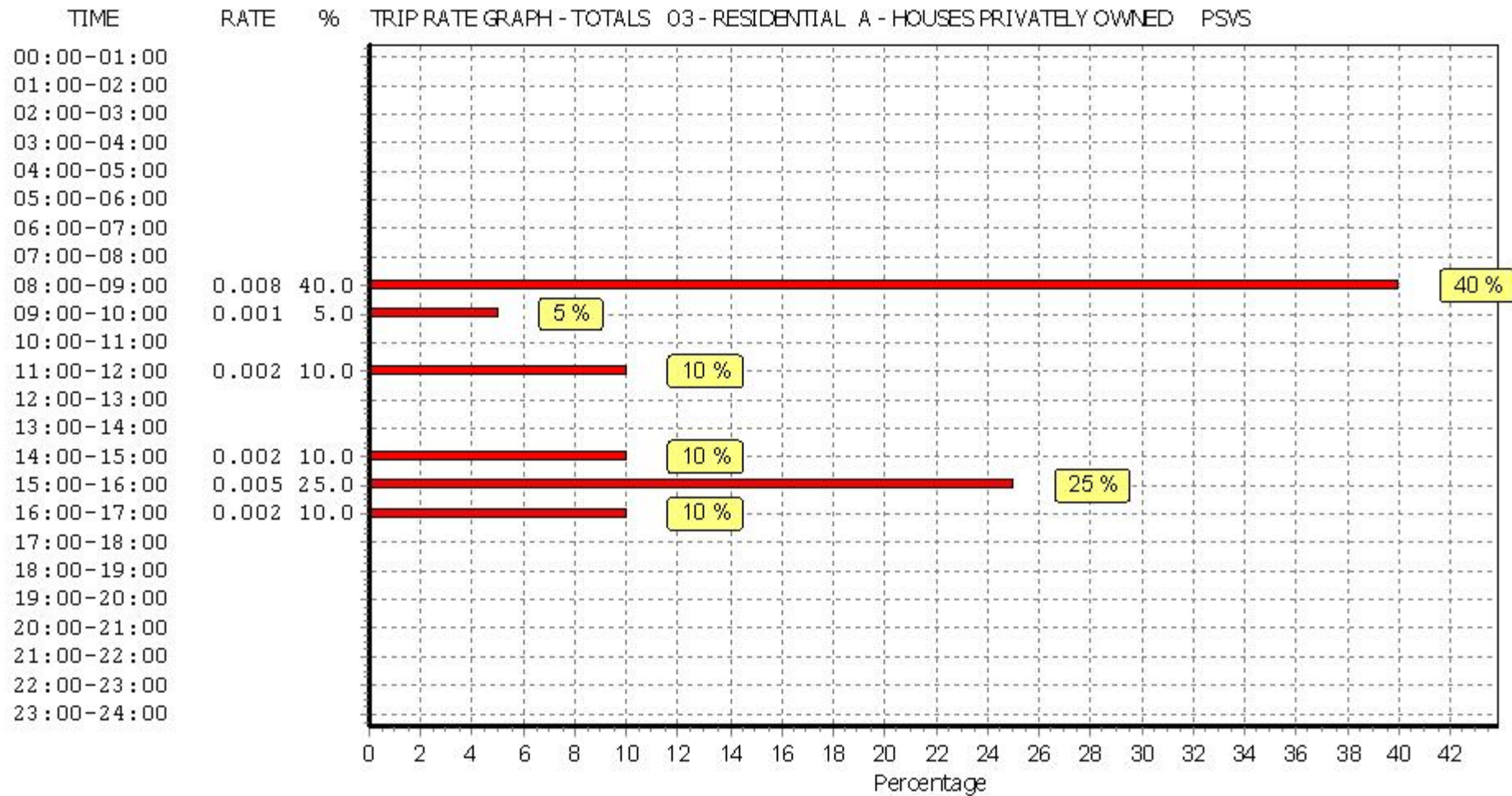
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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

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	31	101	0.003	31	101	0.005	31	101	0.008
08:00 - 09:00	31	101	0.000	31	101	0.012	31	101	0.012
09:00 - 10:00	31	101	0.002	31	101	0.004	31	101	0.006
10:00 - 11:00	31	101	0.003	31	101	0.004	31	101	0.007
11:00 - 12:00	31	101	0.004	31	101	0.003	31	101	0.007
12:00 - 13:00	31	101	0.002	31	101	0.004	31	101	0.006
13:00 - 14:00	31	101	0.004	31	101	0.005	31	101	0.009
14:00 - 15:00	31	101	0.002	31	101	0.003	31	101	0.005
15:00 - 16:00	31	101	0.008	31	101	0.004	31	101	0.012
16:00 - 17:00	31	101	0.009	31	101	0.007	31	101	0.016
17:00 - 18:00	31	101	0.011	31	101	0.008	31	101	0.019
18:00 - 19:00	31	101	0.007	31	101	0.003	31	101	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.055			0.062			0.117

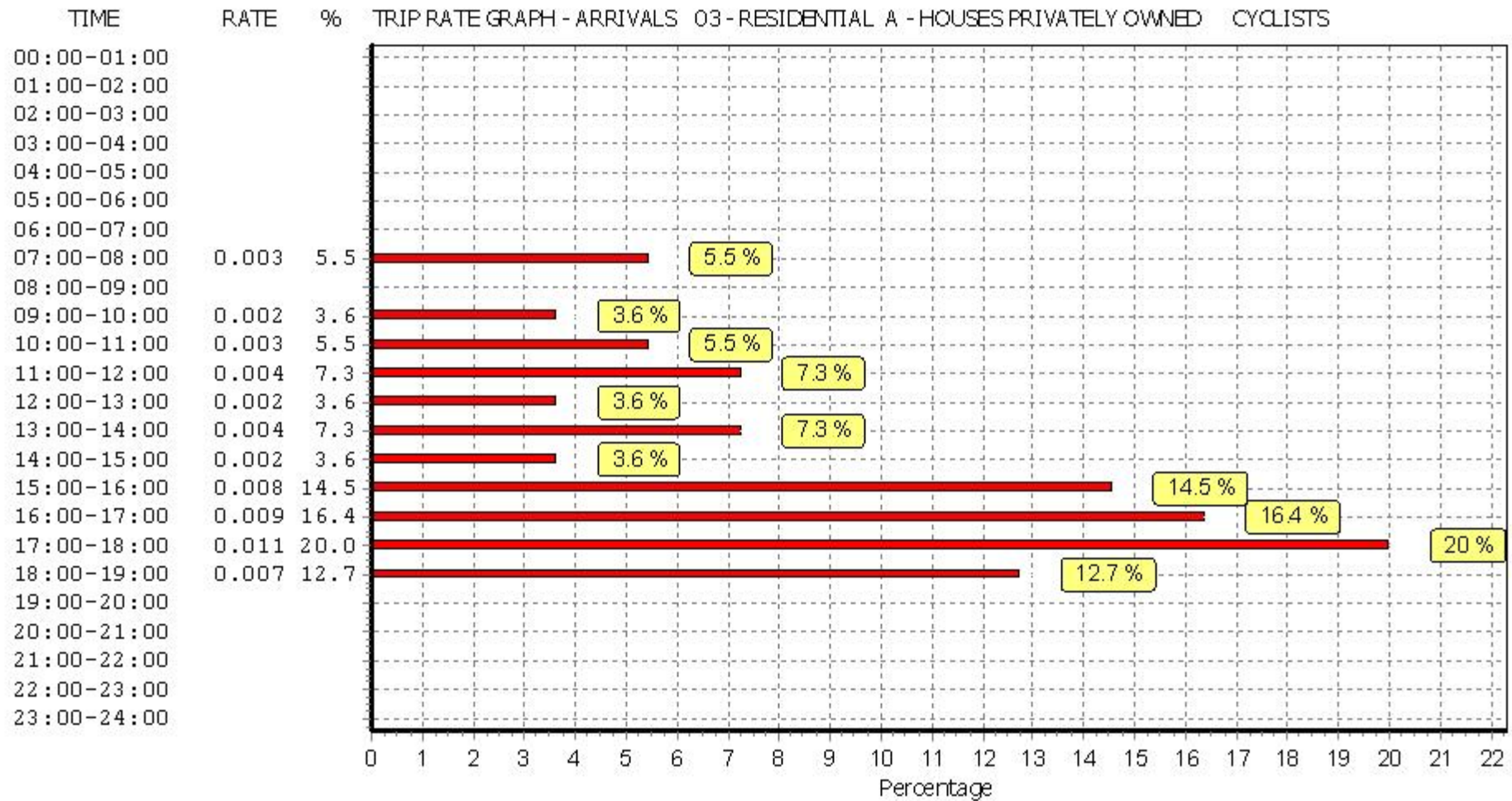
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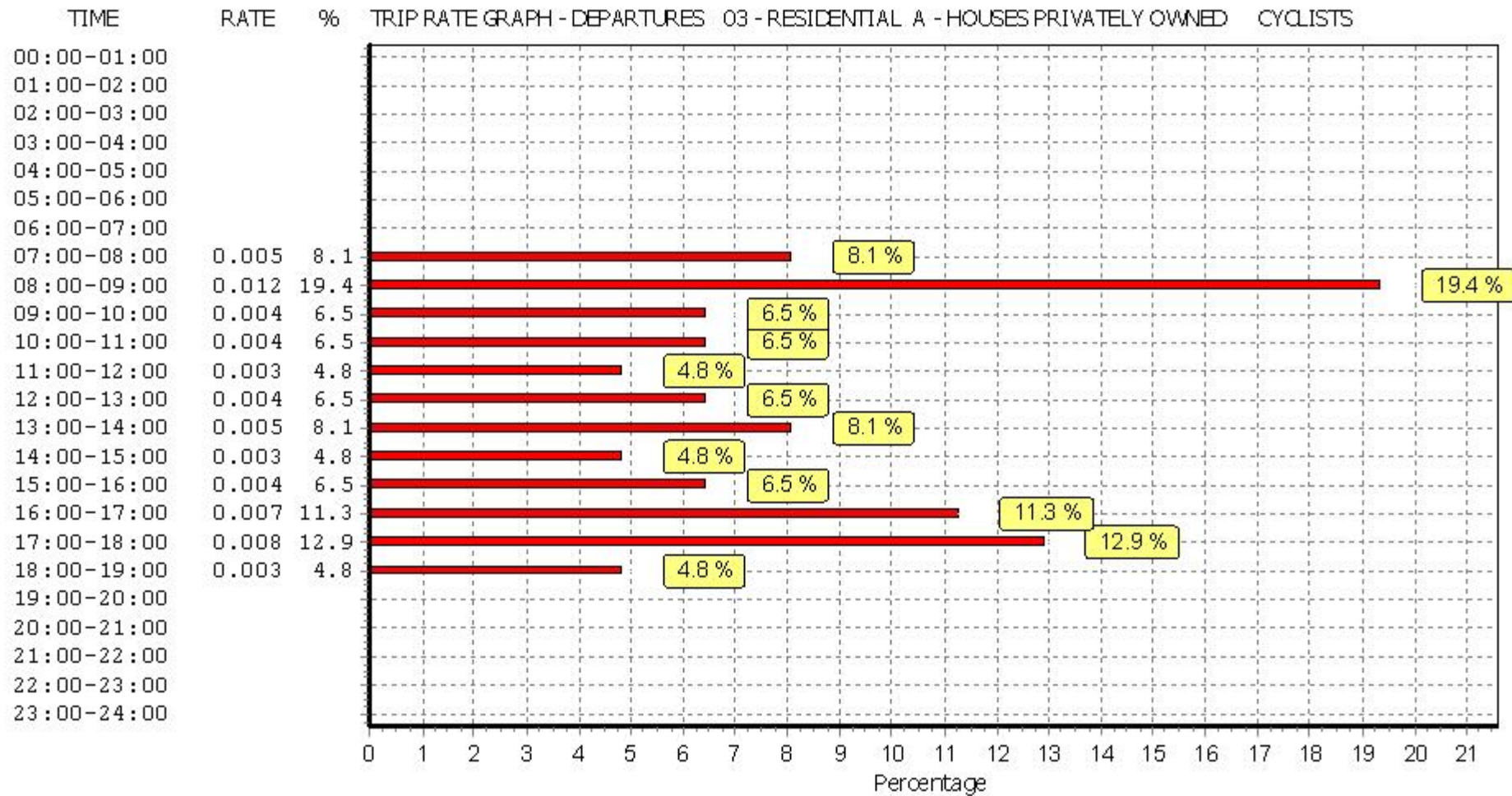
Parameter summary

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 Survey date date range: 01/01/09 - 28/03/17
 Number of weekdays (Monday-Friday): 31
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
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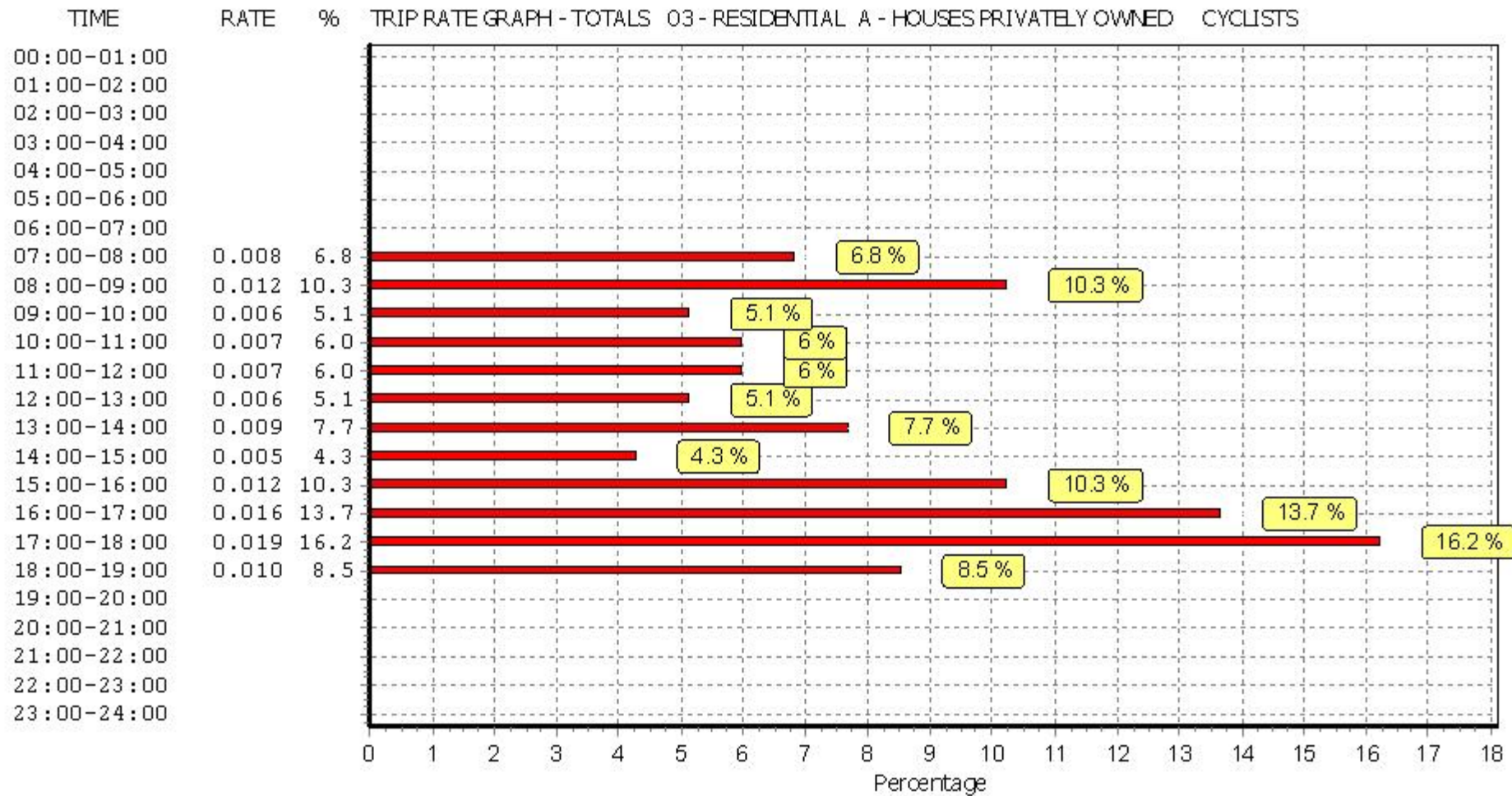
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Calculation Reference: AUDIT-638801-170821-0836

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
 Category : B - SECONDARY
 VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	SM SOMERSET	1 days
05	EAST MIDLANDS	
	NT NOTTINGHAMSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
12	CONNAUGHT	
	RO ROSCOMMON	1 days
14	LEINSTER	
	WC WICKLOW	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	DN DONEGAL	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 pupils
 Actual Range: 272 to 1561 (units:)
 Range Selected by User: 213 to 1913 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 23/03/17

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	1 days
Wednesday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	4

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

Selected Location Sub Categories:

Residential Zone	5
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

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
15,001 to 20,000 2 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 2 days

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

Car ownership within 5 miles:

0.6 to 1.0 2 days
1.1 to 1.5 3 days
1.6 to 2.0 1 days

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

Travel Plan:

Yes 1 days
No 5 days

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

PTAL Rating:

No PTAL Present 6 days

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

LIST OF SITES relevant to selection parameters

1	DN-04-B-01	SEC. SCHOOL	DONEGAL
	KILMACRENNAN ROAD		
	KNOCKNAMONA		
	LETTERKENNY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of pupils:	300	
	Survey date: WEDNESDAY	30/11/11	Survey Type: MANUAL
2	NE-04-B-01	SECONDARY SCHOOL	NORTH EAST LINCOLNSHIRE
	FOXHILLS ROAD		
	SCUNTHORPE		
	Edge of Town		
	Residential Zone		
	Total Number of pupils:	520	
	Survey date: MONDAY	19/05/14	Survey Type: MANUAL
3	NT-04-B-01	SECONDARY SCHOOL	NOTTINGHAMSHIRE
	THE BANKS		
	BINGHAM		
	NEAR NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of pupils:	1561	
	Survey date: THURSDAY	23/03/17	Survey Type: MANUAL
4	RO-04-B-01	SECONDARY SCHOOL	ROSCOMMON
	ST THERESA'S ROAD		
	ROSCOMMON		
	Edge of Town		
	Residential Zone		
	Total Number of pupils:	272	
	Survey date: TUESDAY	23/09/14	Survey Type: MANUAL
5	SM-04-B-01	SECONDARY SCH.	SOMERSET
	DURLEIGH ROAD		
	BRIDGWATER		
	Edge of Town		
	Residential Zone		
	Total Number of pupils:	1073	
	Survey date: WEDNESDAY	21/10/09	Survey Type: MANUAL
6	WC-04-B-01	SECONDARY SCHOOL	WICKLOW
	NEWCASTLE ROAD		
	KILCOOLE		
	Edge of Town		
	No Sub Category		
	Total Number of pupils:	586	
	Survey date: MONDAY	18/10/10	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/B - SECONDARY
VEHICLES

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	719	0.047	6	719	0.006	6	719	0.053
08:00 - 09:00	6	719	0.167	6	719	0.108	6	719	0.275
09:00 - 10:00	6	719	0.023	6	719	0.012	6	719	0.035
10:00 - 11:00	6	719	0.010	6	719	0.012	6	719	0.022
11:00 - 12:00	6	719	0.015	6	719	0.017	6	719	0.032
12:00 - 13:00	6	719	0.015	6	719	0.019	6	719	0.034
13:00 - 14:00	6	719	0.011	6	719	0.016	6	719	0.027
14:00 - 15:00	6	719	0.020	6	719	0.026	6	719	0.046
15:00 - 16:00	6	719	0.061	6	719	0.104	6	719	0.165
16:00 - 17:00	6	719	0.033	6	719	0.054	6	719	0.087
17:00 - 18:00	6	719	0.033	6	719	0.045	6	719	0.078
18:00 - 19:00	5	758	0.014	5	758	0.022	5	758	0.036
19:00 - 20:00	1	586	0.060	1	586	0.007	1	586	0.067
20:00 - 21:00	1	586	0.000	1	586	0.000	1	586	0.000
21:00 - 22:00	1	586	0.005	1	586	0.067	1	586	0.072
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.514			0.515			1.029

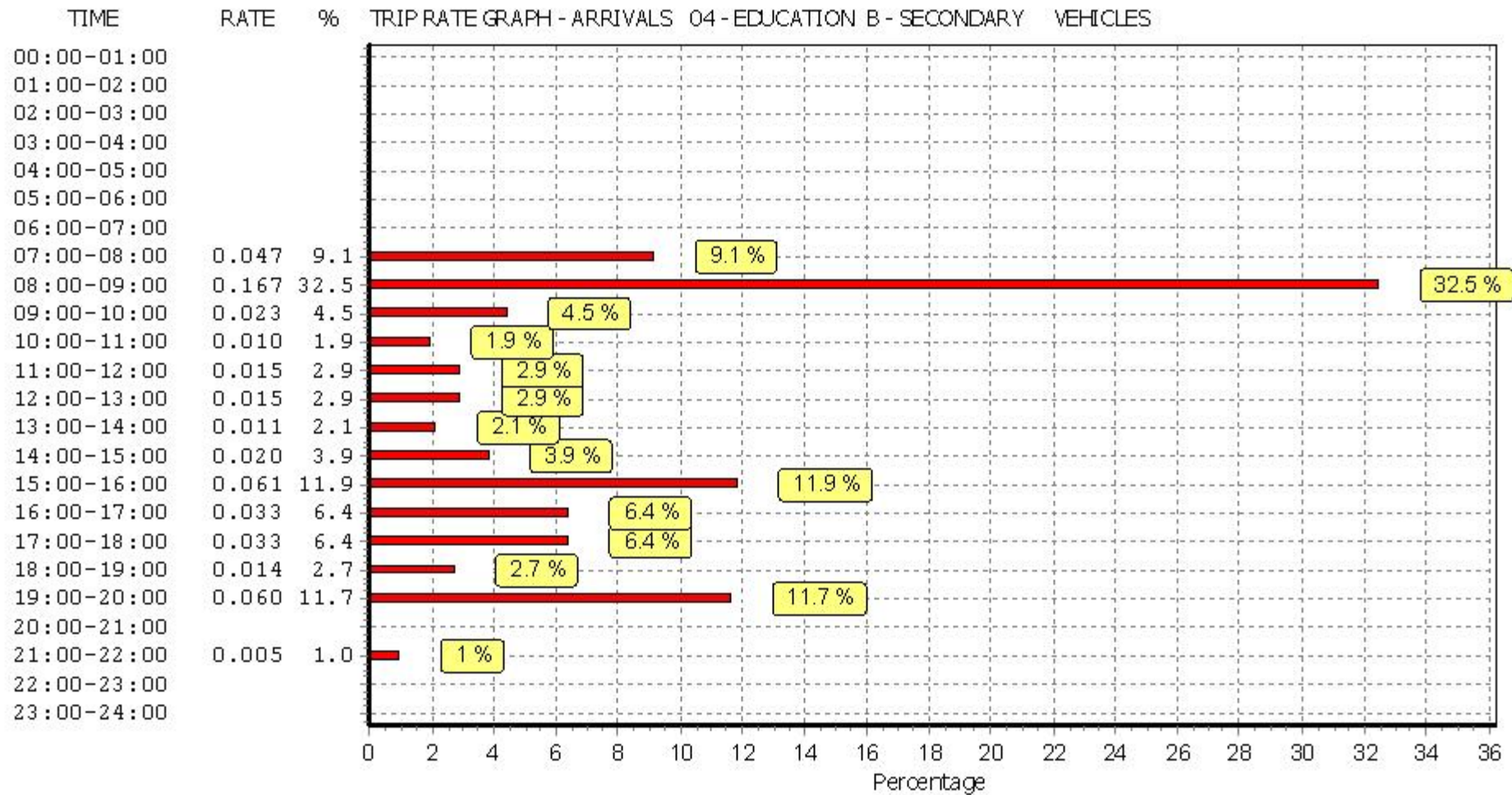
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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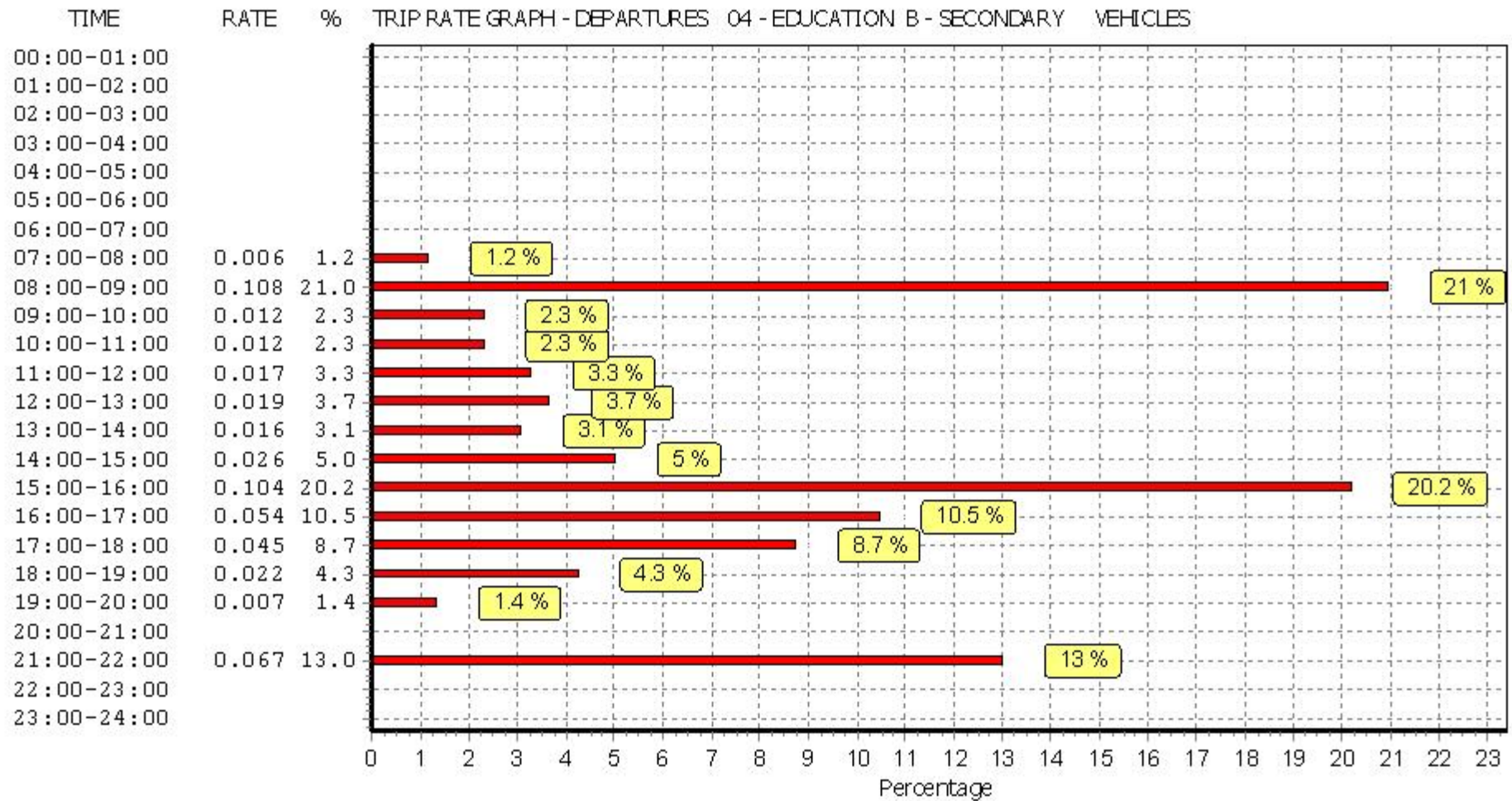
Parameter summary

Trip rate parameter range selected: 272 - 1561 (units:)
 Survey date date range: 01/01/09 - 23/03/17
 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

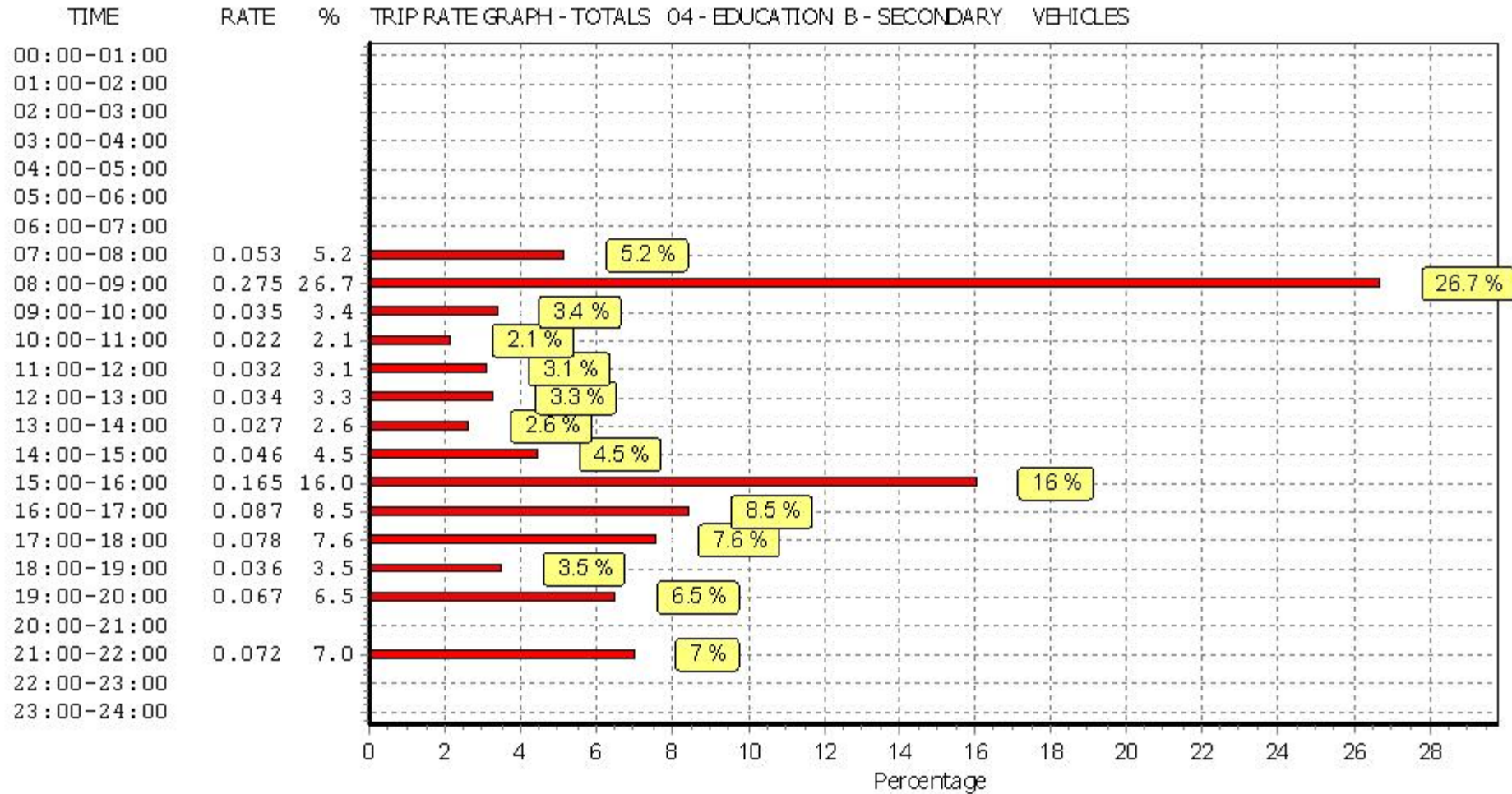
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY
TAXIS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	719	0.000	6	719	0.000	6	719	0.000
08:00 - 09:00	6	719	0.001	6	719	0.001	6	719	0.002
09:00 - 10:00	6	719	0.000	6	719	0.000	6	719	0.000
10:00 - 11:00	6	719	0.000	6	719	0.000	6	719	0.000
11:00 - 12:00	6	719	0.000	6	719	0.000	6	719	0.000
12:00 - 13:00	6	719	0.000	6	719	0.000	6	719	0.000
13:00 - 14:00	6	719	0.000	6	719	0.000	6	719	0.000
14:00 - 15:00	6	719	0.002	6	719	0.000	6	719	0.002
15:00 - 16:00	6	719	0.000	6	719	0.001	6	719	0.001
16:00 - 17:00	6	719	0.000	6	719	0.000	6	719	0.000
17:00 - 18:00	6	719	0.000	6	719	0.000	6	719	0.000
18:00 - 19:00	5	758	0.000	5	758	0.000	5	758	0.000
19:00 - 20:00	1	586	0.000	1	586	0.000	1	586	0.000
20:00 - 21:00	1	586	0.000	1	586	0.000	1	586	0.000
21:00 - 22:00	1	586	0.000	1	586	0.000	1	586	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.002			0.005

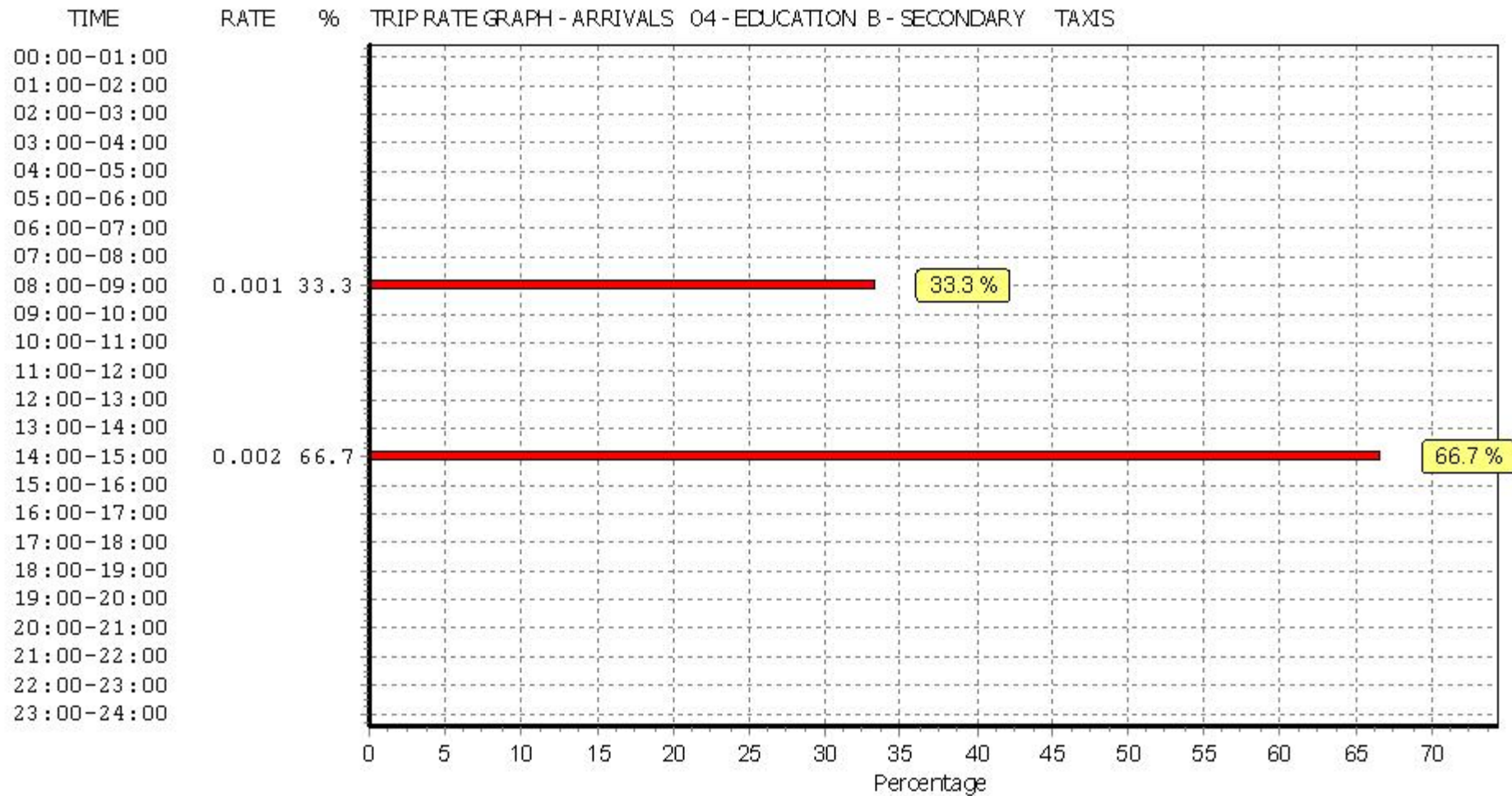
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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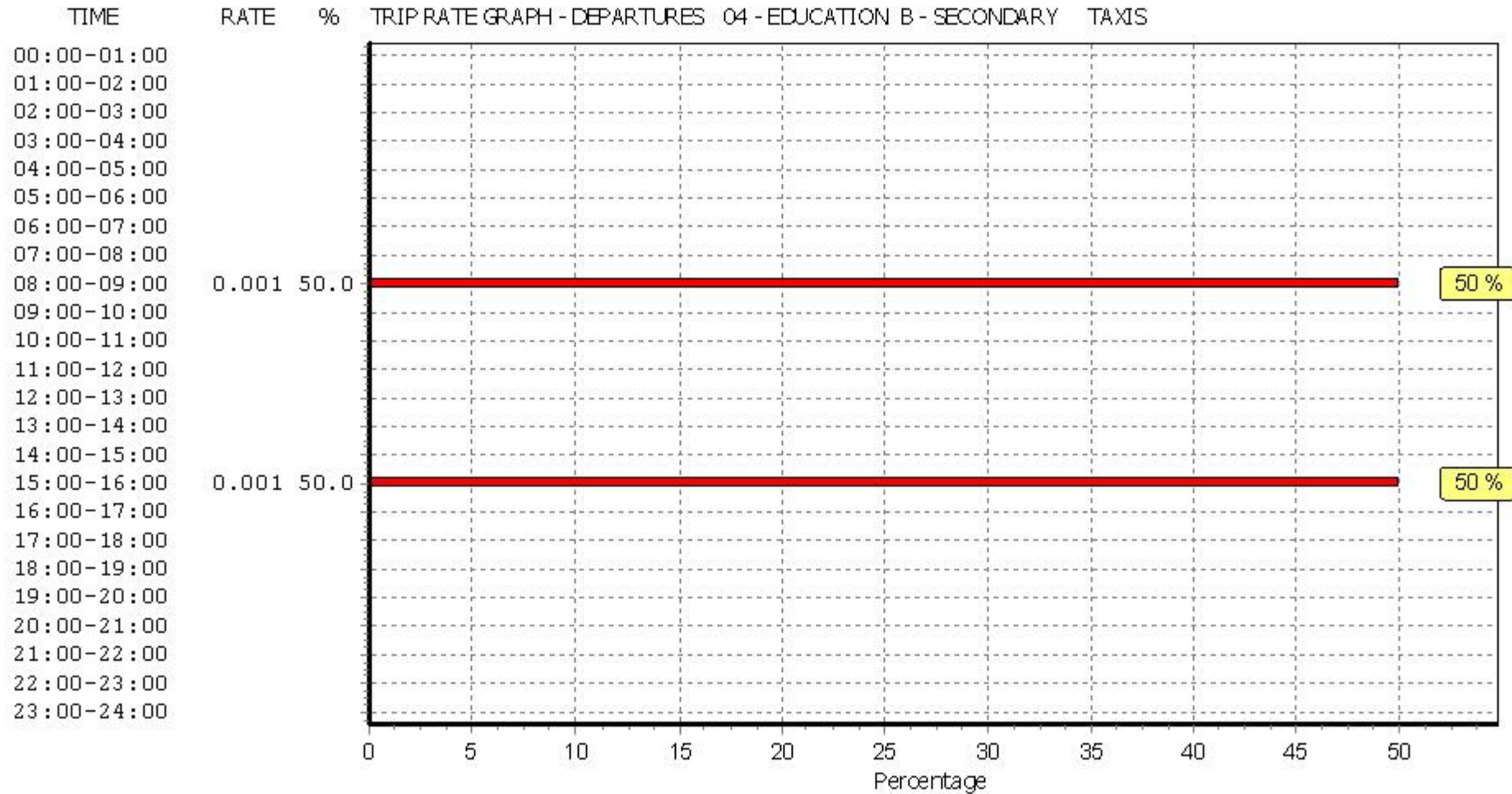
Parameter summary

Trip rate parameter range selected: 272 - 1561 (units:)
 Survey date date range: 01/01/09 - 23/03/17
 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

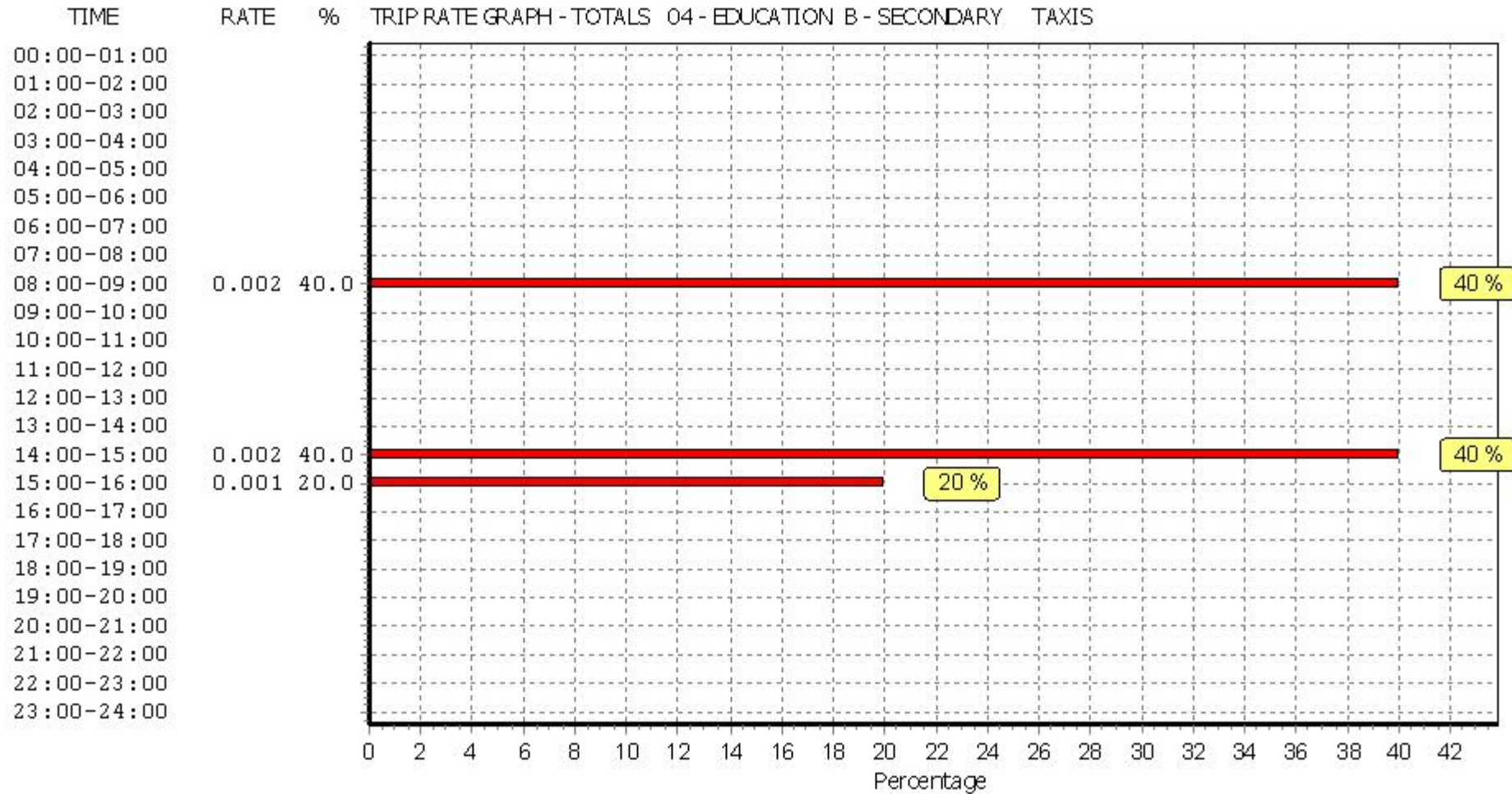
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY
OGVS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	719	0.000	6	719	0.000	6	719	0.000
08:00 - 09:00	6	719	0.000	6	719	0.000	6	719	0.000
09:00 - 10:00	6	719	0.000	6	719	0.000	6	719	0.000
10:00 - 11:00	6	719	0.000	6	719	0.000	6	719	0.000
11:00 - 12:00	6	719	0.000	6	719	0.000	6	719	0.000
12:00 - 13:00	6	719	0.000	6	719	0.000	6	719	0.000
13:00 - 14:00	6	719	0.000	6	719	0.000	6	719	0.000
14:00 - 15:00	6	719	0.000	6	719	0.000	6	719	0.000
15:00 - 16:00	6	719	0.000	6	719	0.000	6	719	0.000
16:00 - 17:00	6	719	0.000	6	719	0.000	6	719	0.000
17:00 - 18:00	6	719	0.000	6	719	0.000	6	719	0.000
18:00 - 19:00	5	758	0.000	5	758	0.000	5	758	0.000
19:00 - 20:00	1	586	0.000	1	586	0.000	1	586	0.000
20:00 - 21:00	1	586	0.000	1	586	0.000	1	586	0.000
21:00 - 22:00	1	586	0.000	1	586	0.000	1	586	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

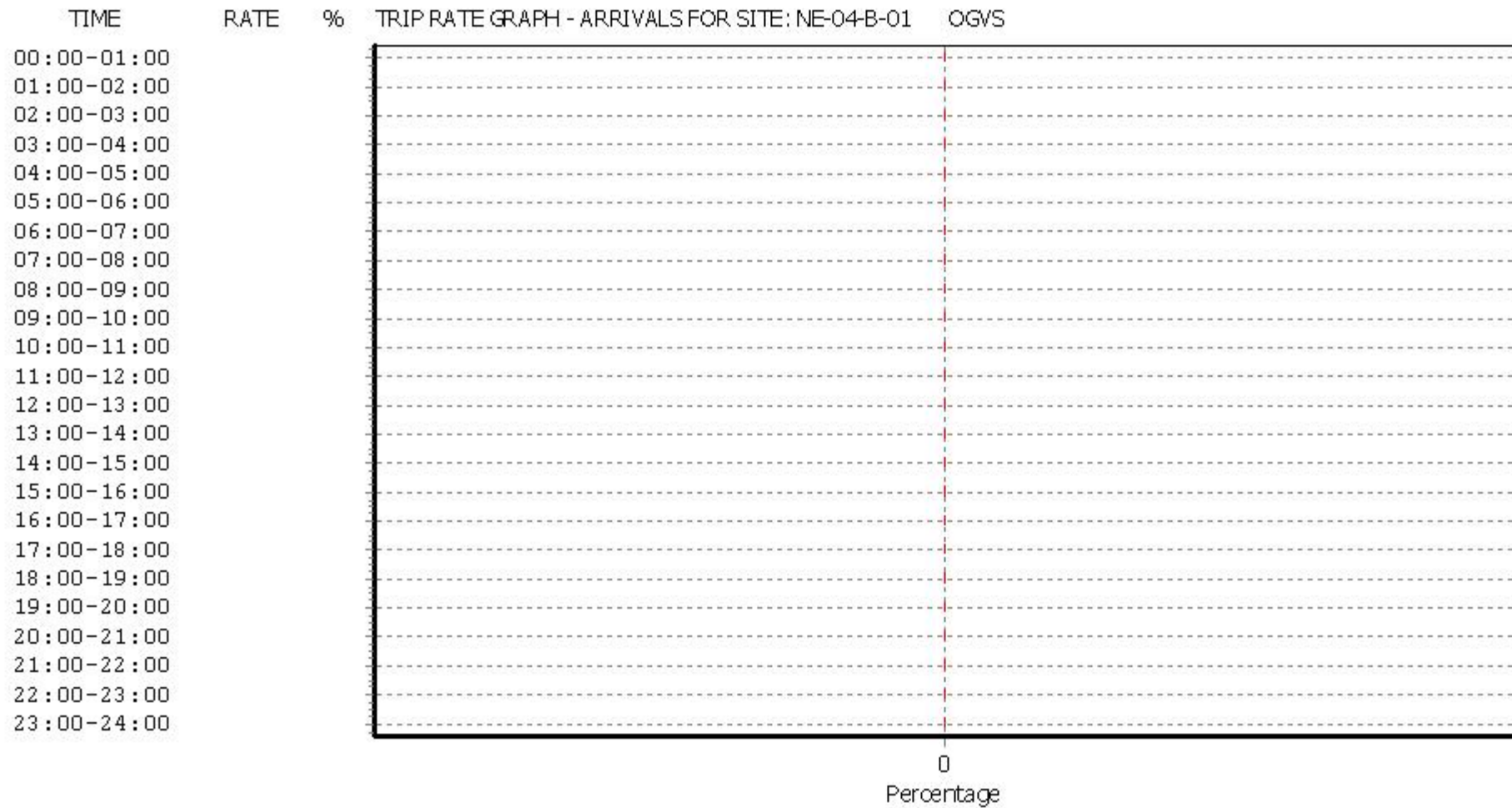
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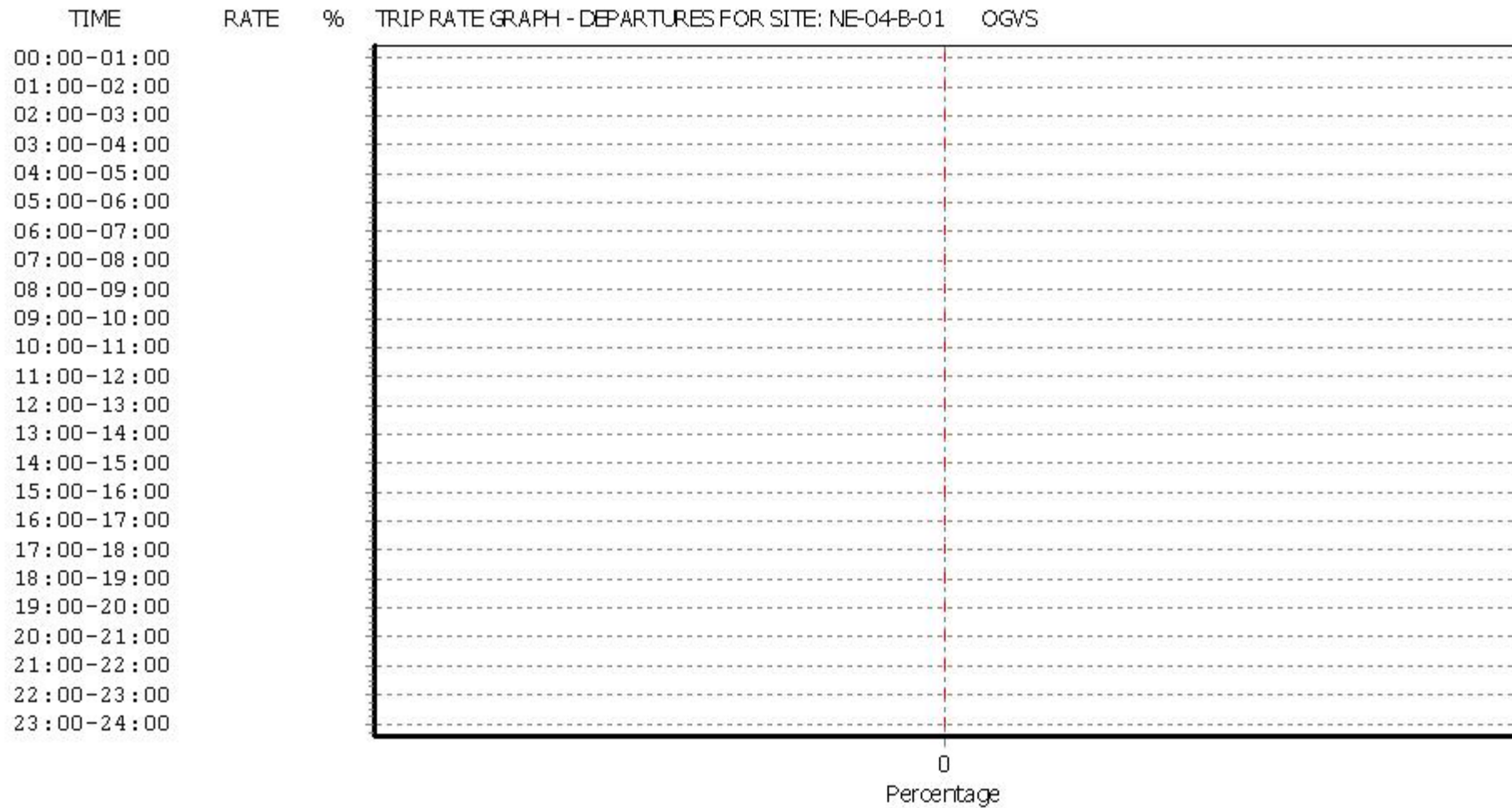
Parameter summary

Trip rate parameter range selected: 272 - 1561 (units:)
 Survey date date range: 01/01/09 - 23/03/17
 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

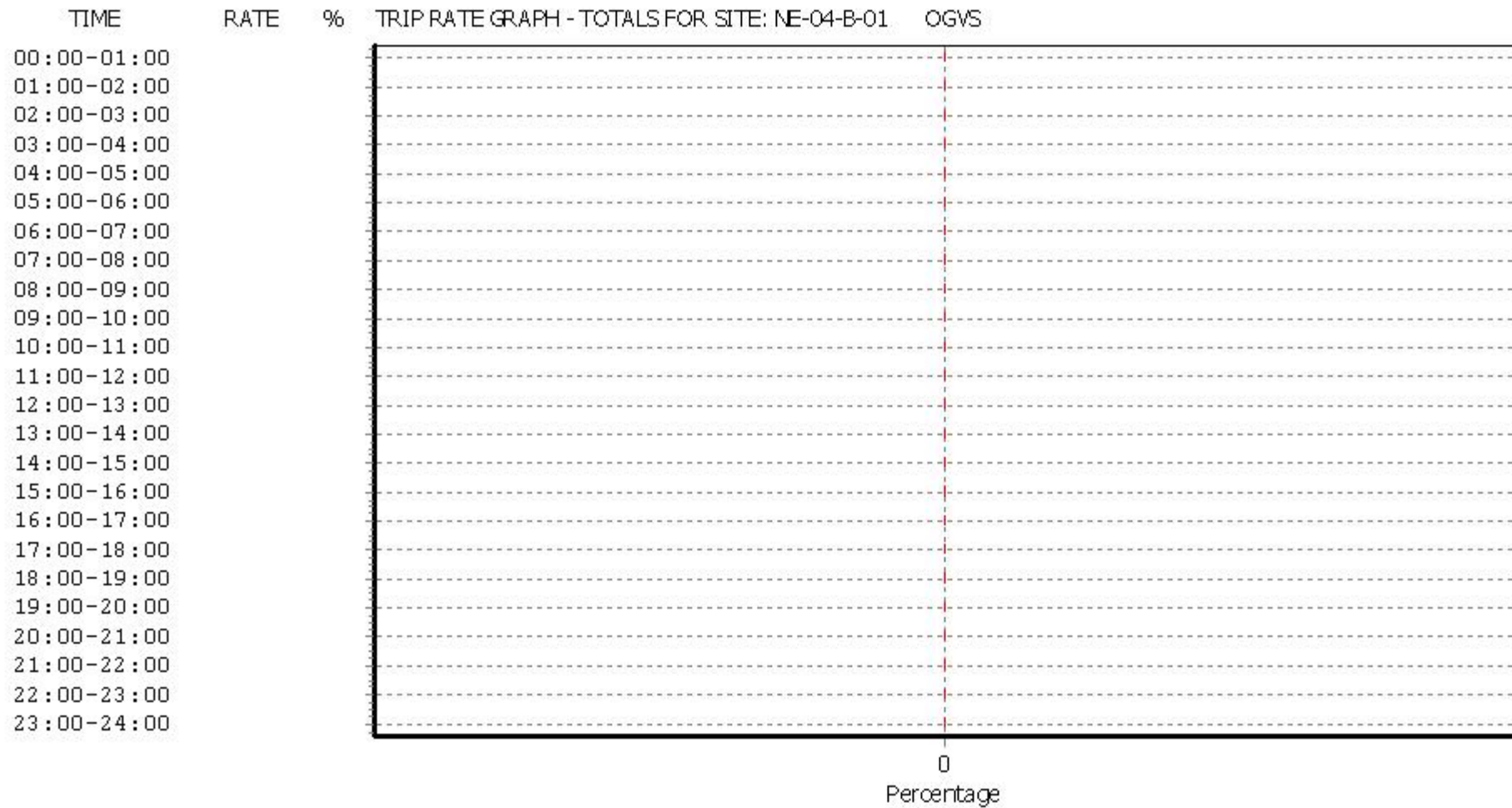
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY
PSVS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	719	0.000	6	719	0.000	6	719	0.000
08:00 - 09:00	6	719	0.006	6	719	0.005	6	719	0.011
09:00 - 10:00	6	719	0.000	6	719	0.000	6	719	0.000
10:00 - 11:00	6	719	0.000	6	719	0.000	6	719	0.000
11:00 - 12:00	6	719	0.000	6	719	0.001	6	719	0.001
12:00 - 13:00	6	719	0.000	6	719	0.000	6	719	0.000
13:00 - 14:00	6	719	0.000	6	719	0.000	6	719	0.000
14:00 - 15:00	6	719	0.000	6	719	0.000	6	719	0.000
15:00 - 16:00	6	719	0.005	6	719	0.004	6	719	0.009
16:00 - 17:00	6	719	0.000	6	719	0.000	6	719	0.000
17:00 - 18:00	6	719	0.000	6	719	0.000	6	719	0.000
18:00 - 19:00	5	758	0.000	5	758	0.000	5	758	0.000
19:00 - 20:00	1	586	0.000	1	586	0.000	1	586	0.000
20:00 - 21:00	1	586	0.000	1	586	0.000	1	586	0.000
21:00 - 22:00	1	586	0.000	1	586	0.000	1	586	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.010			0.021

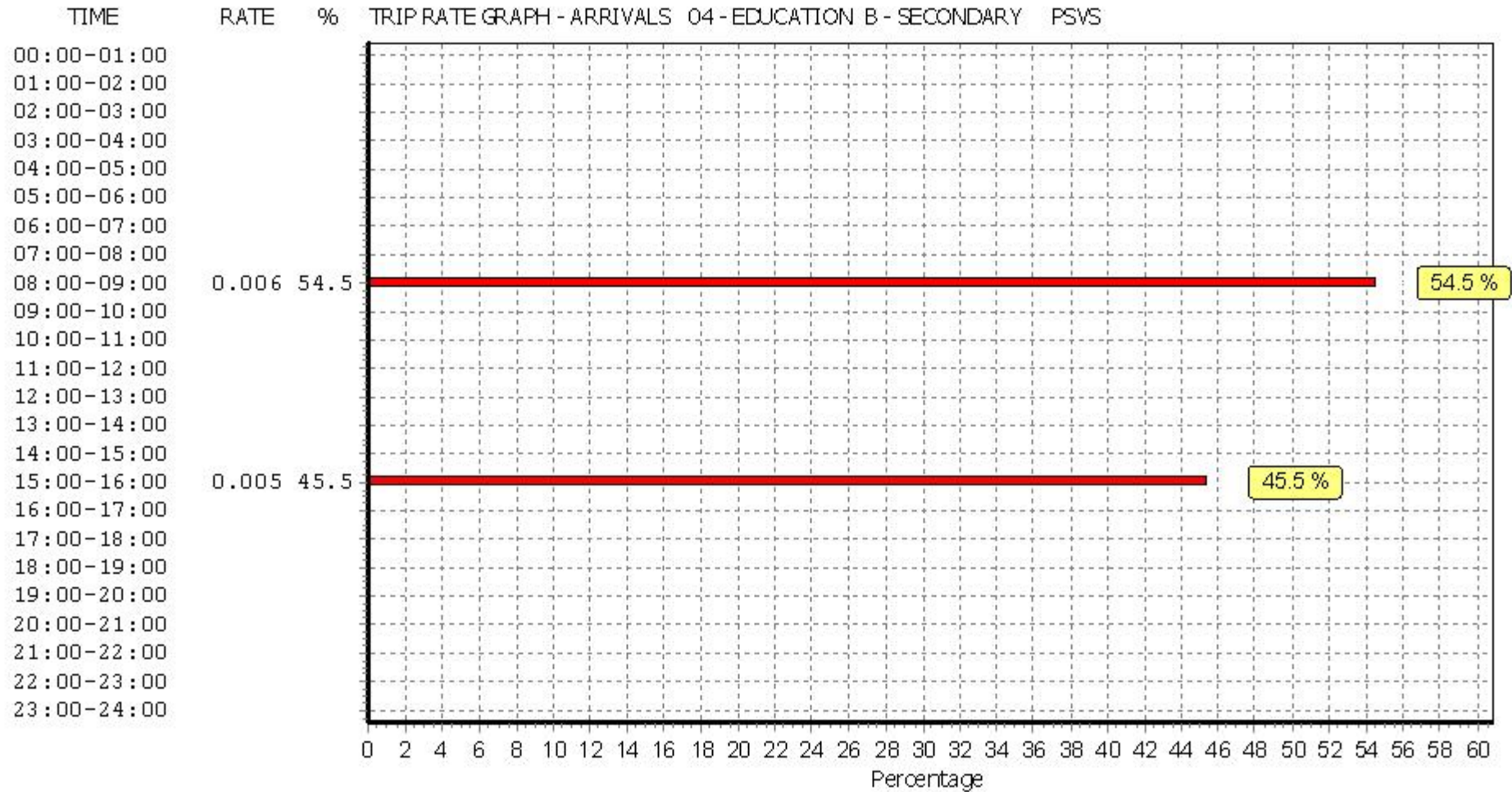
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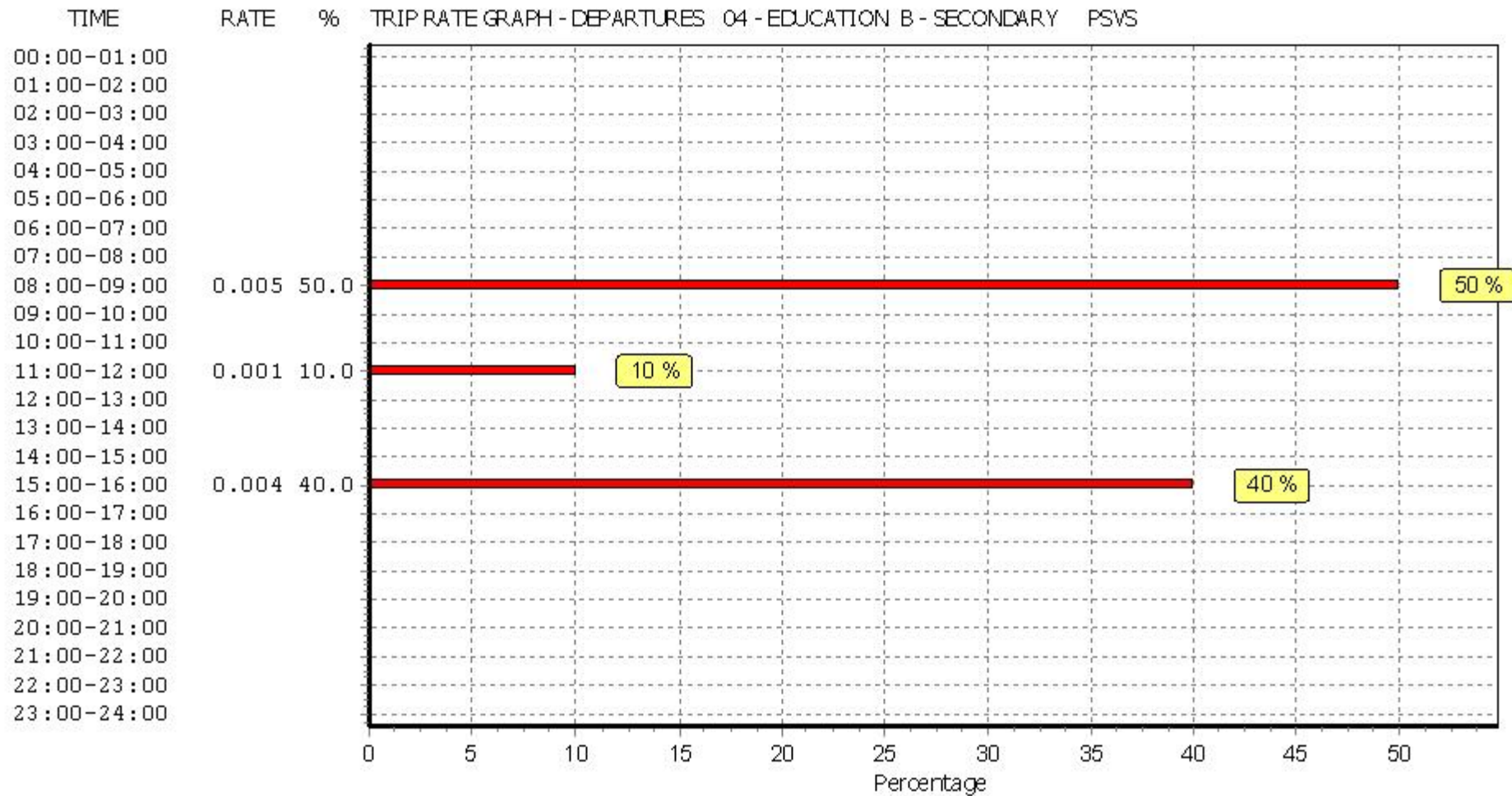
Parameter summary

Trip rate parameter range selected: 272 - 1561 (units:)
 Survey date date range: 01/01/09 - 23/03/17
 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

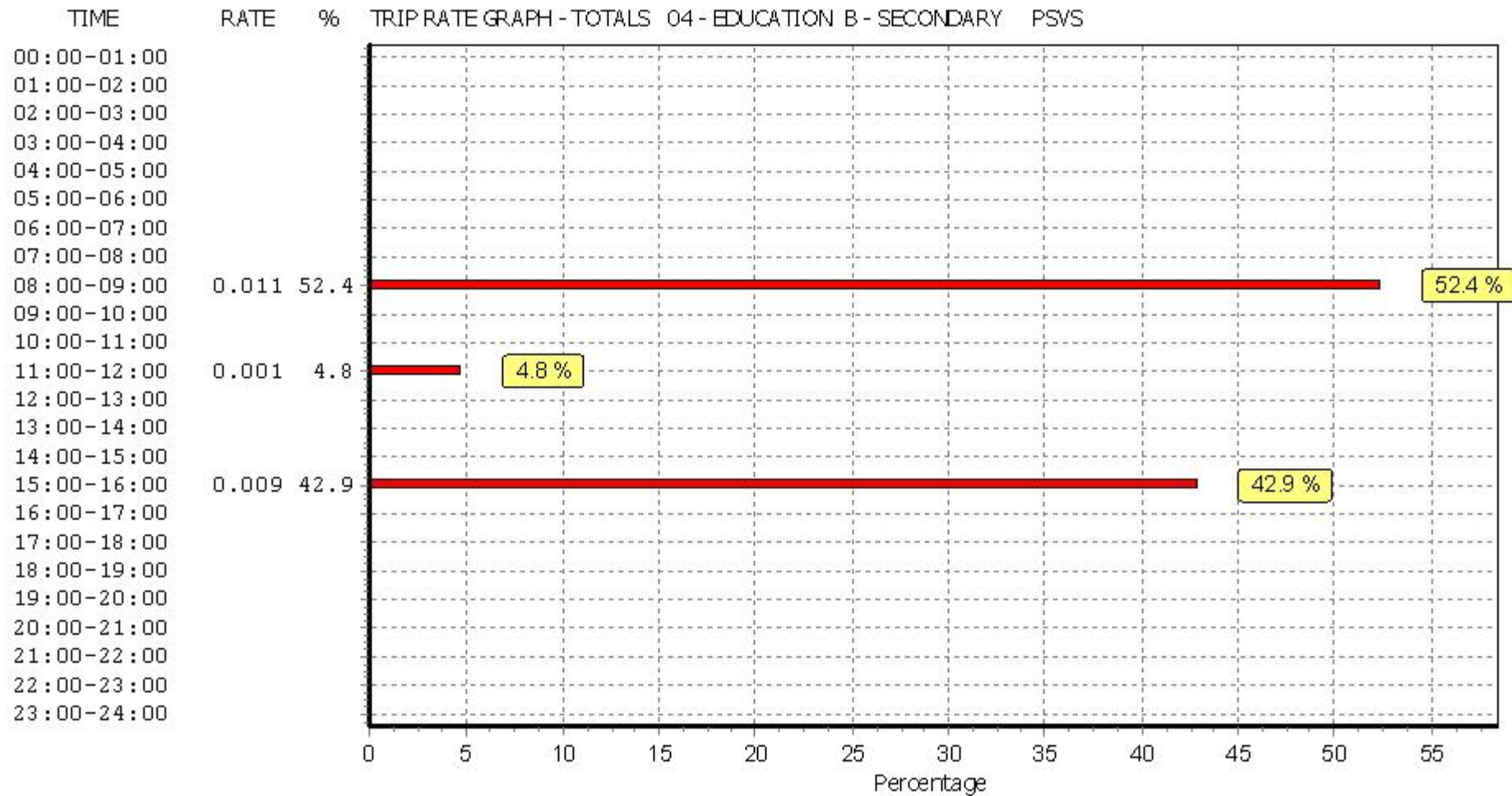
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY
CYCLISTS

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	719	0.006	6	719	0.000	6	719	0.006
08:00 - 09:00	6	719	0.014	6	719	0.000	6	719	0.014
09:00 - 10:00	6	719	0.002	6	719	0.000	6	719	0.002
10:00 - 11:00	6	719	0.000	6	719	0.000	6	719	0.000
11:00 - 12:00	6	719	0.000	6	719	0.000	6	719	0.000
12:00 - 13:00	6	719	0.000	6	719	0.000	6	719	0.000
13:00 - 14:00	6	719	0.000	6	719	0.000	6	719	0.000
14:00 - 15:00	6	719	0.000	6	719	0.003	6	719	0.003
15:00 - 16:00	6	719	0.000	6	719	0.007	6	719	0.007
16:00 - 17:00	6	719	0.000	6	719	0.004	6	719	0.004
17:00 - 18:00	6	719	0.000	6	719	0.007	6	719	0.007
18:00 - 19:00	5	758	0.000	5	758	0.001	5	758	0.001
19:00 - 20:00	1	586	0.000	1	586	0.000	1	586	0.000
20:00 - 21:00	1	586	0.000	1	586	0.000	1	586	0.000
21:00 - 22:00	1	586	0.000	1	586	0.000	1	586	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.022			0.022			0.044

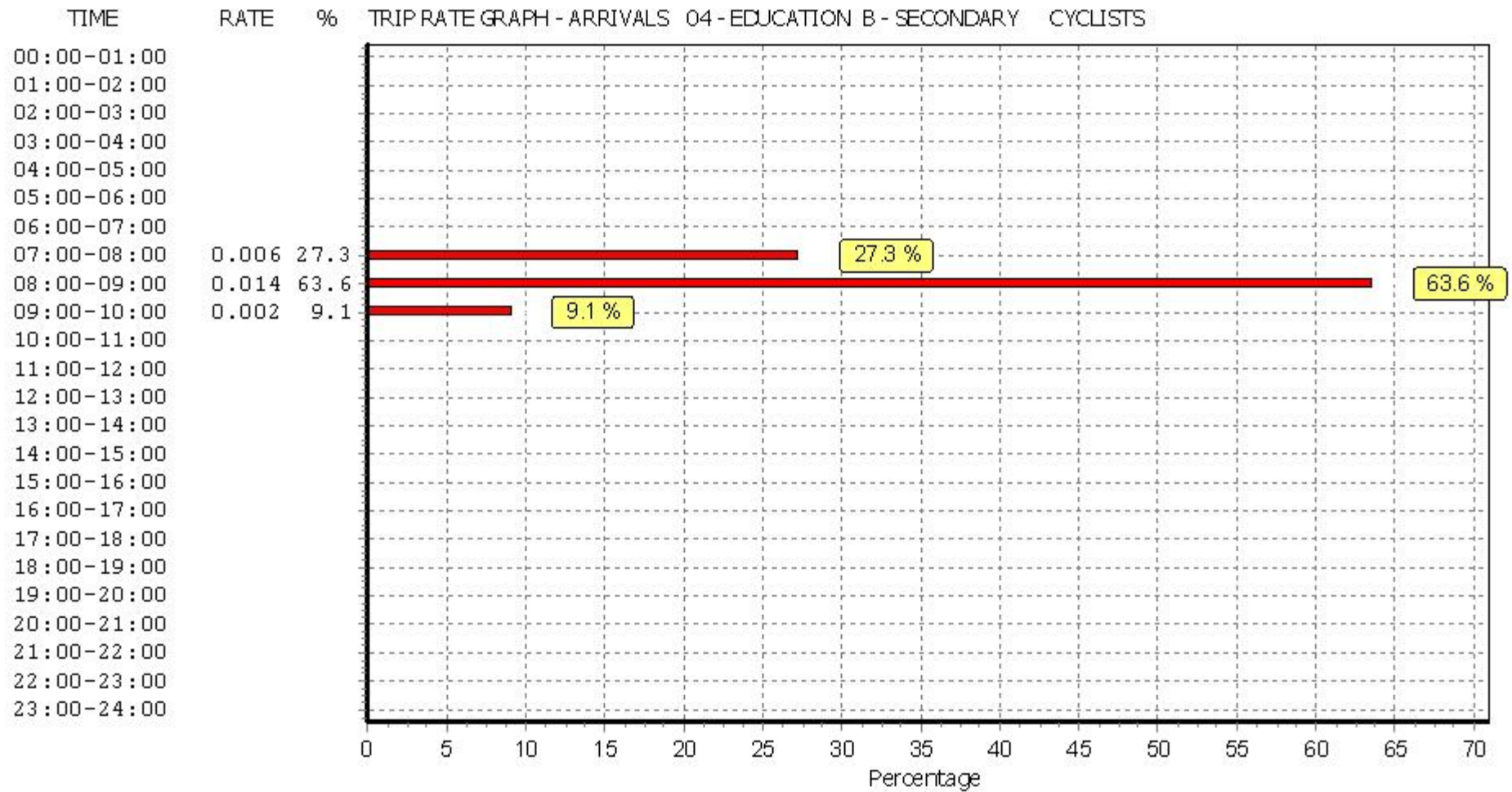
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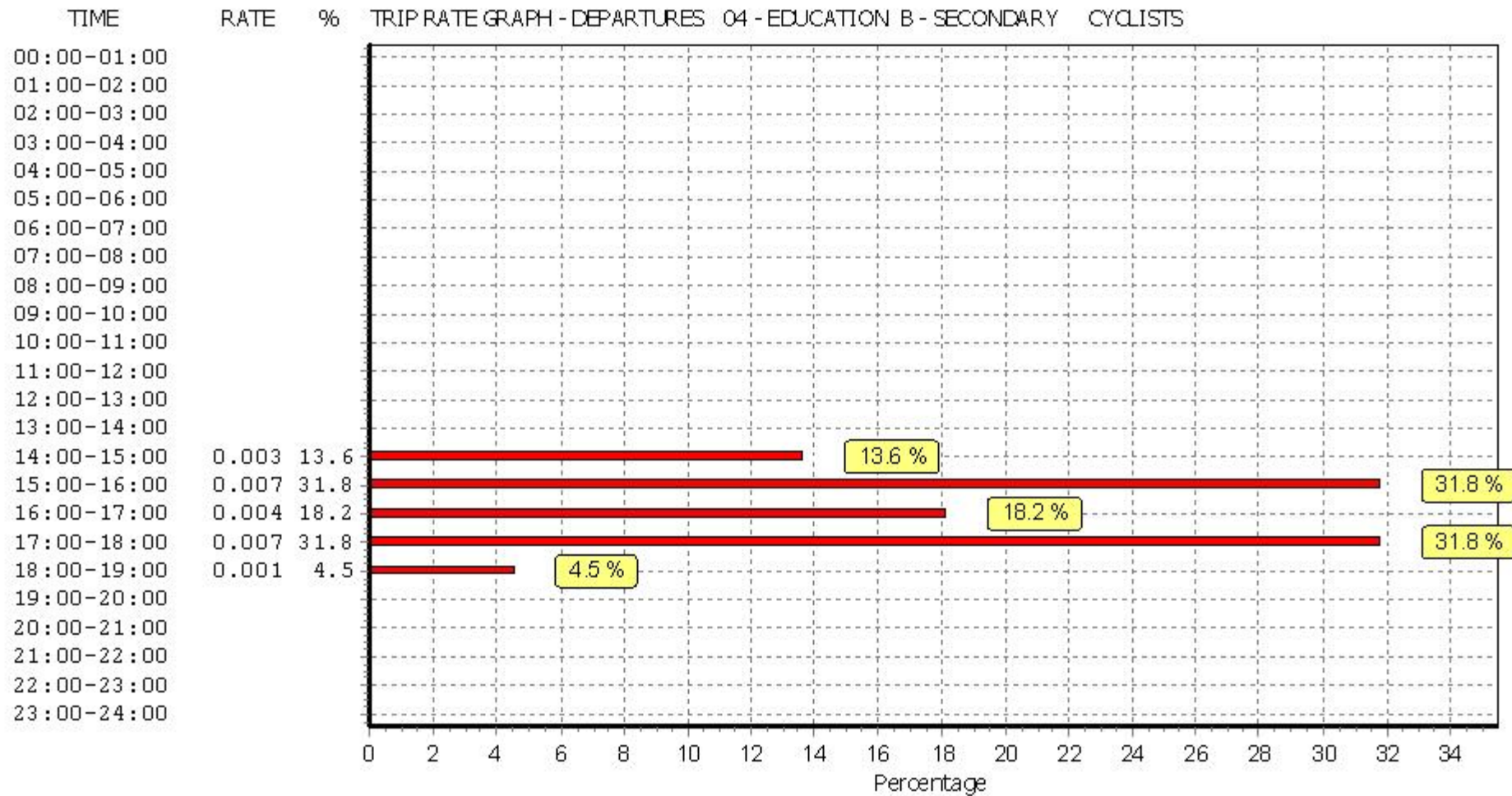
Parameter summary

Trip rate parameter range selected: 272 - 1561 (units:)
 Survey date date range: 01/01/09 - 23/03/17
 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

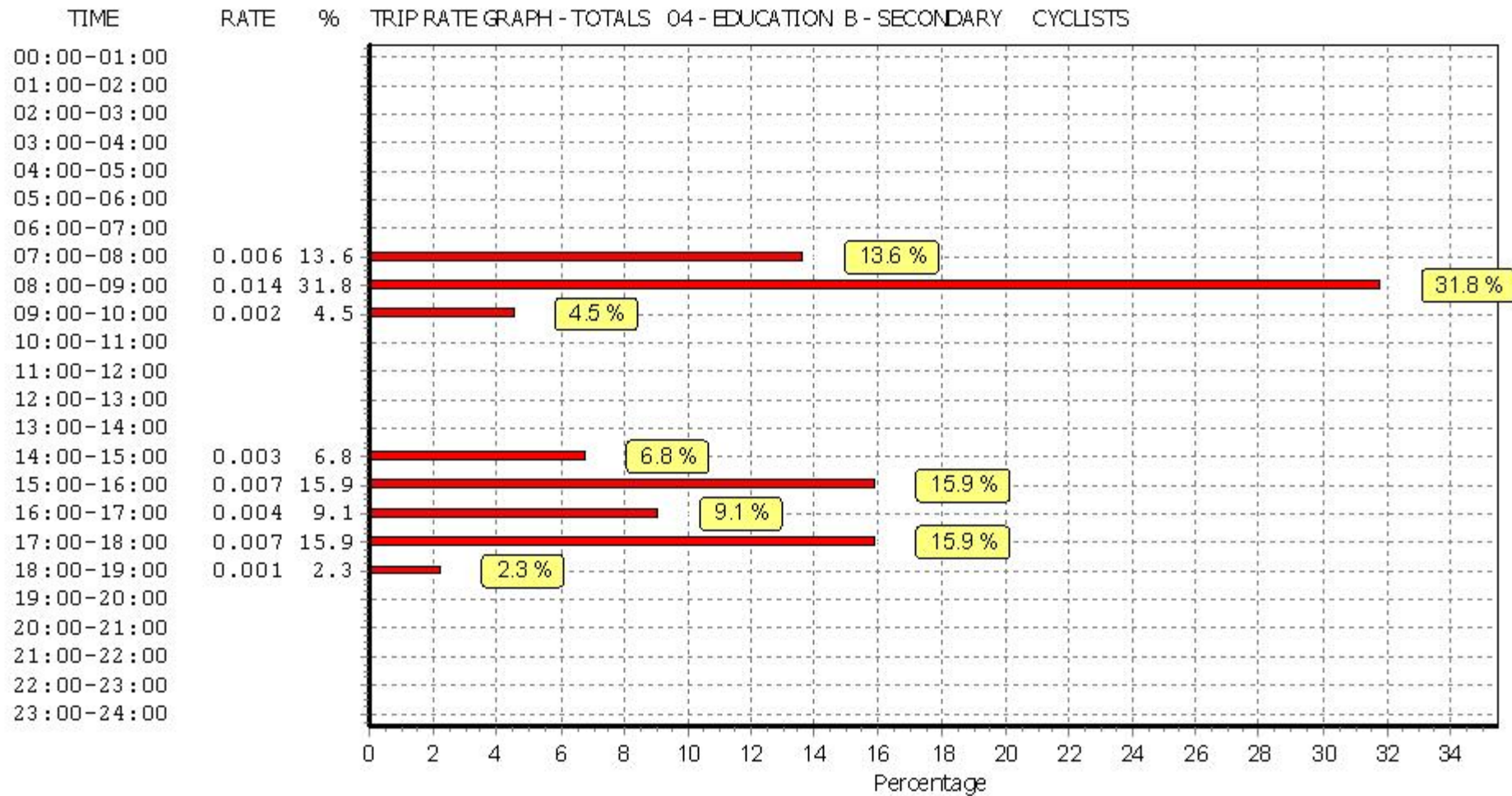
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This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, 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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Calculation Reference: AUDIT-638801-170821-0835

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : F - WAREHOUSING (COMMERCIAL)
 VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
10	WALES	
	WR WREXHAM	1 days
12	CONNAUGHT	
	GA GALWAY	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: 9000 to 32300 (units: sqm)
 Range Selected by User: 8000 to 80066 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 13/11/15

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	1 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	4 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	2
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	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:

B8 4 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 1 days
1,001 to 5,000 2 days
10,001 to 15,000 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 1 days
25,001 to 50,000 2 days
50,001 to 75,000 1 days

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

Car ownership within 5 miles:

1.1 to 1.5 4 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 4 days

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

PTAL Rating:

No PTAL Present 4 days

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

LIST OF SITES relevant to selection parameters

1	GA-02-F-01 PARKMORE WEST IDA BUS. & TECH. PARK GALWAY Edge of Town Industrial Zone Total Gross floor area: Survey date: FRIDAY	LOGISTICS 11000 sqm 12/10/12	GALWAY Survey Type: MANUAL
2	LN-02-F-01 TRENT ROAD GRANTHAM Edge of Town No Sub Category Total Gross floor area: Survey date: MONDAY	BOOK SERVICE 32300 sqm 29/11/10	LINCOLNSHIRE Survey Type: MANUAL
3	SF-02-F-02 WALTON ROAD FELIXSTOWE Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: Survey date: THURSDAY	WAREHOUSING 22270 sqm 11/07/13	SUFFOLK Survey Type: MANUAL
4	WR-02-F-01 UNIT 1-2 PACIFIC PARK WREXHAM IND. ESTATE NEAR WREXHAM Free Standing (PPS6 Out of Town) Industrial Zone Total Gross floor area: Survey date: TUESDAY	WAREHOUSE 9000 sqm 18/10/11	WREXHAM 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 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	1	22270	0.018	1	22270	0.040	1	22270	0.058
06:00 - 07:00	1	22270	0.058	1	22270	0.063	1	22270	0.121
07:00 - 08:00	4	18643	0.054	4	18643	0.017	4	18643	0.071
08:00 - 09:00	4	18643	0.078	4	18643	0.031	4	18643	0.109
09:00 - 10:00	4	18643	0.054	4	18643	0.038	4	18643	0.092
10:00 - 11:00	4	18643	0.047	4	18643	0.042	4	18643	0.089
11:00 - 12:00	4	18643	0.032	4	18643	0.030	4	18643	0.062
12:00 - 13:00	4	18643	0.039	4	18643	0.036	4	18643	0.075
13:00 - 14:00	4	18643	0.064	4	18643	0.038	4	18643	0.102
14:00 - 15:00	4	18643	0.044	4	18643	0.064	4	18643	0.108
15:00 - 16:00	4	18643	0.040	4	18643	0.044	4	18643	0.084
16:00 - 17:00	4	18643	0.020	4	18643	0.047	4	18643	0.067
17:00 - 18:00	4	18643	0.019	4	18643	0.059	4	18643	0.078
18:00 - 19:00	4	18643	0.013	4	18643	0.036	4	18643	0.049
19:00 - 20:00	1	22270	0.036	1	22270	0.031	1	22270	0.067
20:00 - 21:00	1	22270	0.013	1	22270	0.031	1	22270	0.044
21:00 - 22:00	1	22270	0.031	1	22270	0.018	1	22270	0.049
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.660			0.665			1.325

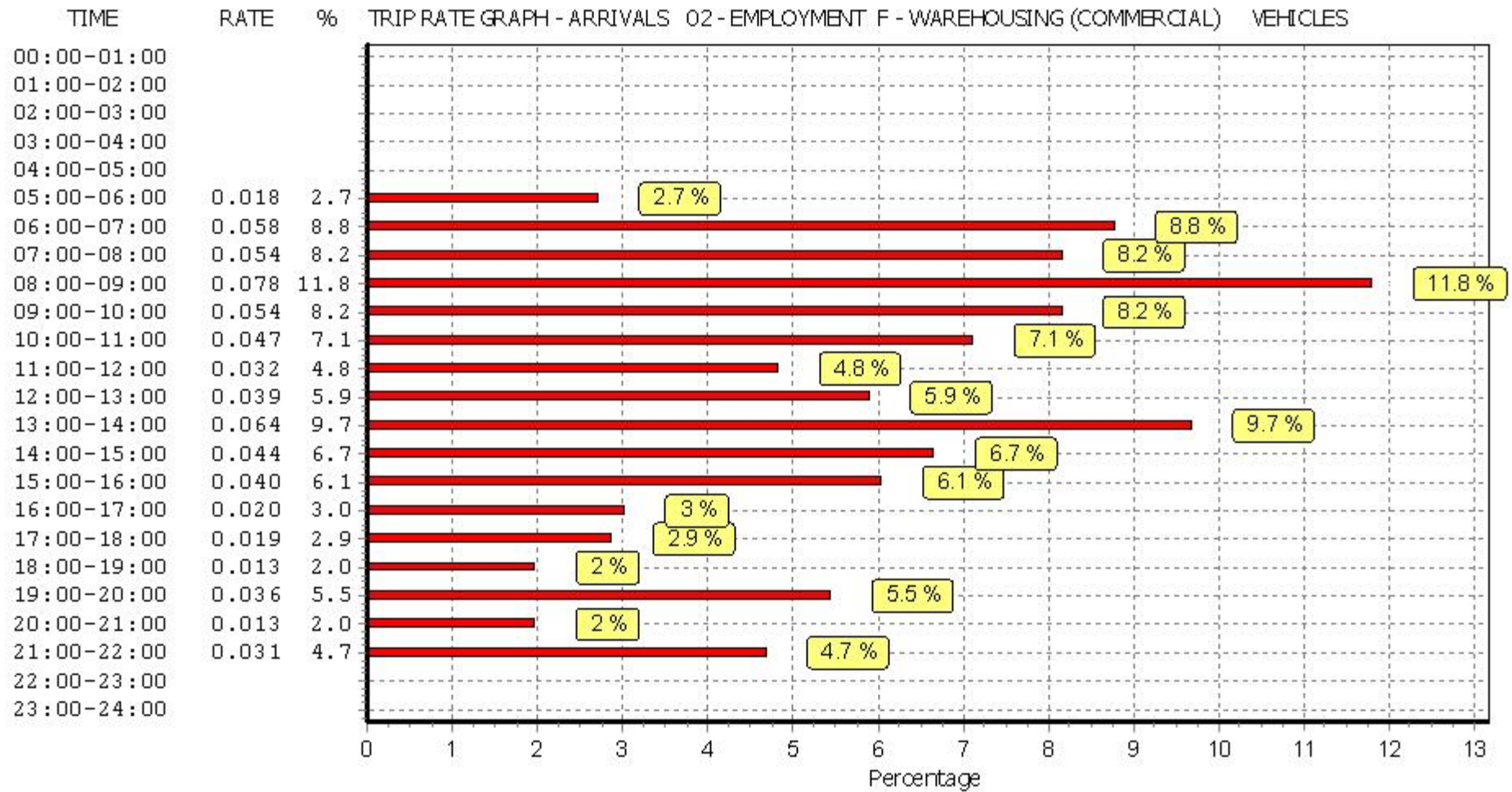
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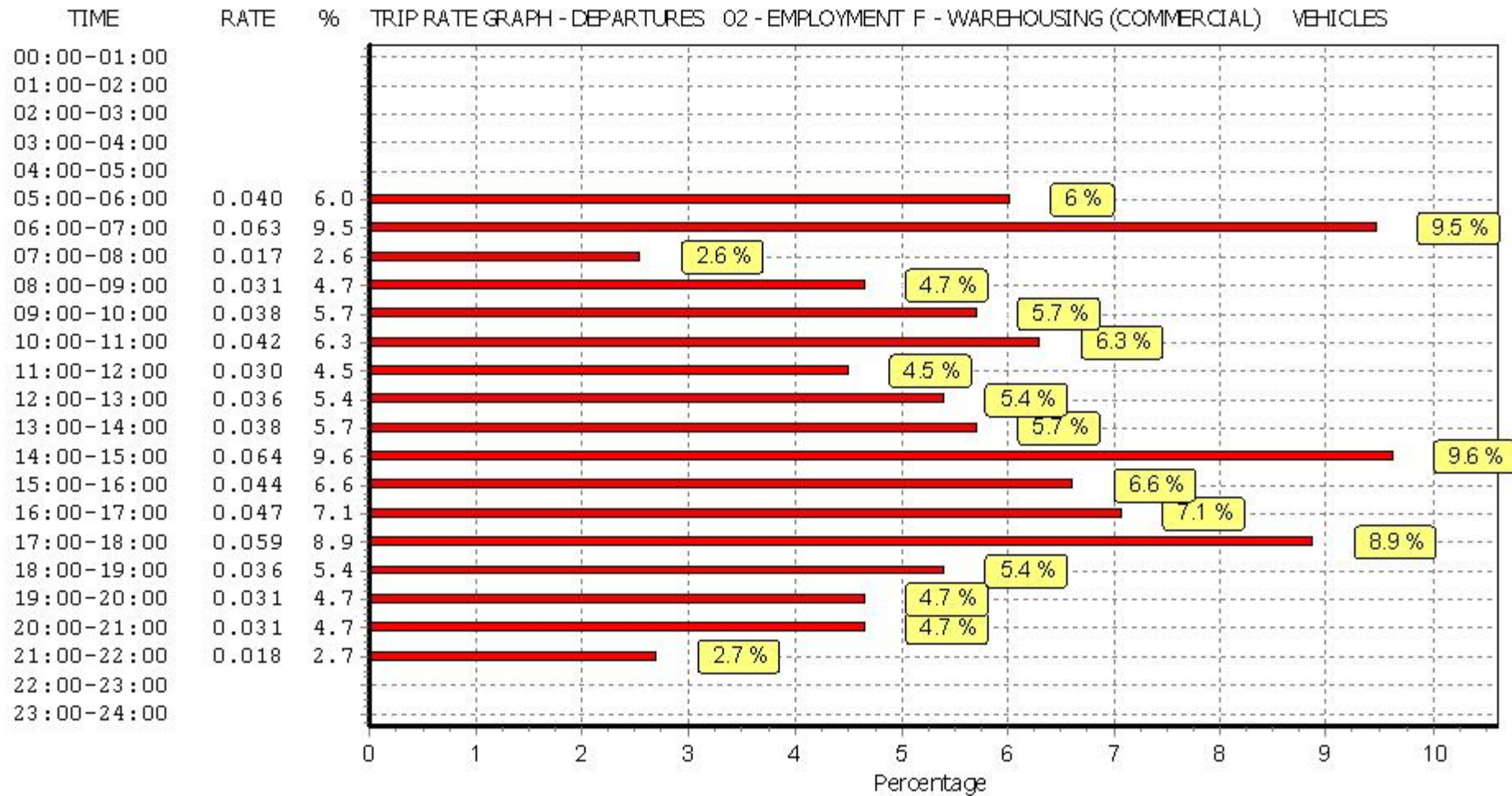
Parameter summary

Trip rate parameter range selected: 9000 - 32300 (units: sqm)
 Survey date date range: 01/01/09 - 13/11/15
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

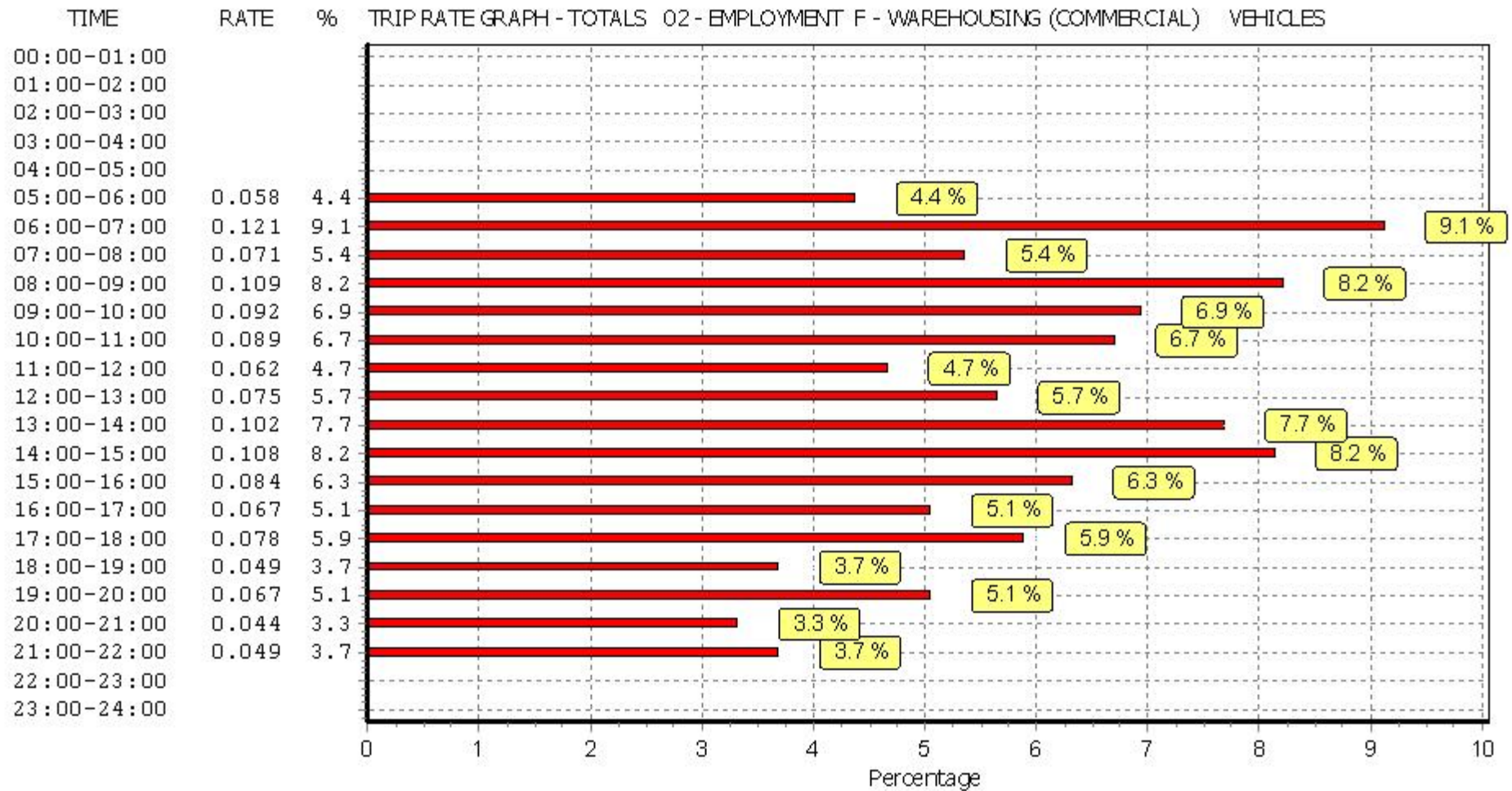
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TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
06:00 - 07:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
07:00 - 08:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
08:00 - 09:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
09:00 - 10:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
10:00 - 11:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
11:00 - 12:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
12:00 - 13:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
13:00 - 14:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
14:00 - 15:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
15:00 - 16:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
16:00 - 17:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
17:00 - 18:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
18:00 - 19:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
19:00 - 20:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
20:00 - 21:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
21:00 - 22:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

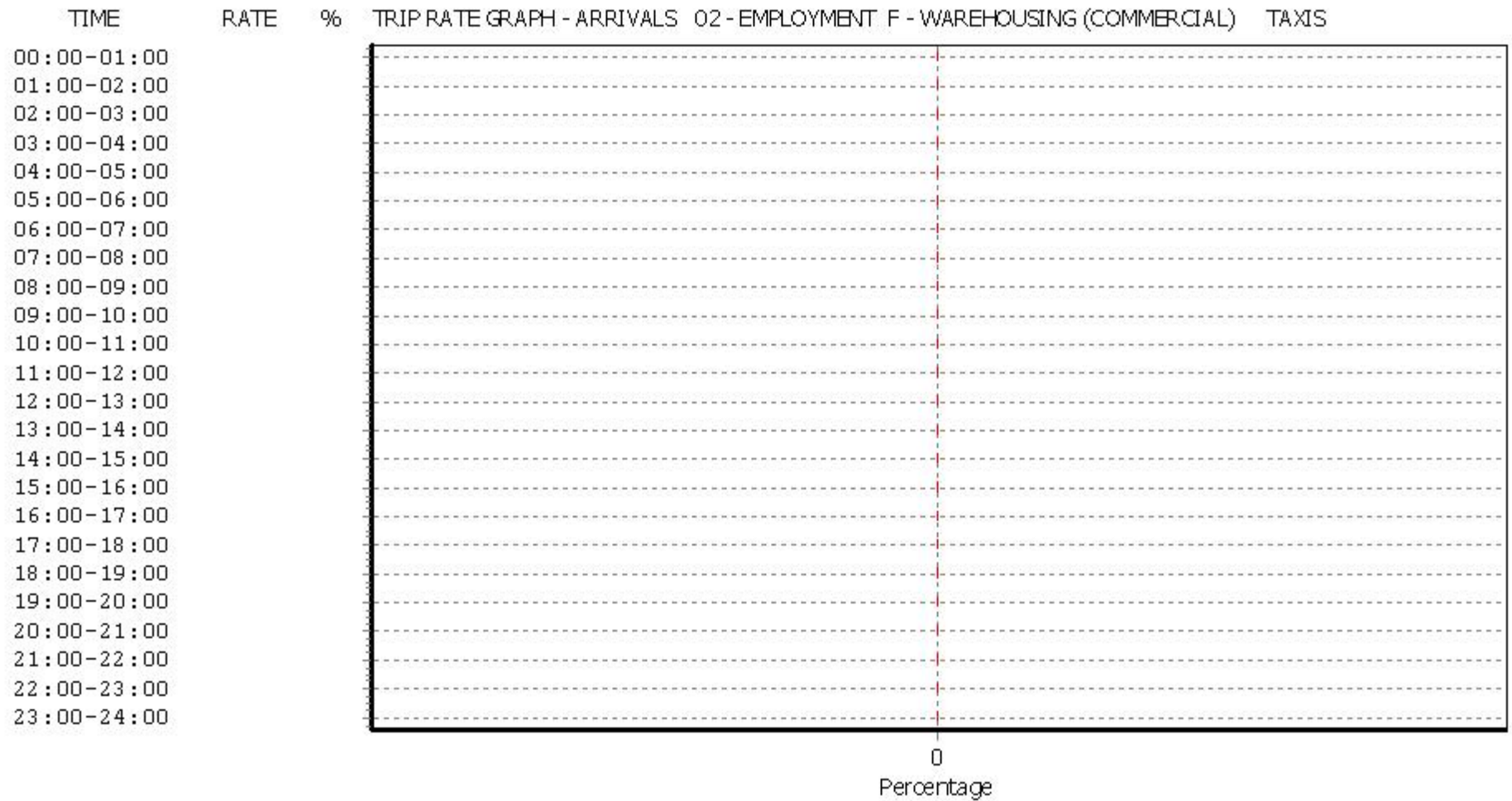
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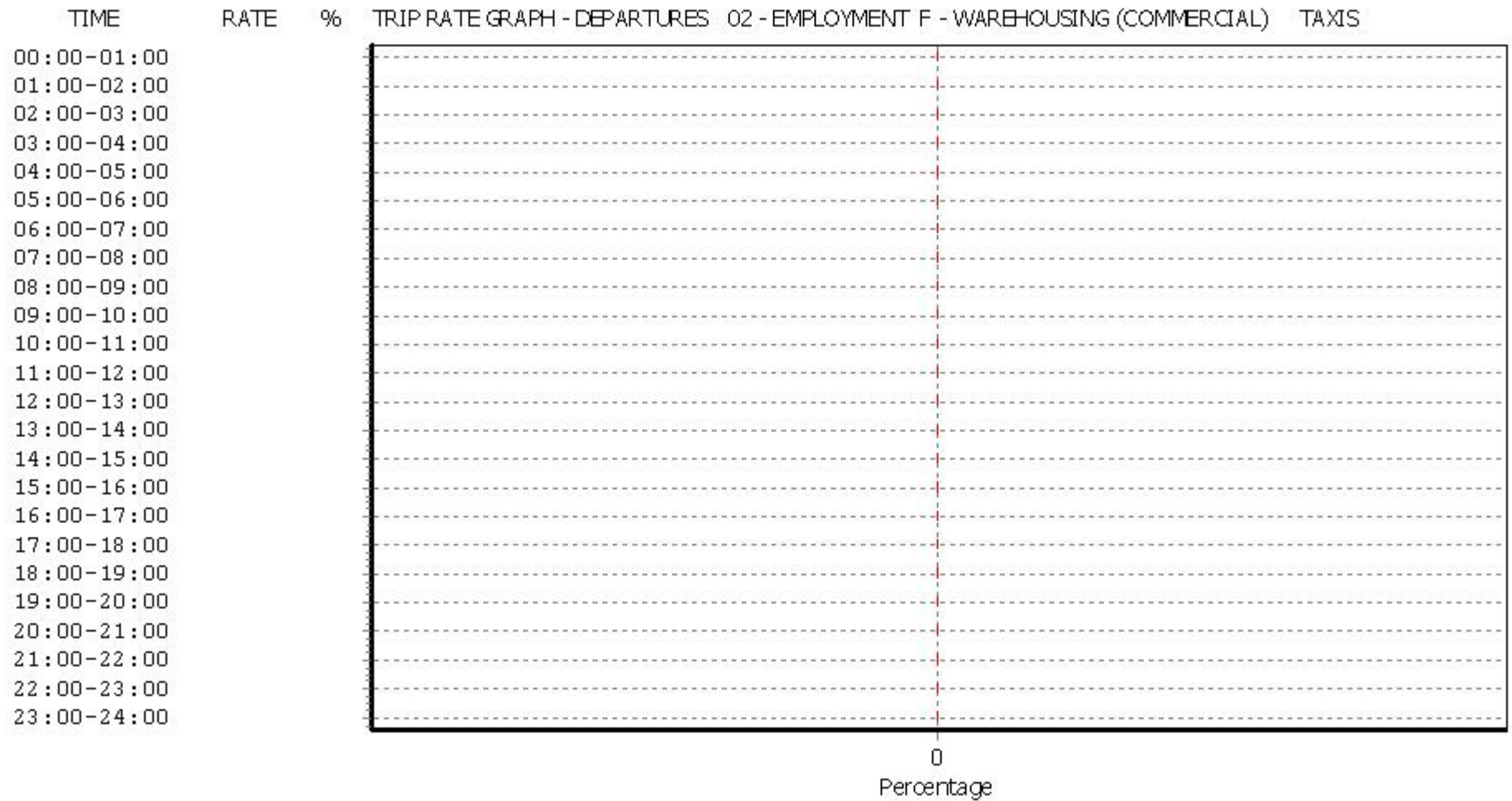
Parameter summary

Trip rate parameter range selected:	9000 - 32300 (units: sqm)
Survey date date range:	01/01/09 - 13/11/15
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

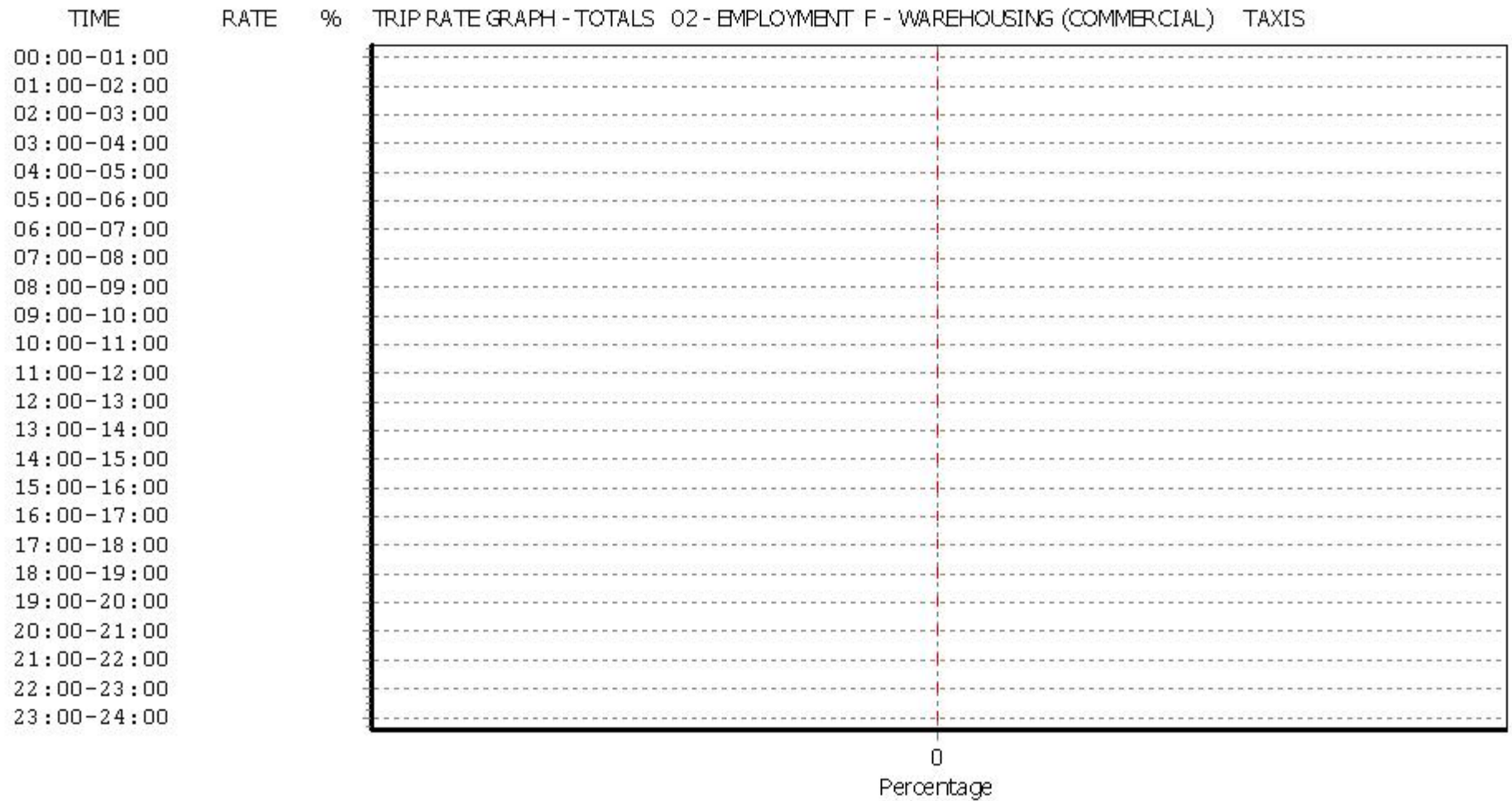
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TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	1	22270	0.013	1	22270	0.040	1	22270	0.053
06:00 - 07:00	1	22270	0.027	1	22270	0.063	1	22270	0.090
07:00 - 08:00	4	18643	0.021	4	18643	0.013	4	18643	0.034
08:00 - 09:00	4	18643	0.009	4	18643	0.012	4	18643	0.021
09:00 - 10:00	4	18643	0.017	4	18643	0.017	4	18643	0.034
10:00 - 11:00	4	18643	0.025	4	18643	0.015	4	18643	0.040
11:00 - 12:00	4	18643	0.013	4	18643	0.011	4	18643	0.024
12:00 - 13:00	4	18643	0.012	4	18643	0.011	4	18643	0.023
13:00 - 14:00	4	18643	0.017	4	18643	0.013	4	18643	0.030
14:00 - 15:00	4	18643	0.013	4	18643	0.009	4	18643	0.022
15:00 - 16:00	4	18643	0.021	4	18643	0.011	4	18643	0.032
16:00 - 17:00	4	18643	0.013	4	18643	0.011	4	18643	0.024
17:00 - 18:00	4	18643	0.012	4	18643	0.016	4	18643	0.028
18:00 - 19:00	4	18643	0.005	4	18643	0.011	4	18643	0.016
19:00 - 20:00	1	22270	0.018	1	22270	0.022	1	22270	0.040
20:00 - 21:00	1	22270	0.013	1	22270	0.027	1	22270	0.040
21:00 - 22:00	1	22270	0.027	1	22270	0.004	1	22270	0.031
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.276			0.306			0.582

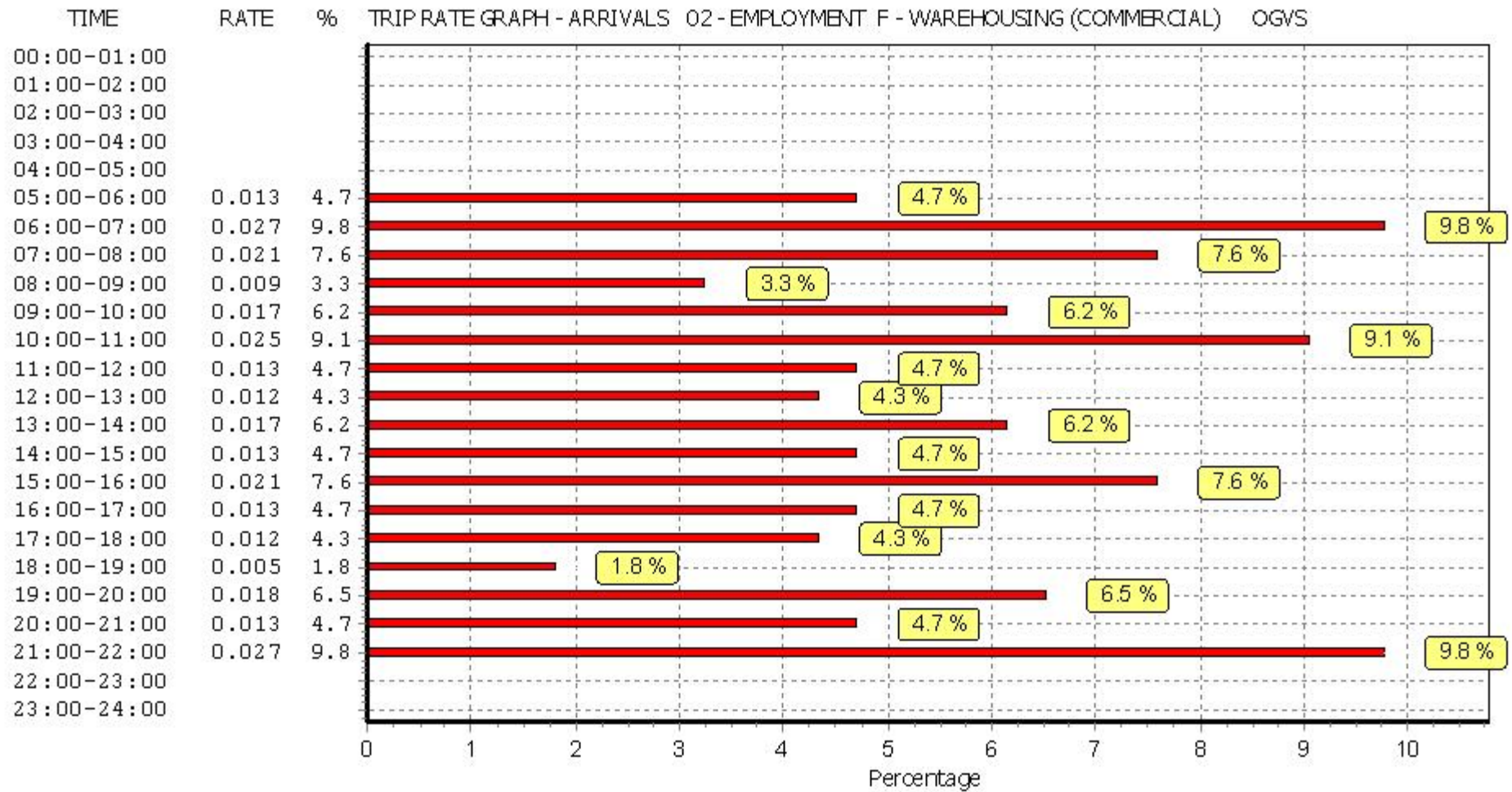
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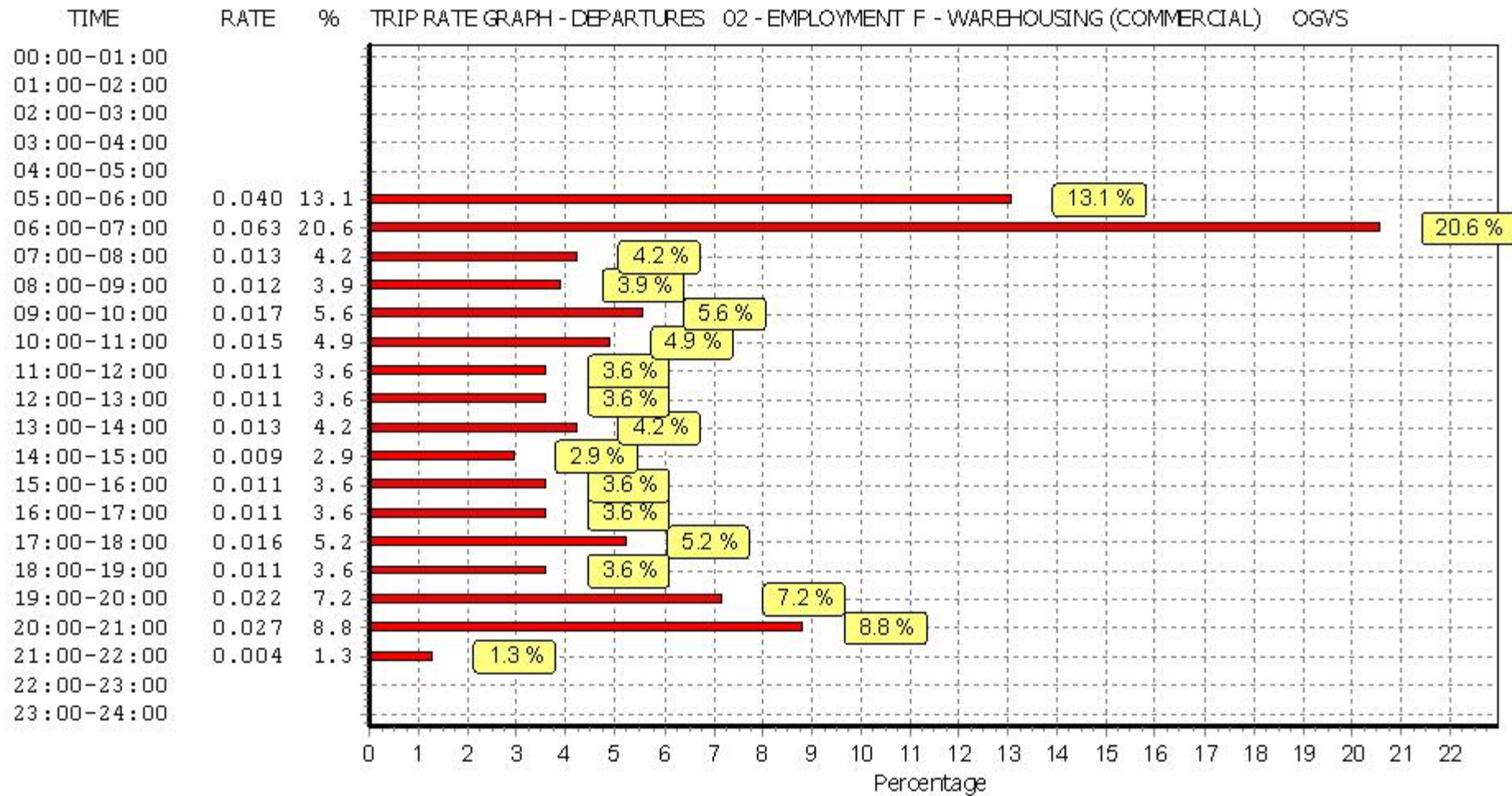
Parameter summary

Trip rate parameter range selected:	9000 - 32300 (units: sqm)
Survey date date range:	01/01/09 - 13/11/15
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

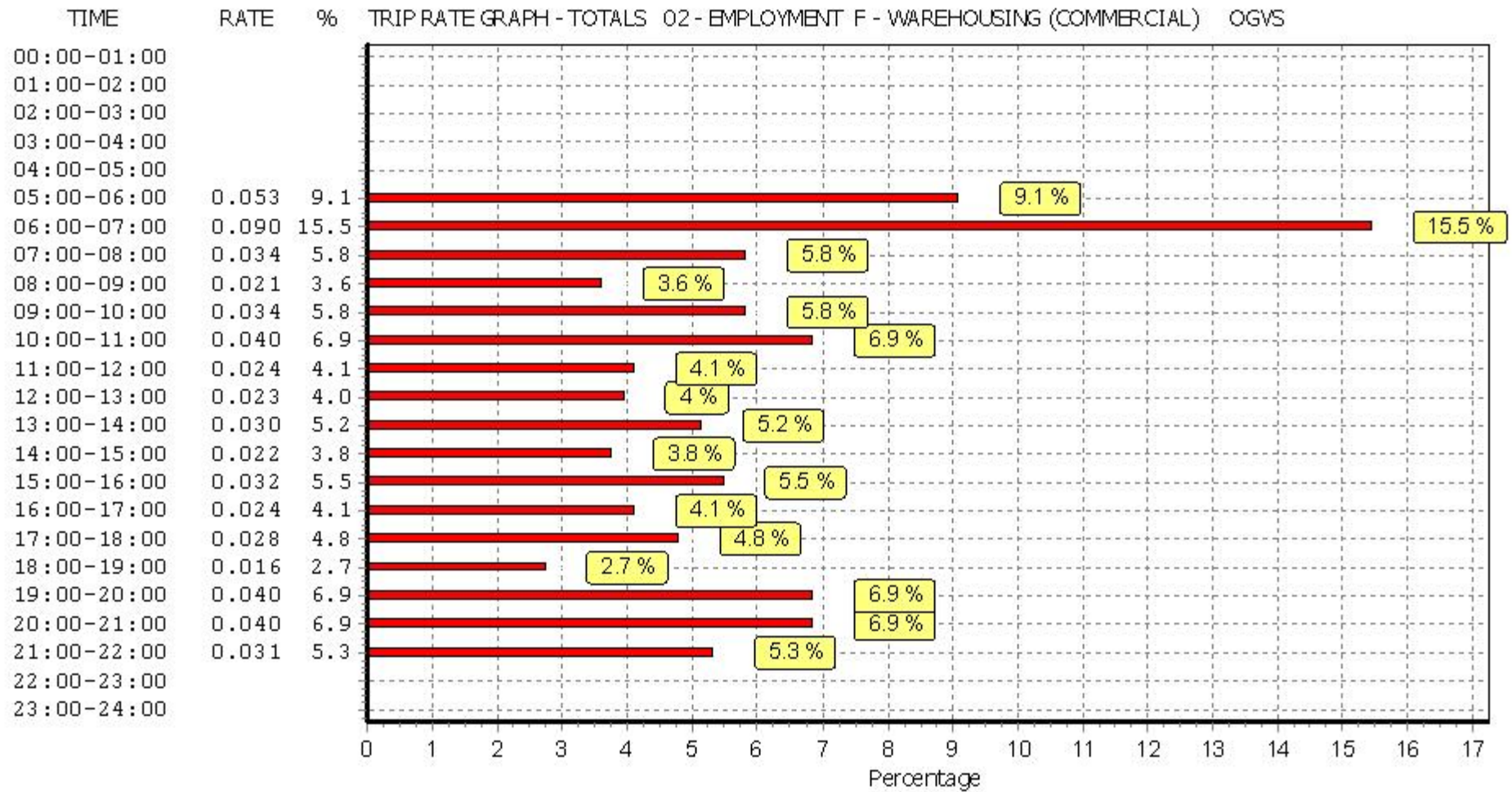
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TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
06:00 - 07:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
07:00 - 08:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
08:00 - 09:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
09:00 - 10:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
10:00 - 11:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
11:00 - 12:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
12:00 - 13:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
13:00 - 14:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
14:00 - 15:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
15:00 - 16:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
16:00 - 17:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
17:00 - 18:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
18:00 - 19:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
19:00 - 20:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
20:00 - 21:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
21:00 - 22:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

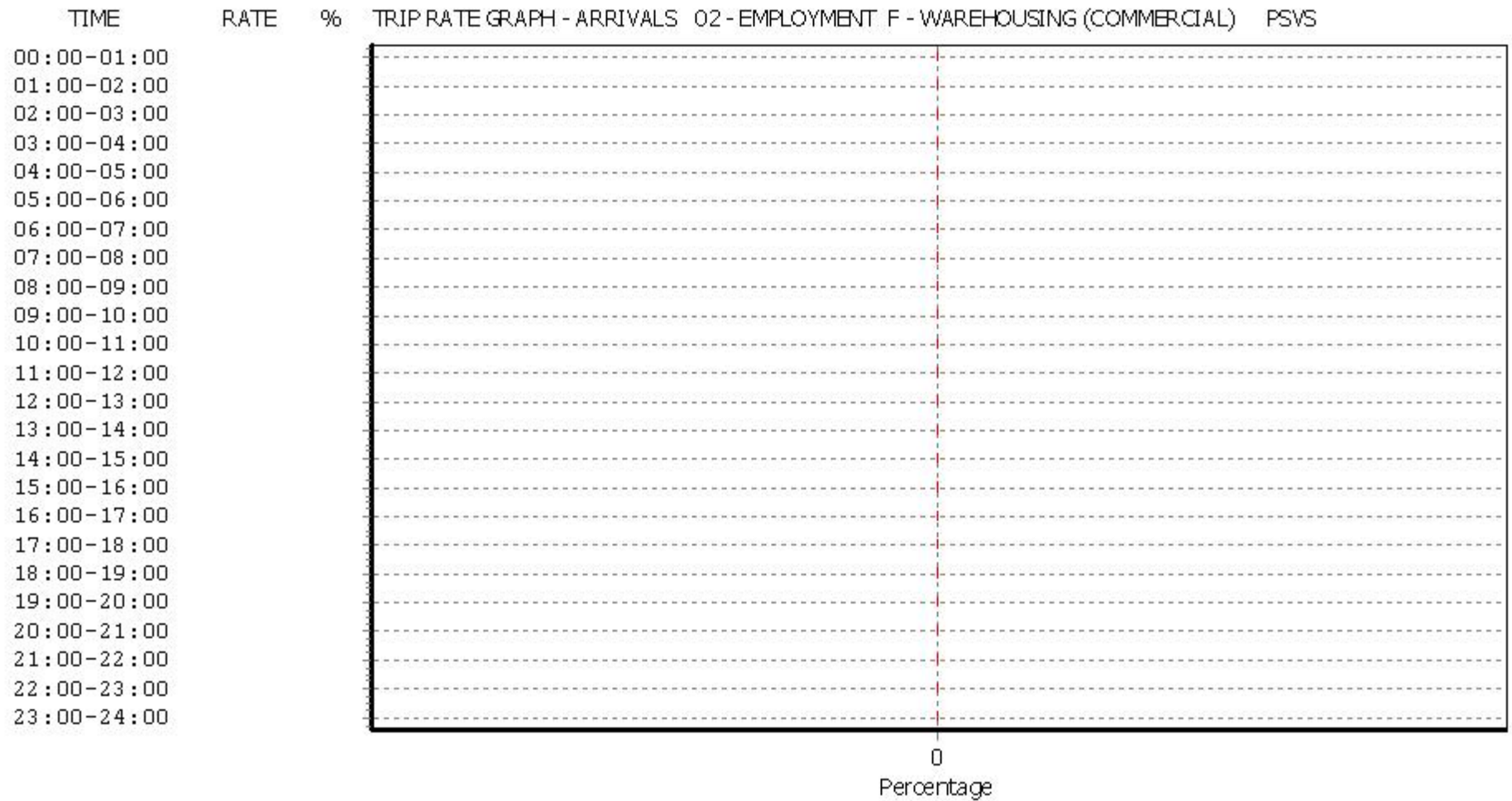
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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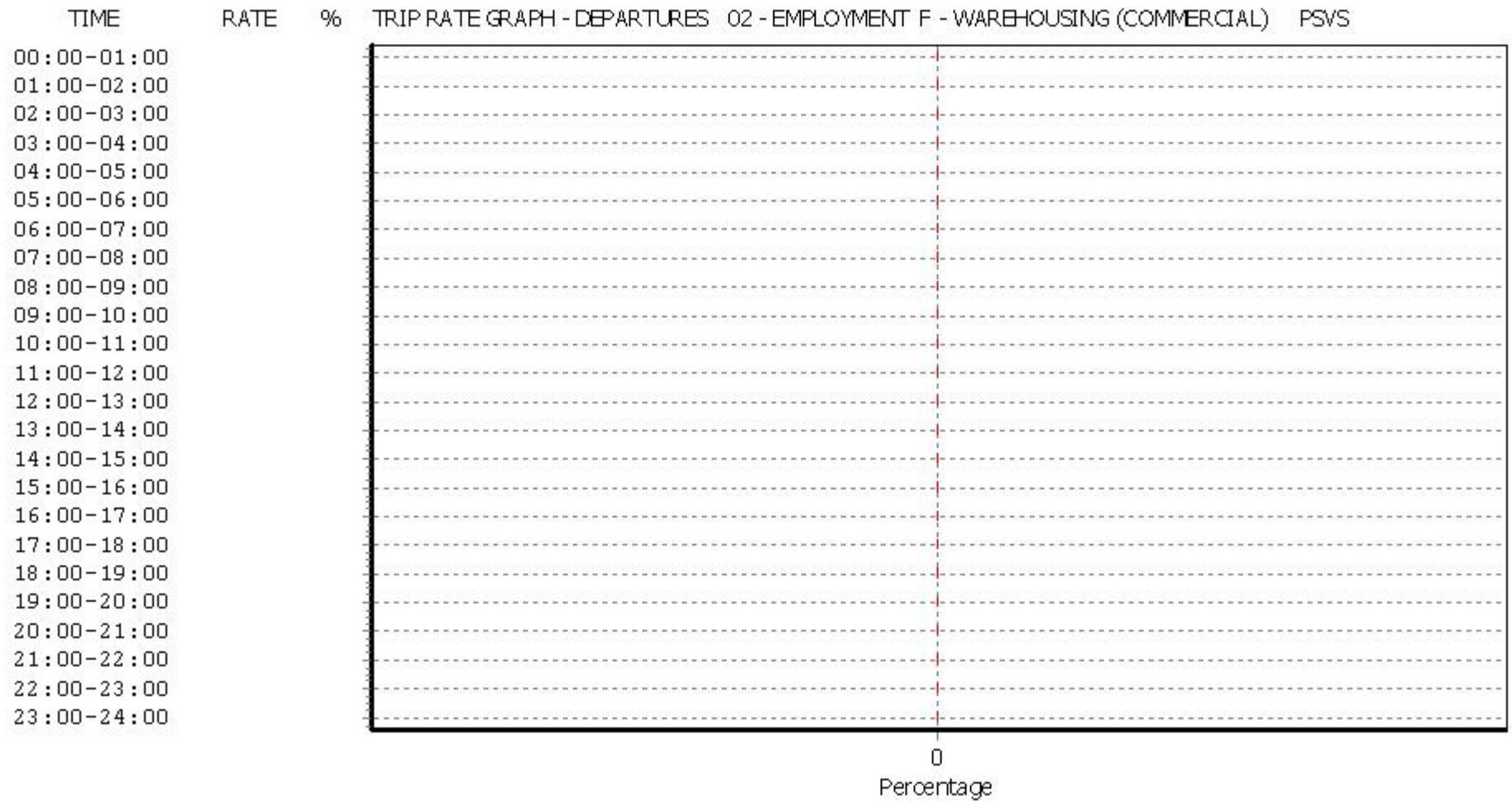
Parameter summary

Trip rate parameter range selected:	9000 - 32300 (units: sqm)
Survey date date range:	01/01/09 - 13/11/15
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

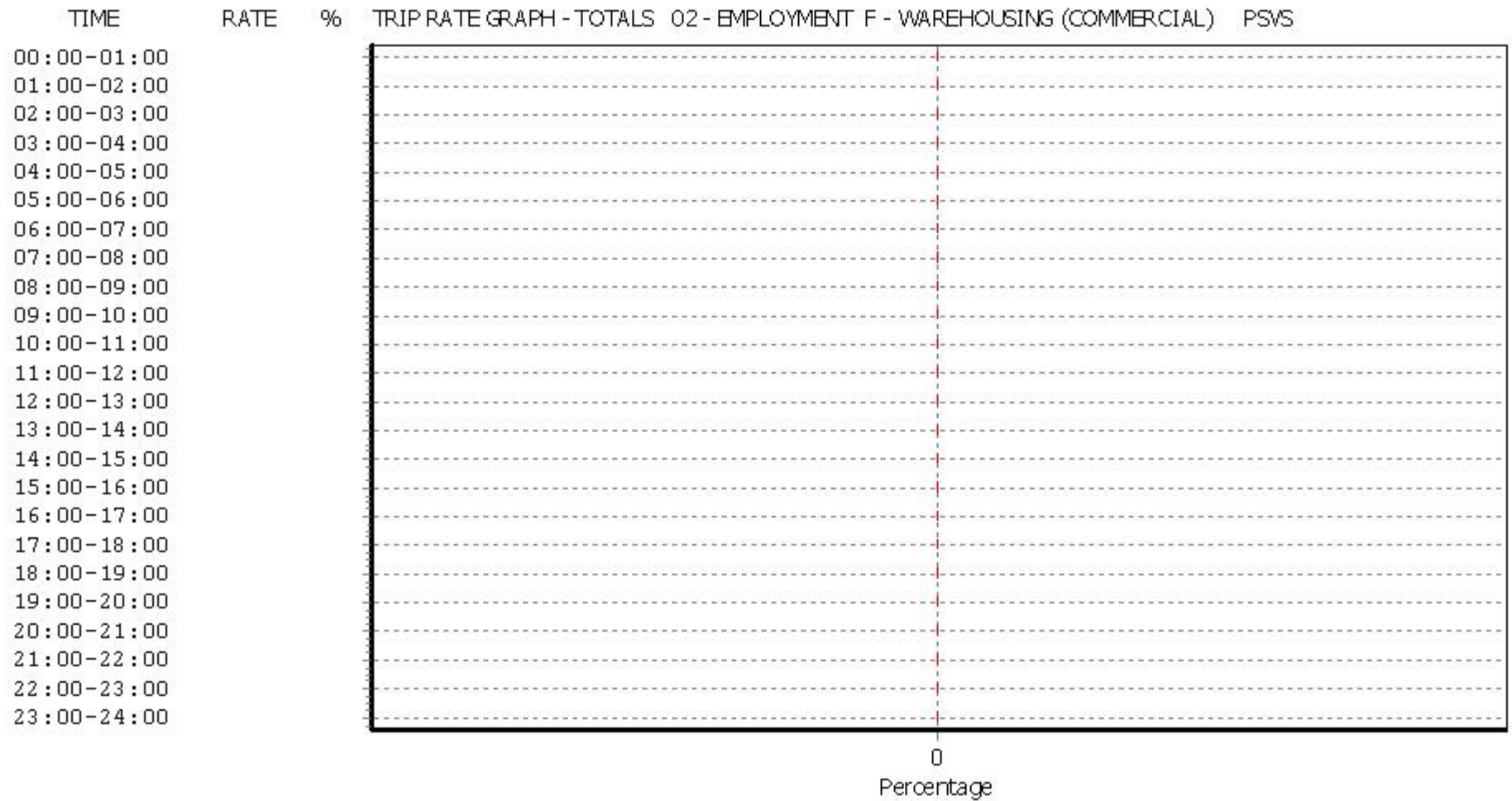
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
06:00 - 07:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
07:00 - 08:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
08:00 - 09:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
09:00 - 10:00	4	18643	0.004	4	18643	0.000	4	18643	0.004
10:00 - 11:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
11:00 - 12:00	4	18643	0.000	4	18643	0.001	4	18643	0.001
12:00 - 13:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
13:00 - 14:00	4	18643	0.005	4	18643	0.001	4	18643	0.006
14:00 - 15:00	4	18643	0.000	4	18643	0.003	4	18643	0.003
15:00 - 16:00	4	18643	0.000	4	18643	0.000	4	18643	0.000
16:00 - 17:00	4	18643	0.001	4	18643	0.003	4	18643	0.004
17:00 - 18:00	4	18643	0.000	4	18643	0.004	4	18643	0.004
18:00 - 19:00	4	18643	0.000	4	18643	0.003	4	18643	0.003
19:00 - 20:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
20:00 - 21:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
21:00 - 22:00	1	22270	0.000	1	22270	0.000	1	22270	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.015			0.025

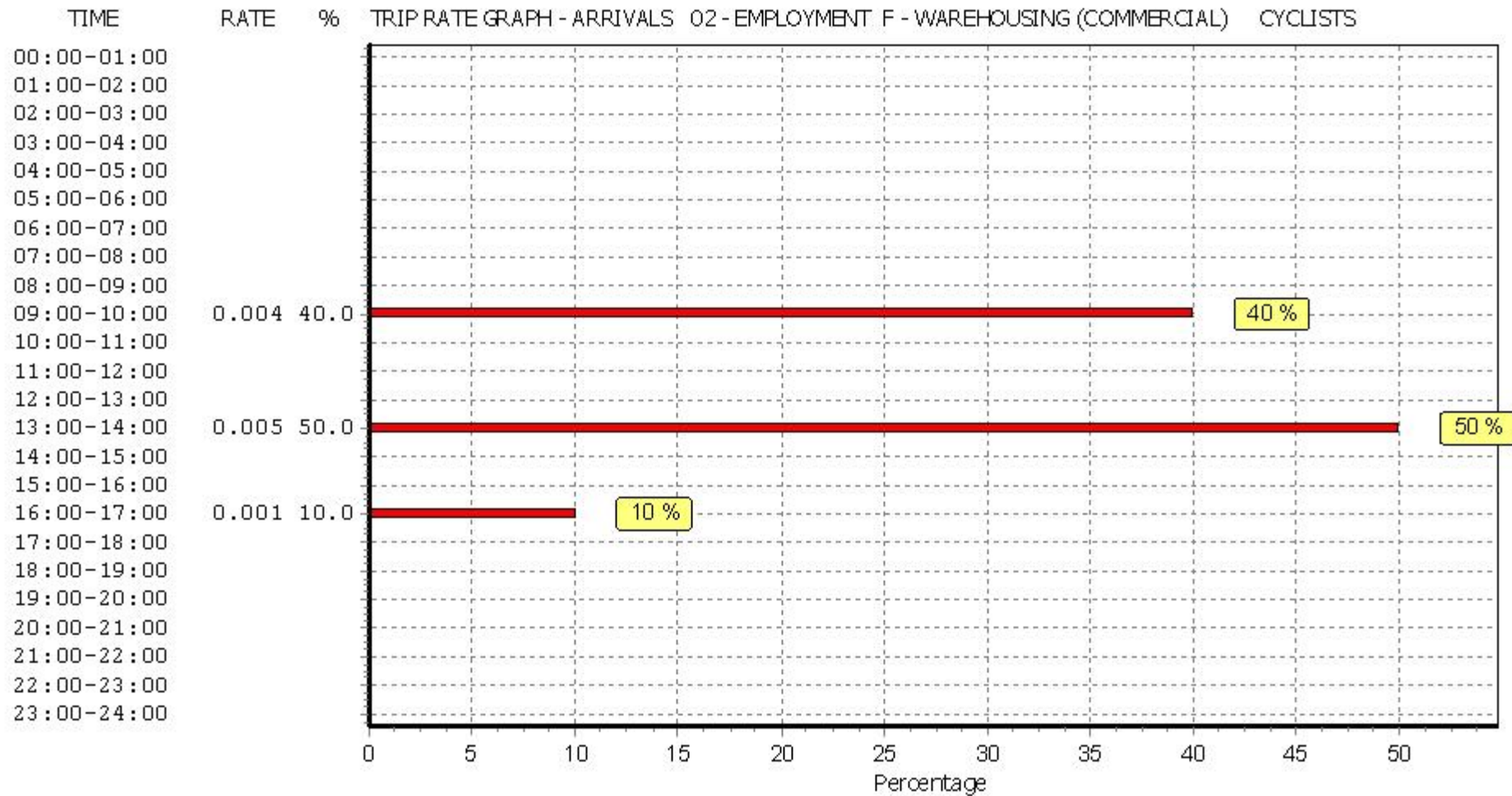
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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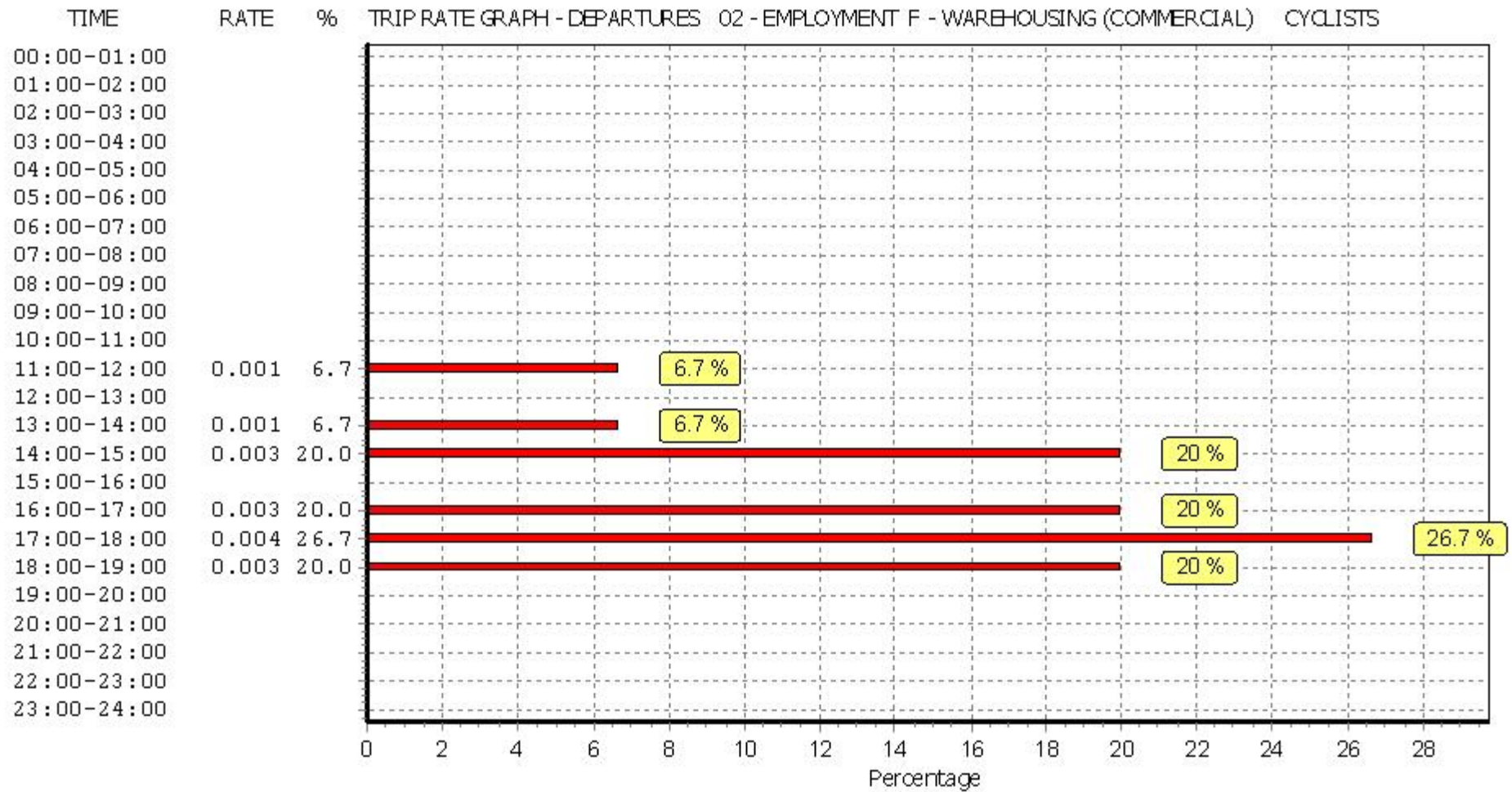
Parameter summary

Trip rate parameter range selected:	9000 - 32300 (units: sqm)
Survey date date range:	01/01/09 - 13/11/15
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

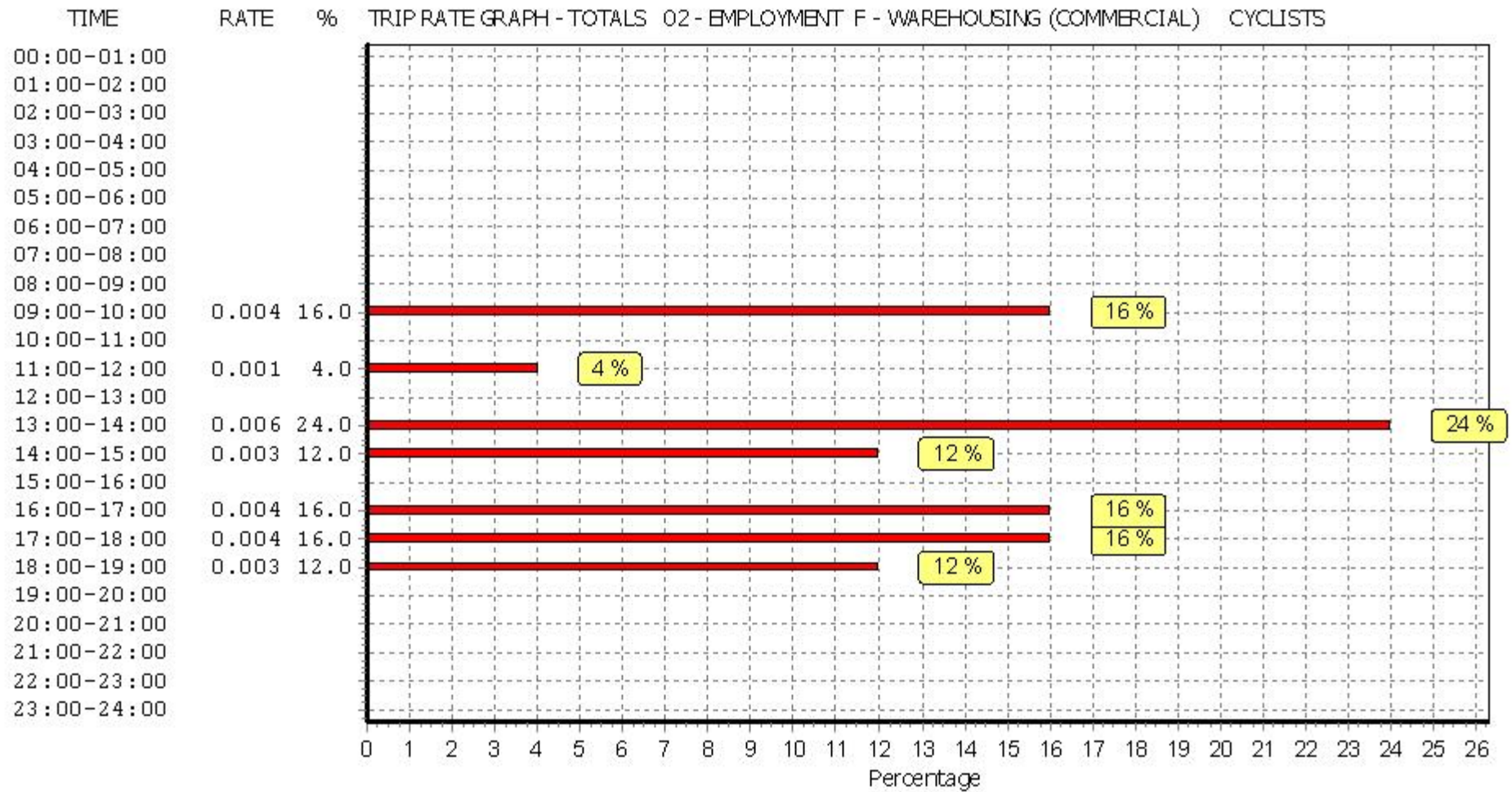
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
 Category : Q - COMMUNITY CENTRE
 VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
11	SCOTLAND	
	FA FALKIRK	1 days
13	MUNSTER	
	LI LIMERICK	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	CV CAVAN	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: 400 to 1676 (units: sqm)
 Range Selected by User: 210 to 2329 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 13/11/15

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
Wednesday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	3
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	4
Village	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:

D2 5 days

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

Population within 1 mile:

1,001 to 5,000 2 days
5,001 to 10,000 2 days
20,001 to 25,000 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
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 3 days
1.6 to 2.0 1 days

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

Travel Plan:

No 5 days

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

PTAL Rating:

No PTAL Present 5 days

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

LIST OF SITES relevant to selection parameters

1	CA-07-Q-01 HIGH STREET	COMMUNITY CENTRE	CAMBRIDGESHIRE
	COTTENHAM Neighbourhood Centre (PPS6 Local Centre) Village Total Gross floor area: 500 sqm Survey date: MONDAY 15/10/12		
2	CV-07-Q-01 KILLYMOONEY DRIVE	COMMUNITY CENTRE	CAVAN Survey Type: MANUAL
	CAVAN Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 922 sqm Survey date: WEDNESDAY 19/12/12		
3	FA-07-Q-02 PARKHALL DRIVE	COMMUNITY CENTRE	FALKIRK Survey Type: MANUAL
	MADDISTON FALKIRK Edge of Town Residential Zone Total Gross floor area: 400 sqm Survey date: MONDAY 03/06/13		
4	LI-07-Q-01 CASTLE OAKS VIEW	COMMUNITY CENTRE	LIMERICK Survey Type: MANUAL
	DONOUGH O'MALLEY PARK LIMERICK Edge of Town Residential Zone Total Gross floor area: 1676 sqm Survey date: WEDNESDAY 06/11/13		
5	SH-07-Q-01 SOUTHGATE	COMMUNITY CENTRE	SHROPSHIRE Survey Type: MANUAL
	SUTTON HILL TELFORD Edge of Town Residential Zone Total Gross floor area: 1486 sqm Survey date: THURSDAY 24/10/13		

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 07 - LEISURE/Q - COMMUNITY CENTRE
VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	1676	0.418	1	1676	0.000	1	1676	0.418
08:00 - 09:00	5	997	0.482	5	997	0.060	5	997	0.542
09:00 - 10:00	5	997	0.502	5	997	0.281	5	997	0.783
10:00 - 11:00	5	997	0.281	5	997	0.201	5	997	0.482
11:00 - 12:00	5	997	0.301	5	997	0.401	5	997	0.702
12:00 - 13:00	5	997	0.241	5	997	0.562	5	997	0.803
13:00 - 14:00	5	997	0.281	5	997	0.341	5	997	0.622
14:00 - 15:00	5	997	0.281	5	997	0.181	5	997	0.462
15:00 - 16:00	5	997	0.482	5	997	0.261	5	997	0.743
16:00 - 17:00	5	997	0.181	5	997	0.582	5	997	0.763
17:00 - 18:00	5	997	0.281	5	997	0.642	5	997	0.923
18:00 - 19:00	5	997	0.662	5	997	0.241	5	997	0.903
19:00 - 20:00	4	827	0.544	4	827	0.574	4	827	1.118
20:00 - 21:00	4	827	0.453	4	827	0.967	4	827	1.420
21:00 - 22:00	2	993	0.000	2	993	0.000	2	993	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.390			5.294			10.684

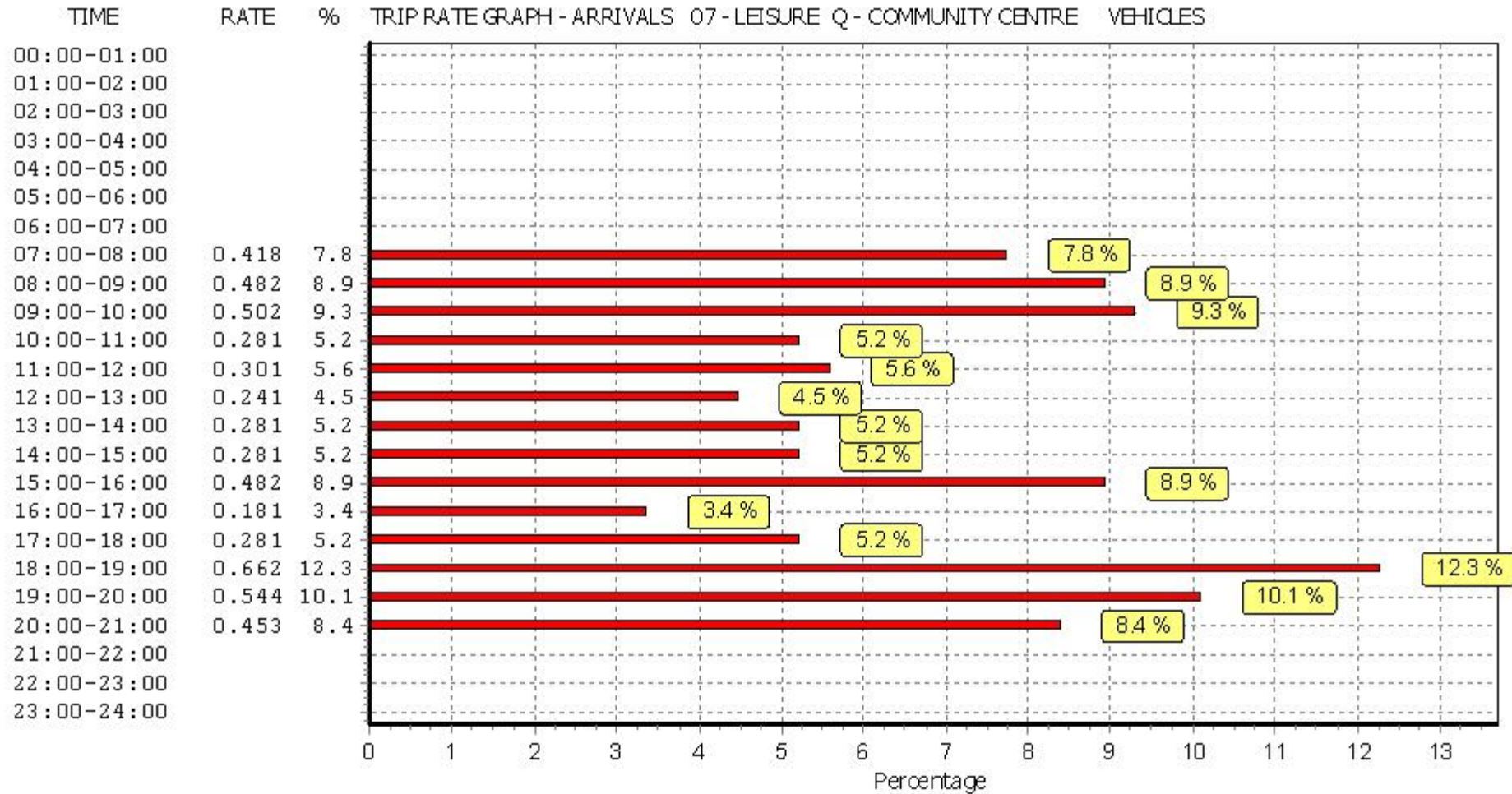
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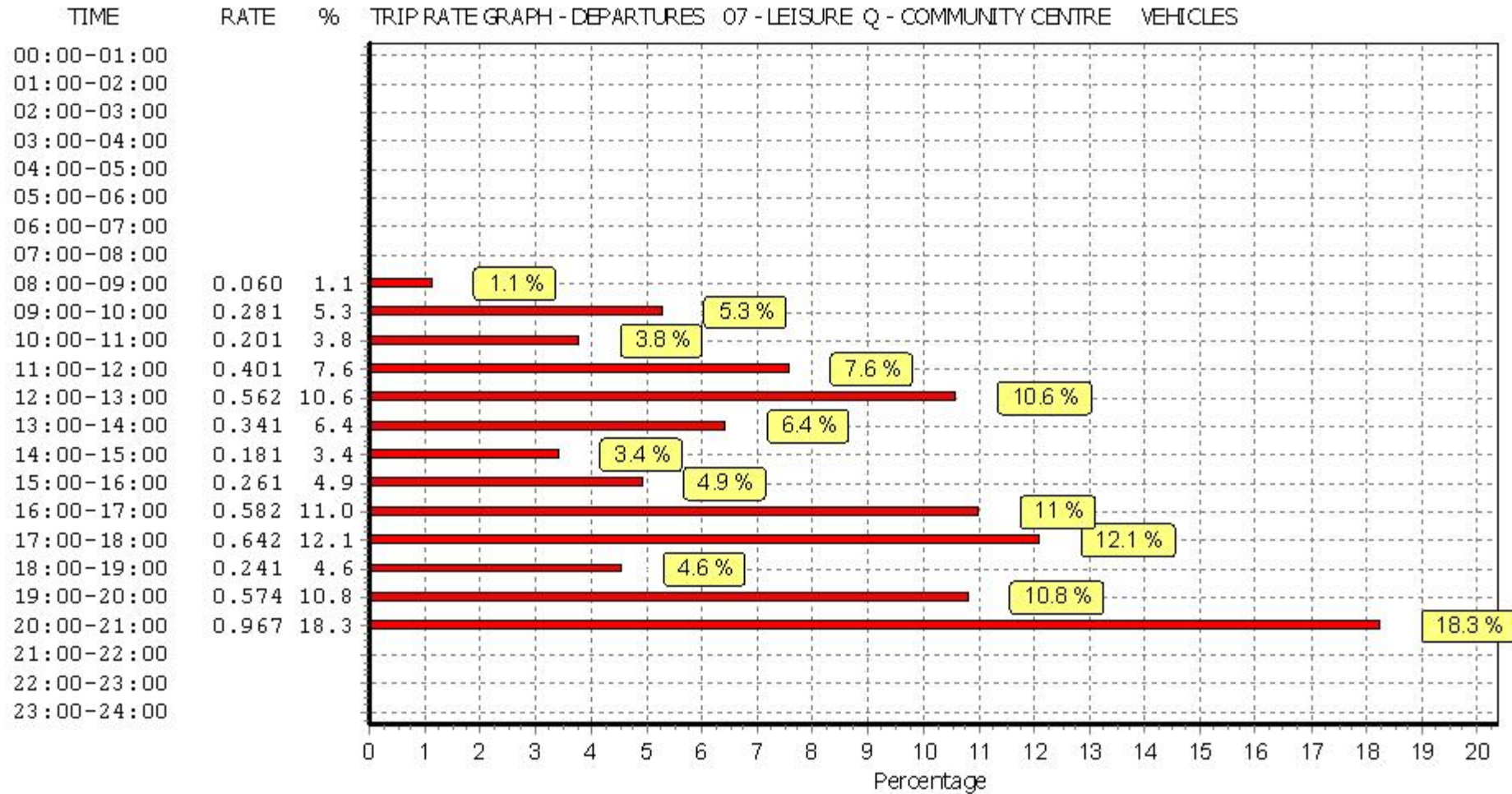
Parameter summary

Trip rate parameter range selected: 400 - 1676 (units: sqm)
 Survey date date range: 01/01/09 - 13/11/15
 Number of weekdays (Monday-Friday): 5
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

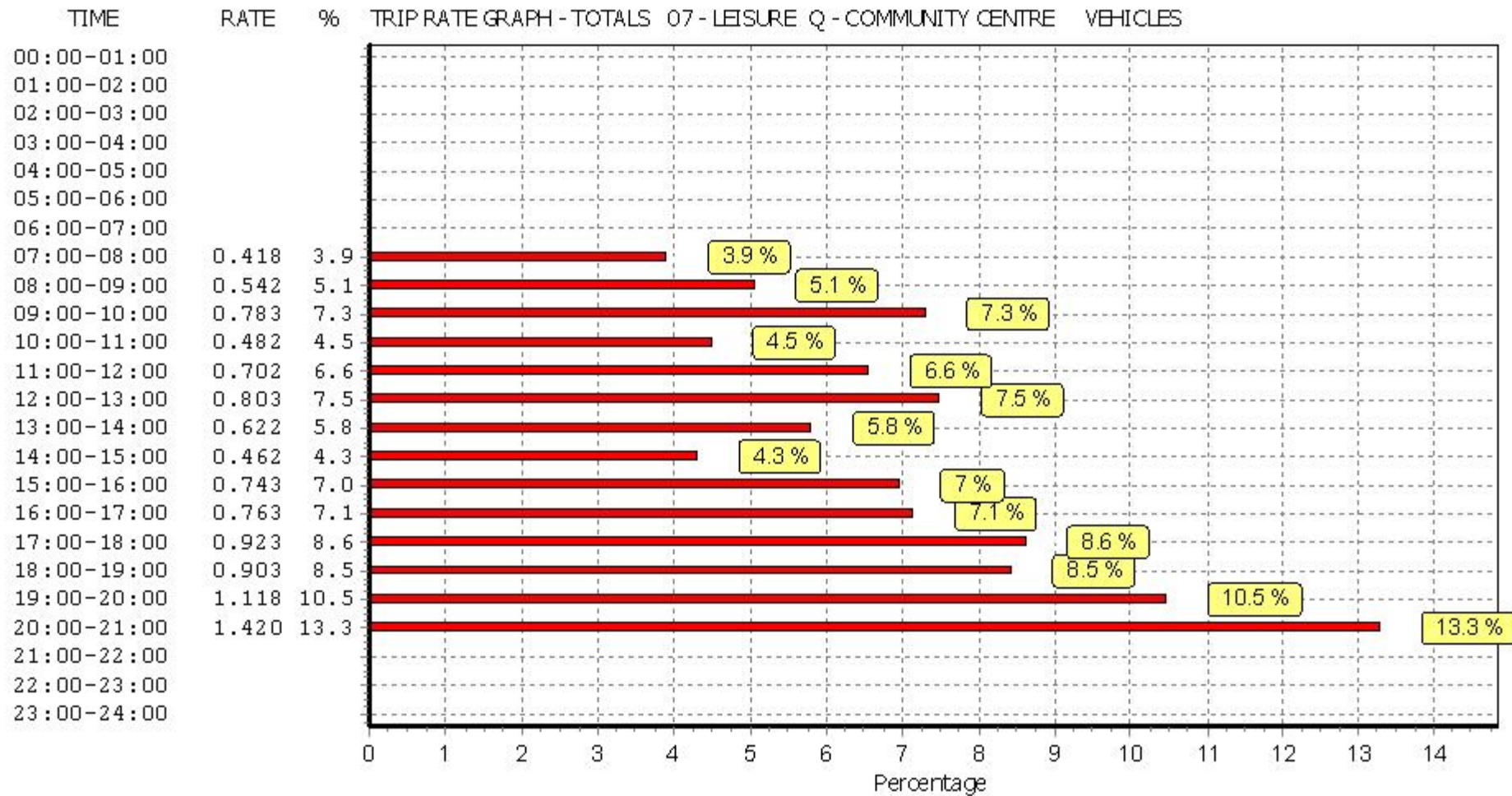
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TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	1676	0.000	1	1676	0.000	1	1676	0.000
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09:00 - 10:00	5	997	0.000	5	997	0.000	5	997	0.000
10:00 - 11:00	5	997	0.000	5	997	0.000	5	997	0.000
11:00 - 12:00	5	997	0.000	5	997	0.000	5	997	0.000
12:00 - 13:00	5	997	0.000	5	997	0.000	5	997	0.000
13:00 - 14:00	5	997	0.020	5	997	0.000	5	997	0.020
14:00 - 15:00	5	997	0.000	5	997	0.020	5	997	0.020
15:00 - 16:00	5	997	0.000	5	997	0.000	5	997	0.000
16:00 - 17:00	5	997	0.000	5	997	0.000	5	997	0.000
17:00 - 18:00	5	997	0.000	5	997	0.000	5	997	0.000
18:00 - 19:00	5	997	0.000	5	997	0.000	5	997	0.000
19:00 - 20:00	4	827	0.000	4	827	0.000	4	827	0.000
20:00 - 21:00	4	827	0.000	4	827	0.000	4	827	0.000
21:00 - 22:00	2	993	0.000	2	993	0.000	2	993	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.020			0.020			0.040

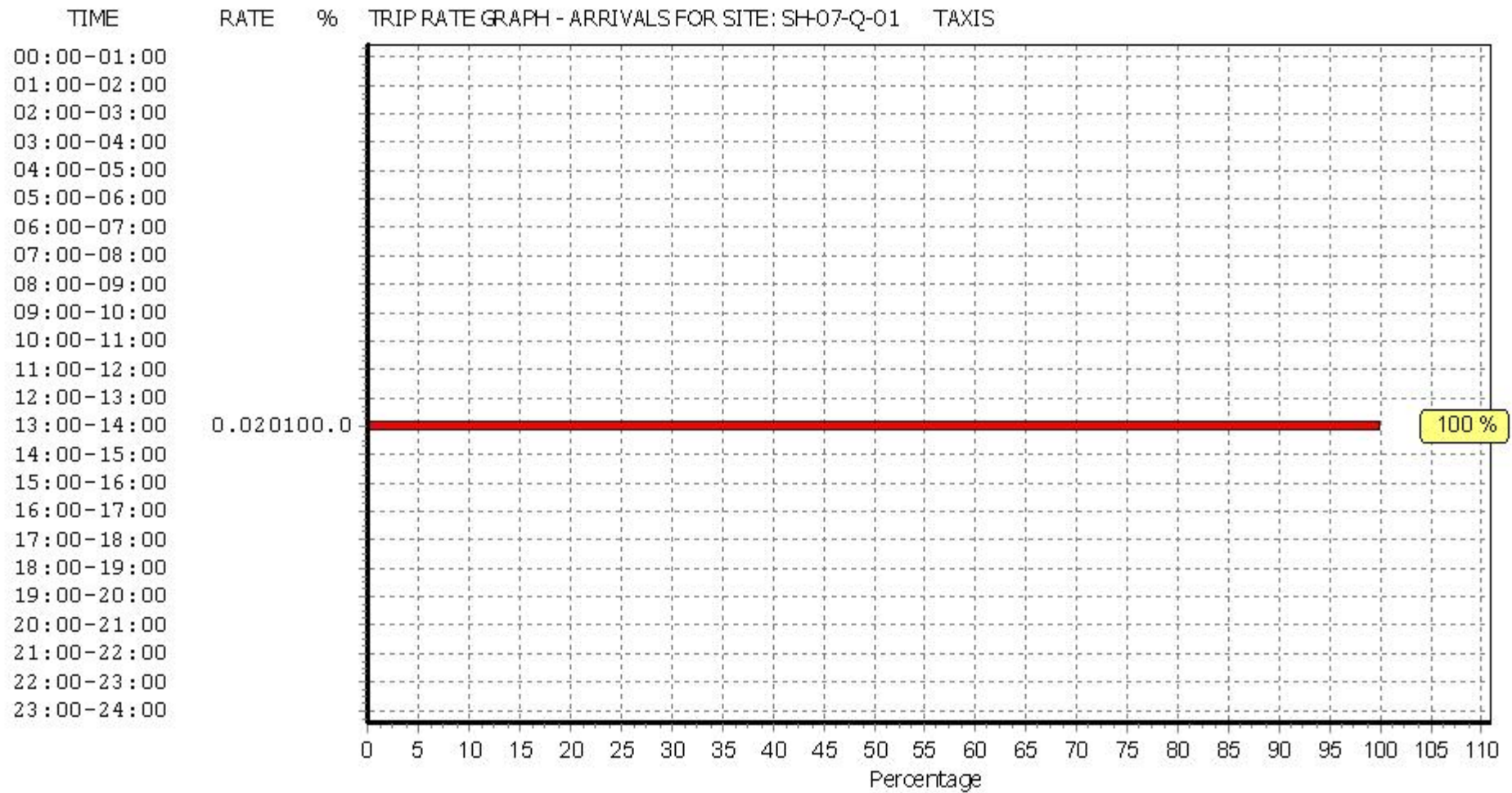
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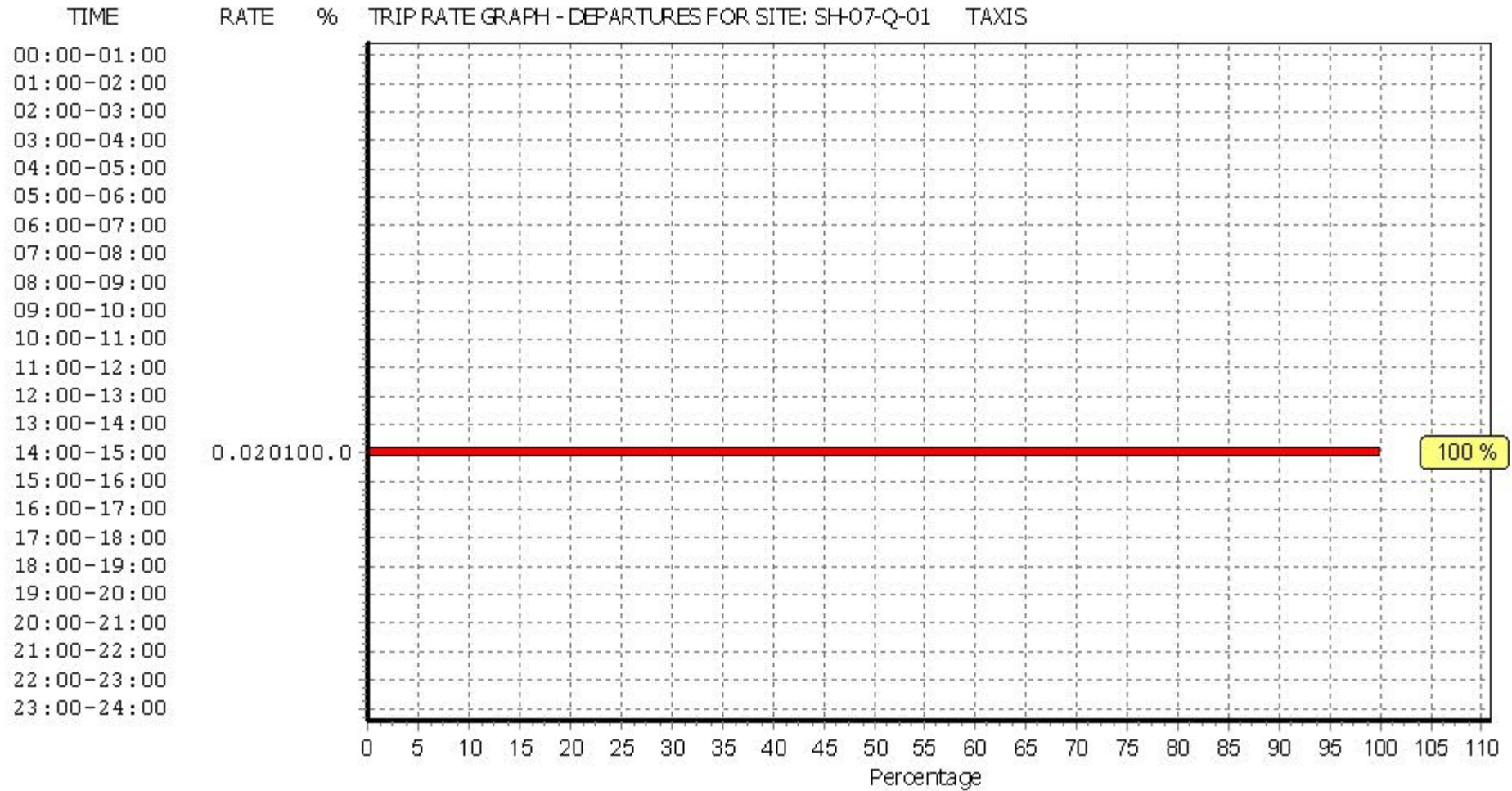
Parameter summary

Trip rate parameter range selected: 400 - 1676 (units: sqm)
 Survey date range: 01/01/09 - 13/11/15
 Number of weekdays (Monday-Friday): 5
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

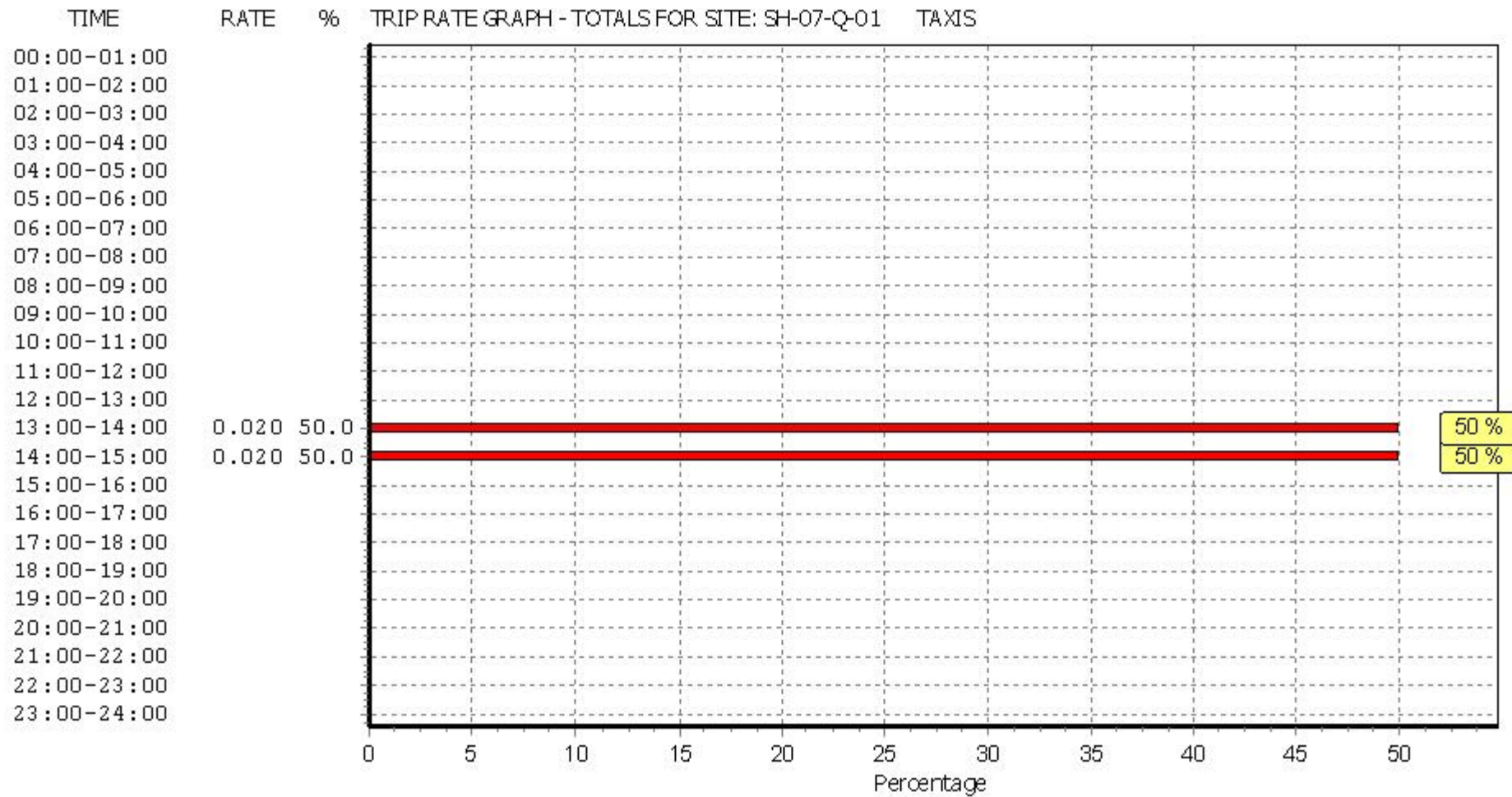
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TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	1676	0.000	1	1676	0.000	1	1676	0.000
08:00 - 09:00	5	997	0.000	5	997	0.000	5	997	0.000
09:00 - 10:00	5	997	0.000	5	997	0.000	5	997	0.000
10:00 - 11:00	5	997	0.020	5	997	0.020	5	997	0.040
11:00 - 12:00	5	997	0.000	5	997	0.000	5	997	0.000
12:00 - 13:00	5	997	0.000	5	997	0.000	5	997	0.000
13:00 - 14:00	5	997	0.000	5	997	0.000	5	997	0.000
14:00 - 15:00	5	997	0.000	5	997	0.000	5	997	0.000
15:00 - 16:00	5	997	0.000	5	997	0.000	5	997	0.000
16:00 - 17:00	5	997	0.000	5	997	0.000	5	997	0.000
17:00 - 18:00	5	997	0.000	5	997	0.000	5	997	0.000
18:00 - 19:00	5	997	0.000	5	997	0.000	5	997	0.000
19:00 - 20:00	4	827	0.000	4	827	0.000	4	827	0.000
20:00 - 21:00	4	827	0.000	4	827	0.000	4	827	0.000
21:00 - 22:00	2	993	0.000	2	993	0.000	2	993	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.020			0.020			0.040

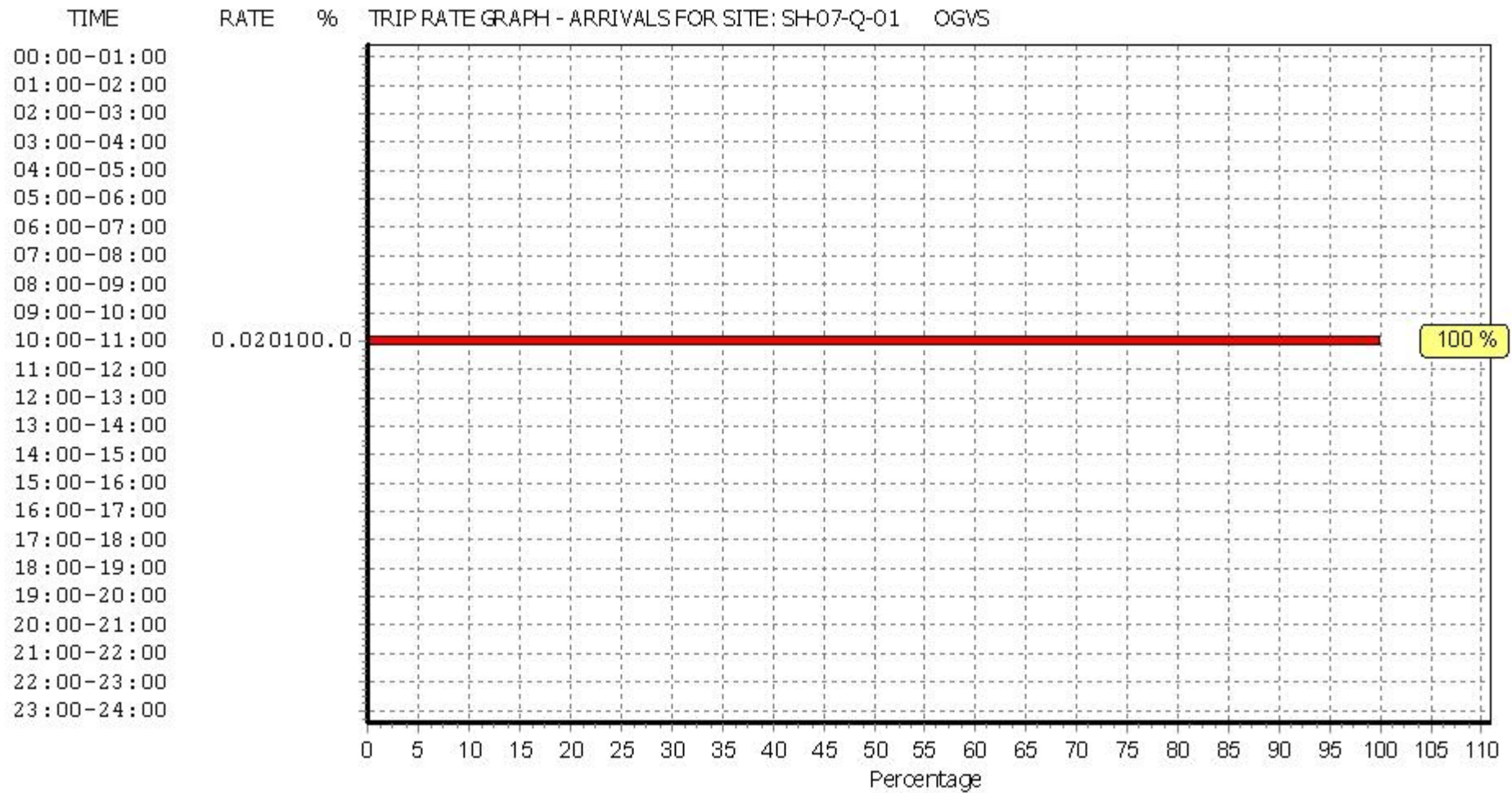
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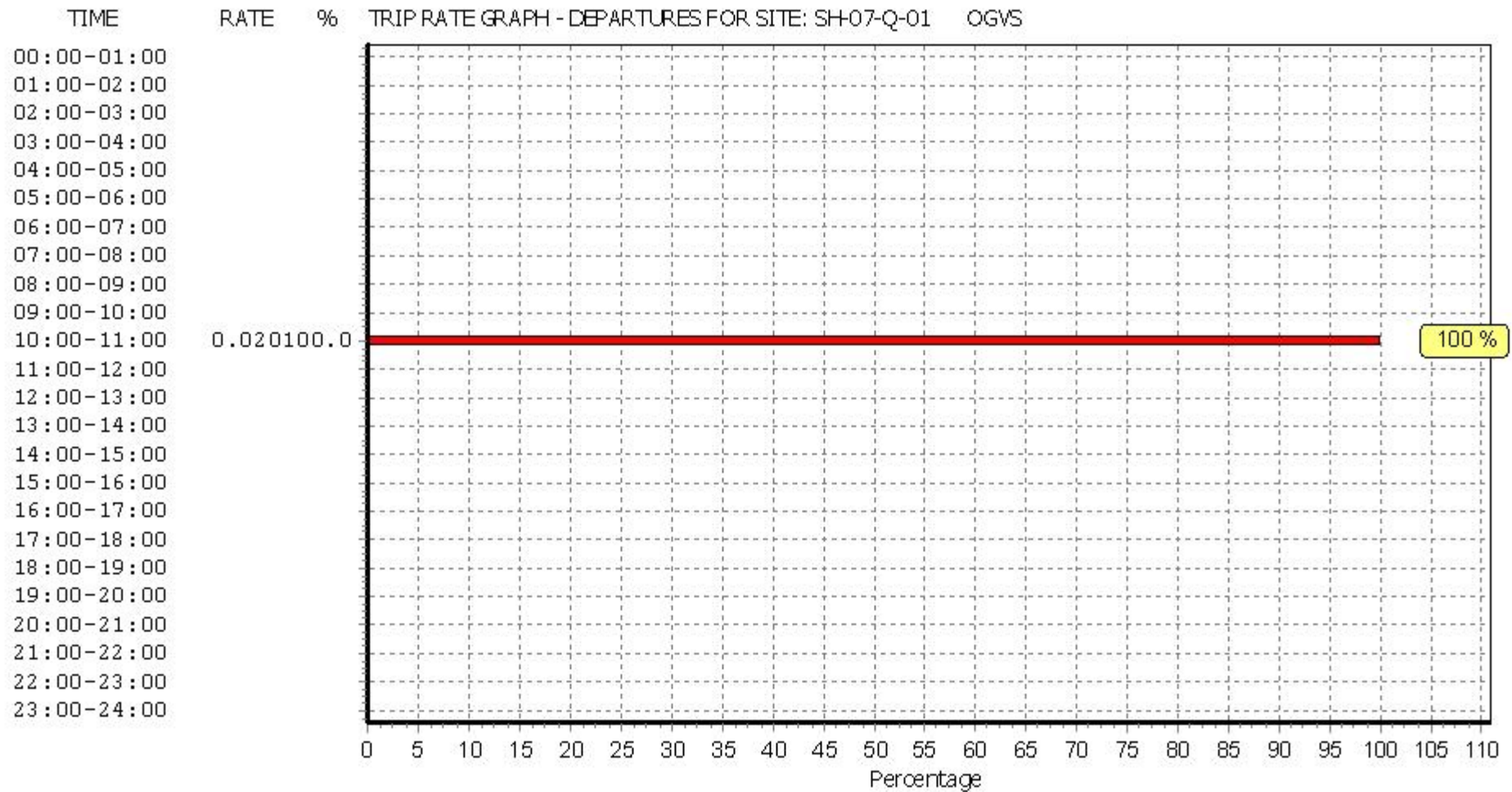
Parameter summary

Trip rate parameter range selected: 400 - 1676 (units: sqm)
 Survey date date range: 01/01/09 - 13/11/15
 Number of weekdays (Monday-Friday): 5
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

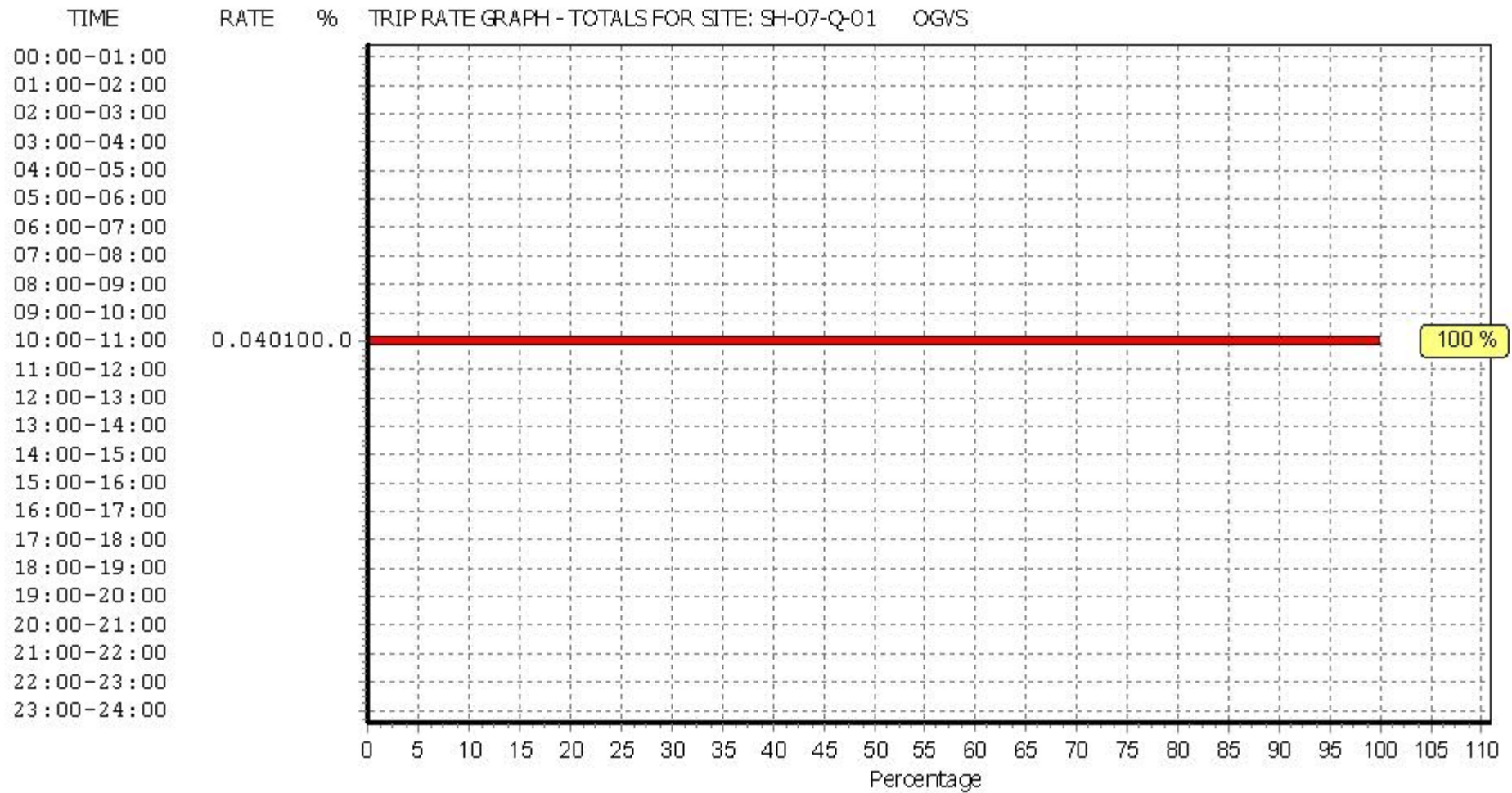
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TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	1676	0.000	1	1676	0.000	1	1676	0.000
08:00 - 09:00	5	997	0.000	5	997	0.000	5	997	0.000
09:00 - 10:00	5	997	0.000	5	997	0.000	5	997	0.000
10:00 - 11:00	5	997	0.000	5	997	0.000	5	997	0.000
11:00 - 12:00	5	997	0.000	5	997	0.000	5	997	0.000
12:00 - 13:00	5	997	0.000	5	997	0.000	5	997	0.000
13:00 - 14:00	5	997	0.000	5	997	0.000	5	997	0.000
14:00 - 15:00	5	997	0.000	5	997	0.000	5	997	0.000
15:00 - 16:00	5	997	0.000	5	997	0.000	5	997	0.000
16:00 - 17:00	5	997	0.000	5	997	0.000	5	997	0.000
17:00 - 18:00	5	997	0.000	5	997	0.000	5	997	0.000
18:00 - 19:00	5	997	0.000	5	997	0.000	5	997	0.000
19:00 - 20:00	4	827	0.000	4	827	0.000	4	827	0.000
20:00 - 21:00	4	827	0.000	4	827	0.000	4	827	0.000
21:00 - 22:00	2	993	0.000	2	993	0.000	2	993	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

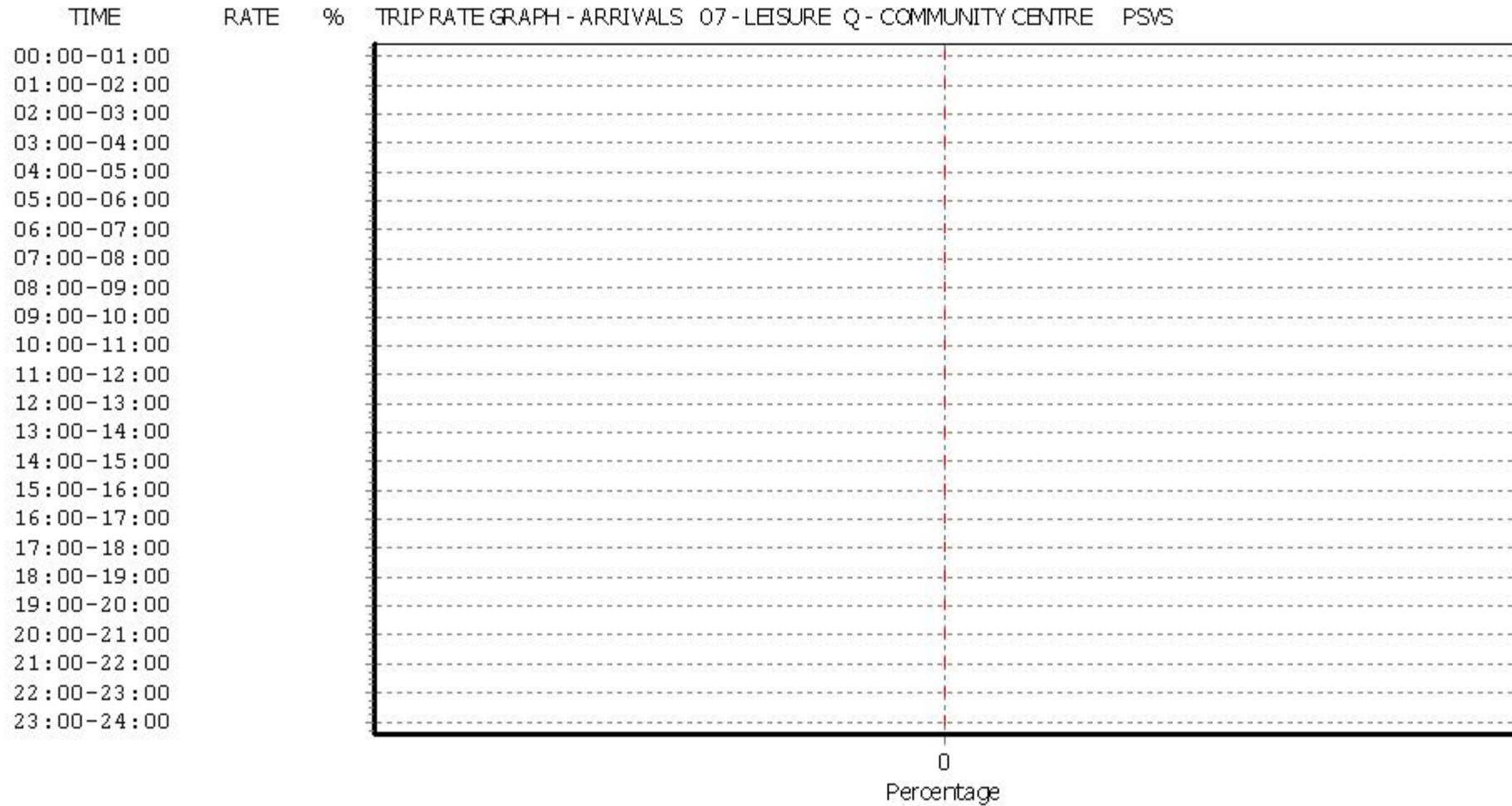
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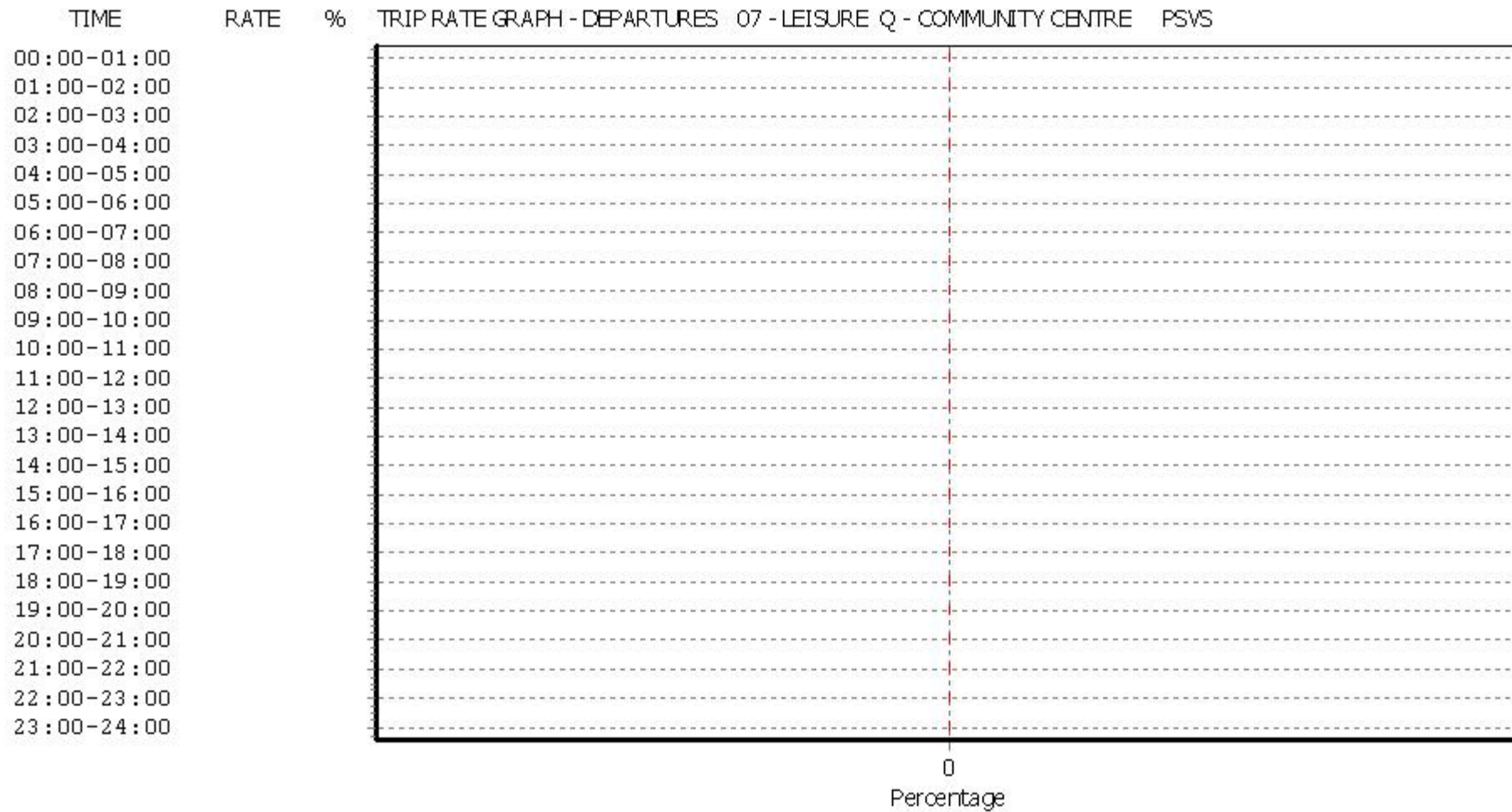
Parameter summary

Trip rate parameter range selected: 400 - 1676 (units: sqm)
 Survey date date range: 01/01/09 - 13/11/15
 Number of weekdays (Monday-Friday): 5
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

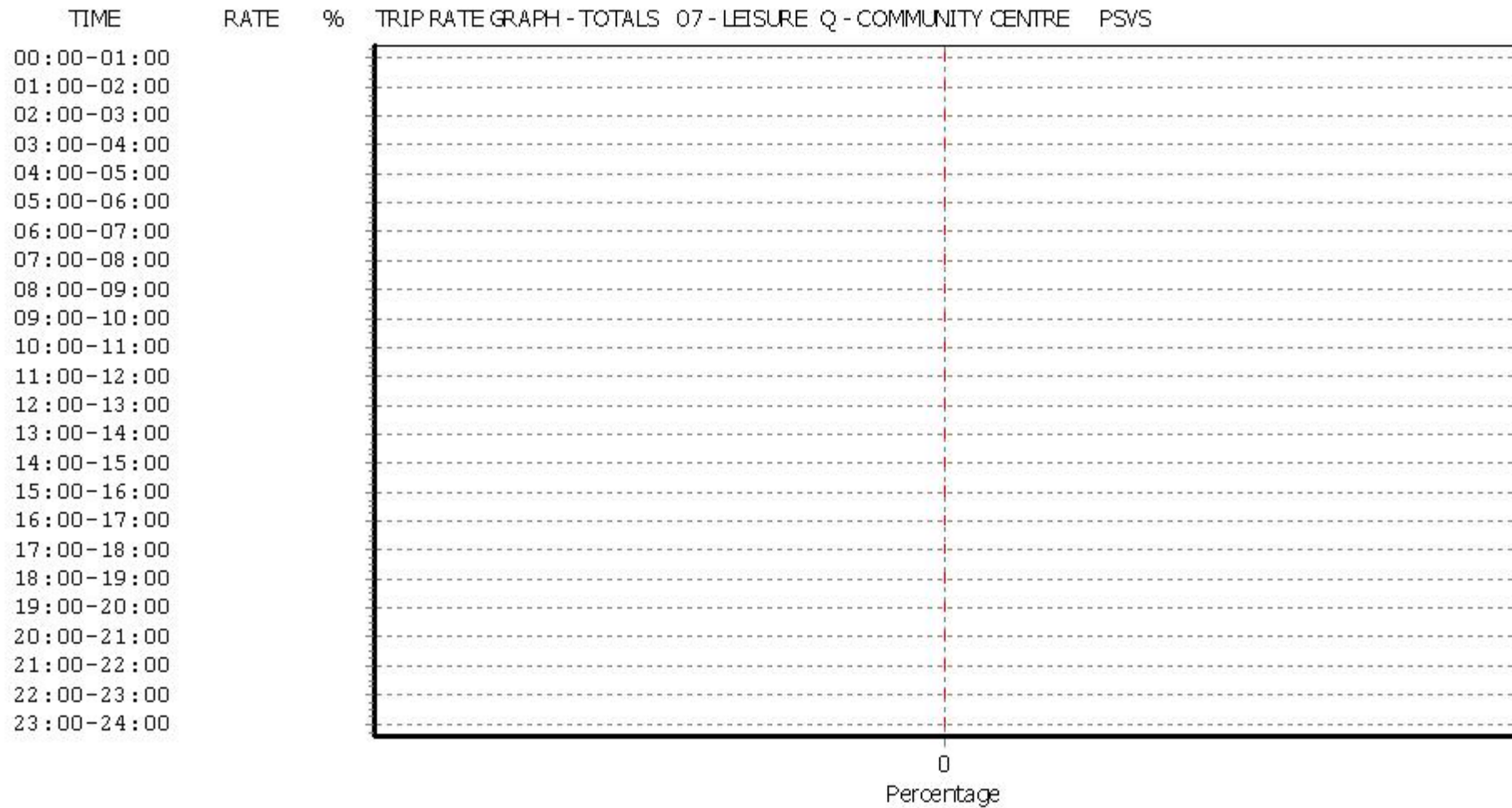
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TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE
CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	1676	0.000	1	1676	0.000	1	1676	0.000
08:00 - 09:00	5	997	0.040	5	997	0.000	5	997	0.040
09:00 - 10:00	5	997	0.020	5	997	0.000	5	997	0.020
10:00 - 11:00	5	997	0.020	5	997	0.000	5	997	0.020
11:00 - 12:00	5	997	0.000	5	997	0.000	5	997	0.000
12:00 - 13:00	5	997	0.000	5	997	0.000	5	997	0.000
13:00 - 14:00	5	997	0.000	5	997	0.000	5	997	0.000
14:00 - 15:00	5	997	0.020	5	997	0.020	5	997	0.040
15:00 - 16:00	5	997	0.000	5	997	0.000	5	997	0.000
16:00 - 17:00	5	997	0.020	5	997	0.080	5	997	0.100
17:00 - 18:00	5	997	0.000	5	997	0.020	5	997	0.020
18:00 - 19:00	5	997	0.000	5	997	0.000	5	997	0.000
19:00 - 20:00	4	827	0.000	4	827	0.000	4	827	0.000
20:00 - 21:00	4	827	0.000	4	827	0.000	4	827	0.000
21:00 - 22:00	2	993	0.000	2	993	0.000	2	993	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.120			0.120			0.240

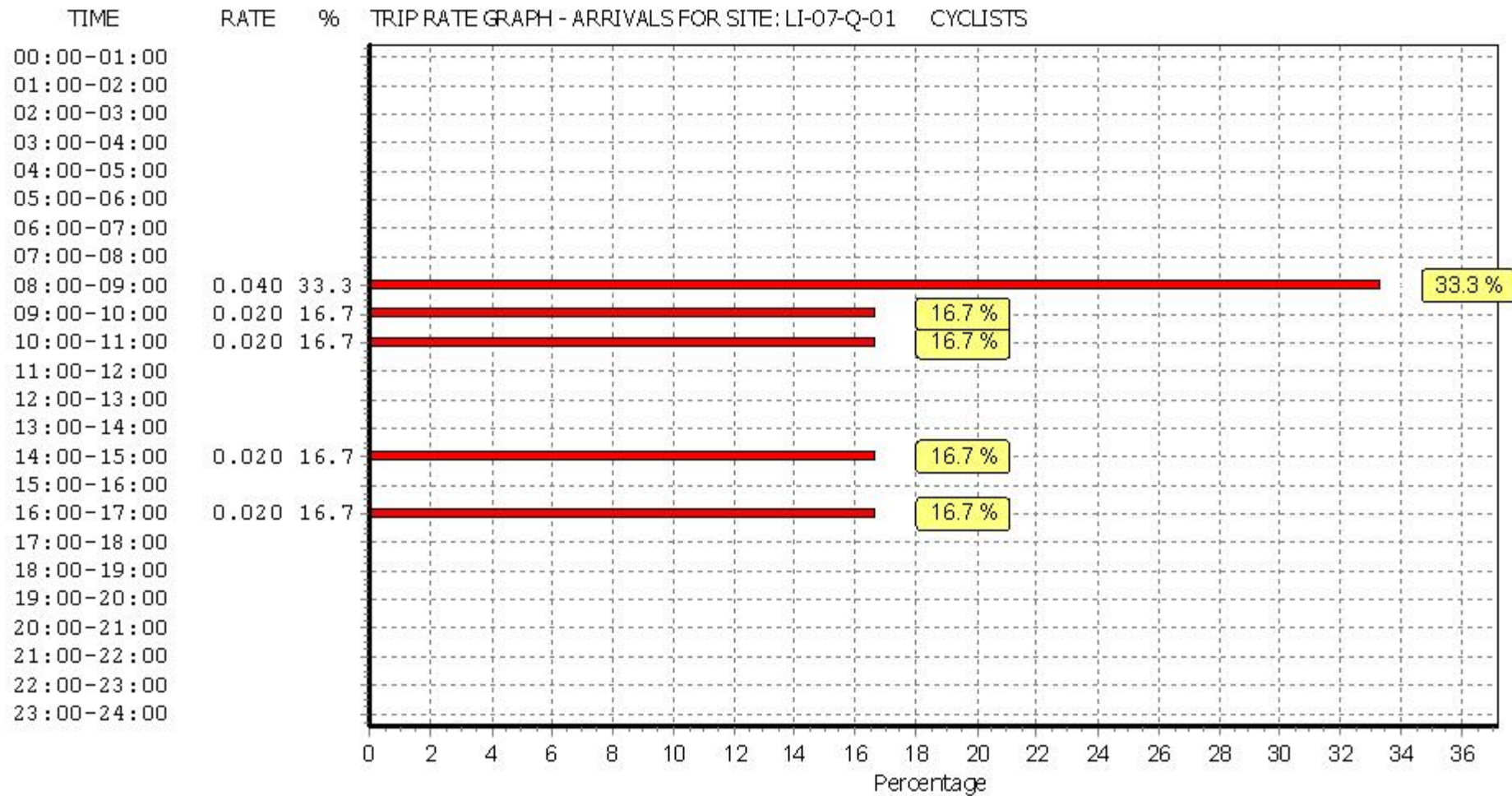
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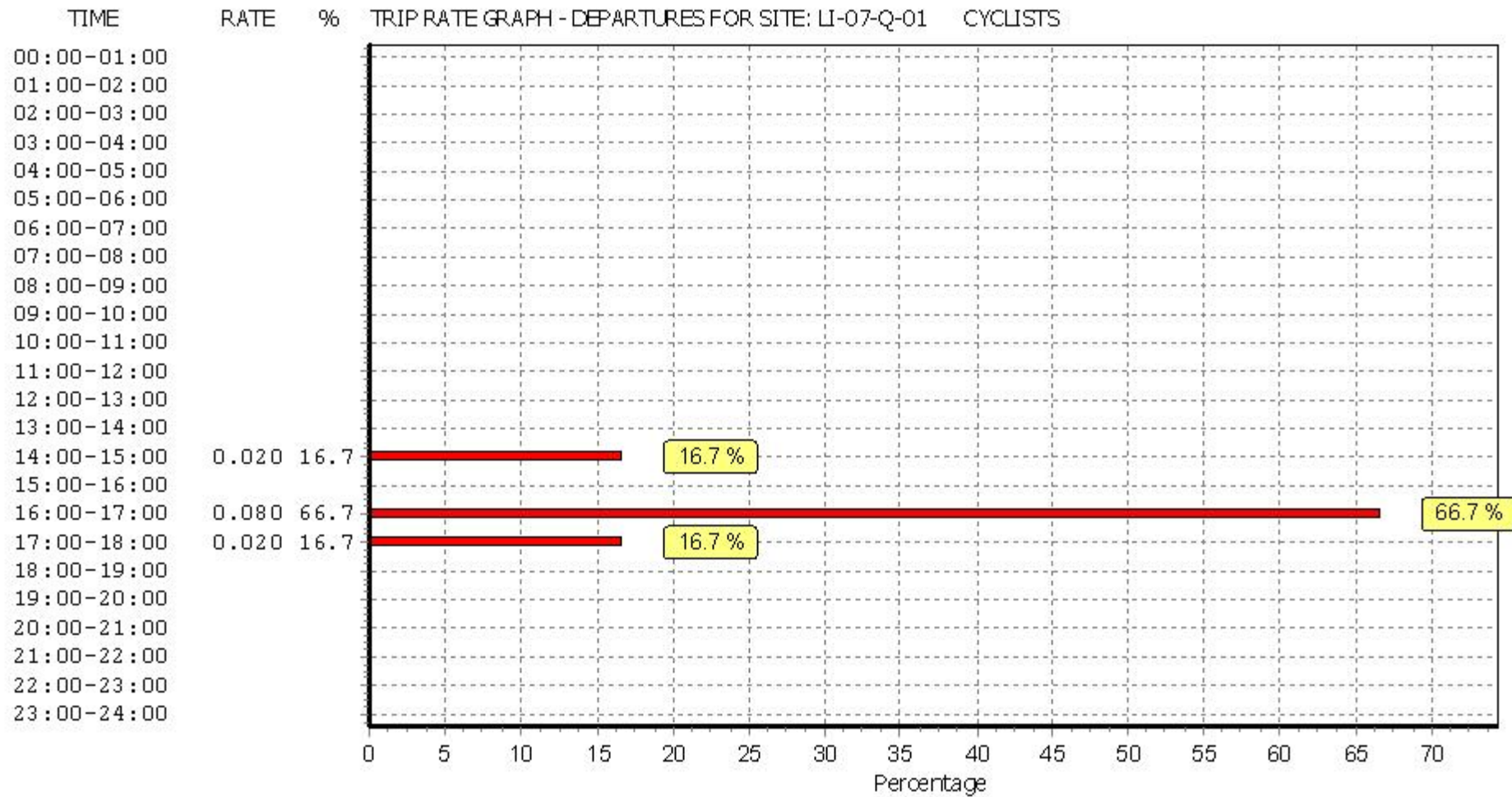
Parameter summary

Trip rate parameter range selected: 400 - 1676 (units: sqm)
 Survey date date range: 01/01/09 - 13/11/15
 Number of weekdays (Monday-Friday): 5
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

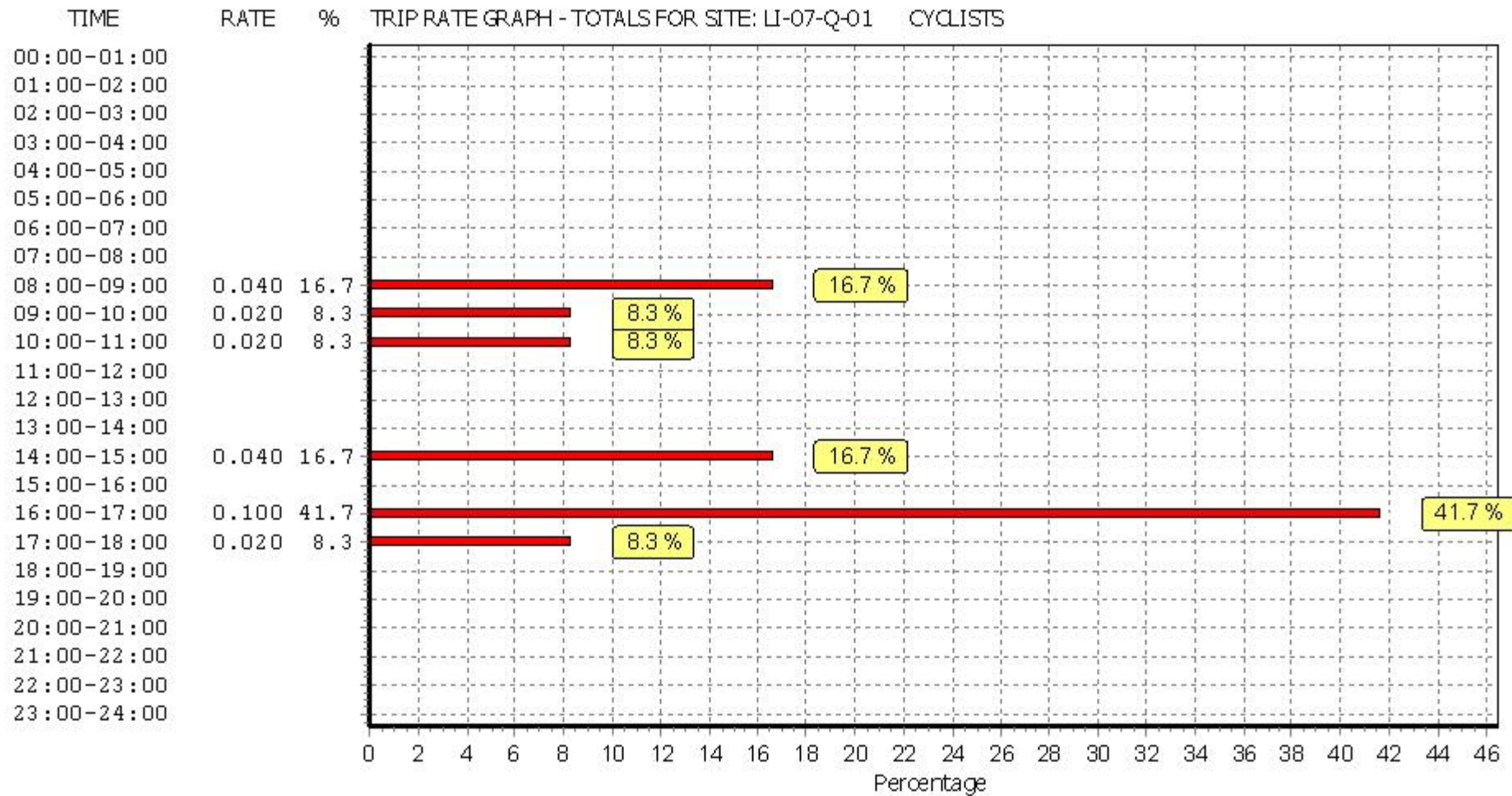
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TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	2 days
11	SCOTLAND	
	SR STIRLING	1 days
17	ULSTER (NORTHERN IRELAND)	
	DE DERRY	2 days
	DO DOWN	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: 260 to 1425 (units: sqm)
 Range Selected by User: 210 to 84009 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 10/11/15

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

Selected survey days:

Tuesday	1 days
Wednesday	1 days
Thursday	4 days
Friday	1 days

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

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:

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

A1 5 days

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

Population within 1 mile:

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

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

Population within 5 miles:

25,001 to 50,000 1 days
 75,001 to 100,000 3 days
 100,001 to 125,000 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 6 days

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

Petrol filling station:

Included in the survey count 0 days
 Excluded from count or no filling station 7 days

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

Travel Plan:

Yes 1 days
 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 7 days

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

LIST OF SITES relevant to selection parameters

1	CH-01-I-02 LOCAL SHOPS CHRISTLETON ROAD BOUGHTON HEATH CHESTER Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Gross floor area: 260 sqm Survey date: TUESDAY 15/05/12	CESHIRE	Survey Type: MANUAL
2	CH-01-I-03 LOCAL SHOPS MILL LANE BACHE CHESTER Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Gross floor area: 365 sqm Survey date: THURSDAY 17/05/12	CESHIRE	Survey Type: MANUAL
3	DE-01-I-01 LOCAL SHOPS ROSSDOWNEY PARK CLOONEY LONDONDERRY Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 820 sqm Survey date: WEDNESDAY 20/06/12	DERRY	Survey Type: MANUAL
4	DE-01-I-02 LOCAL SHOPS BEECHWOOD AVENUE LONDONDERRY Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 1425 sqm Survey date: THURSDAY 21/06/12	DERRY	Survey Type: MANUAL
5	DO-01-I-01 LOCAL SHOPS COMBER ROAD DUNDONALD BELFAST Neighbourhood Centre (PPS6 Local Centre) No Sub Category Total Gross floor area: 1305 sqm Survey date: FRIDAY 25/11/11	DOWN	Survey Type: MANUAL
6	SH-01-I-02 LOCAL SHOPS WREKIN DRIVE DONNINGTON TELFORD Edge of Town Residential Zone Total Gross floor area: 900 sqm Survey date: THURSDAY 24/10/13	SHROPSHIRE	Survey Type: MANUAL
7	SR-01-I-02 LOCAL SHOPS ALLOA ROAD STIRLING Edge of Town Residential Zone Total Gross floor area: 550 sqm Survey date: THURSDAY 26/06/14	STIRLING	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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	804	3.929	7	804	3.396	7	804	7.325
08:00 - 09:00	7	804	4.889	7	804	4.444	7	804	9.333
09:00 - 10:00	7	804	6.311	7	804	5.724	7	804	12.035
10:00 - 11:00	7	804	5.653	7	804	5.351	7	804	11.004
11:00 - 12:00	7	804	6.916	7	804	7.147	7	804	14.063
12:00 - 13:00	7	804	7.911	7	804	7.360	7	804	15.271
13:00 - 14:00	7	804	7.164	7	804	7.147	7	804	14.311
14:00 - 15:00	7	804	6.809	7	804	6.987	7	804	13.796
15:00 - 16:00	7	804	7.004	7	804	6.969	7	804	13.973
16:00 - 17:00	7	804	7.200	7	804	7.289	7	804	14.489
17:00 - 18:00	7	804	6.542	7	804	6.987	7	804	13.529
18:00 - 19:00	7	804	6.293	7	804	6.524	7	804	12.817
19:00 - 20:00	5	1000	5.880	5	1000	5.420	5	1000	11.300
20:00 - 21:00	5	1000	6.160	5	1000	6.500	5	1000	12.660
21:00 - 22:00	5	1000	4.700	5	1000	5.400	5	1000	10.100
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			93.361			92.645			186.006

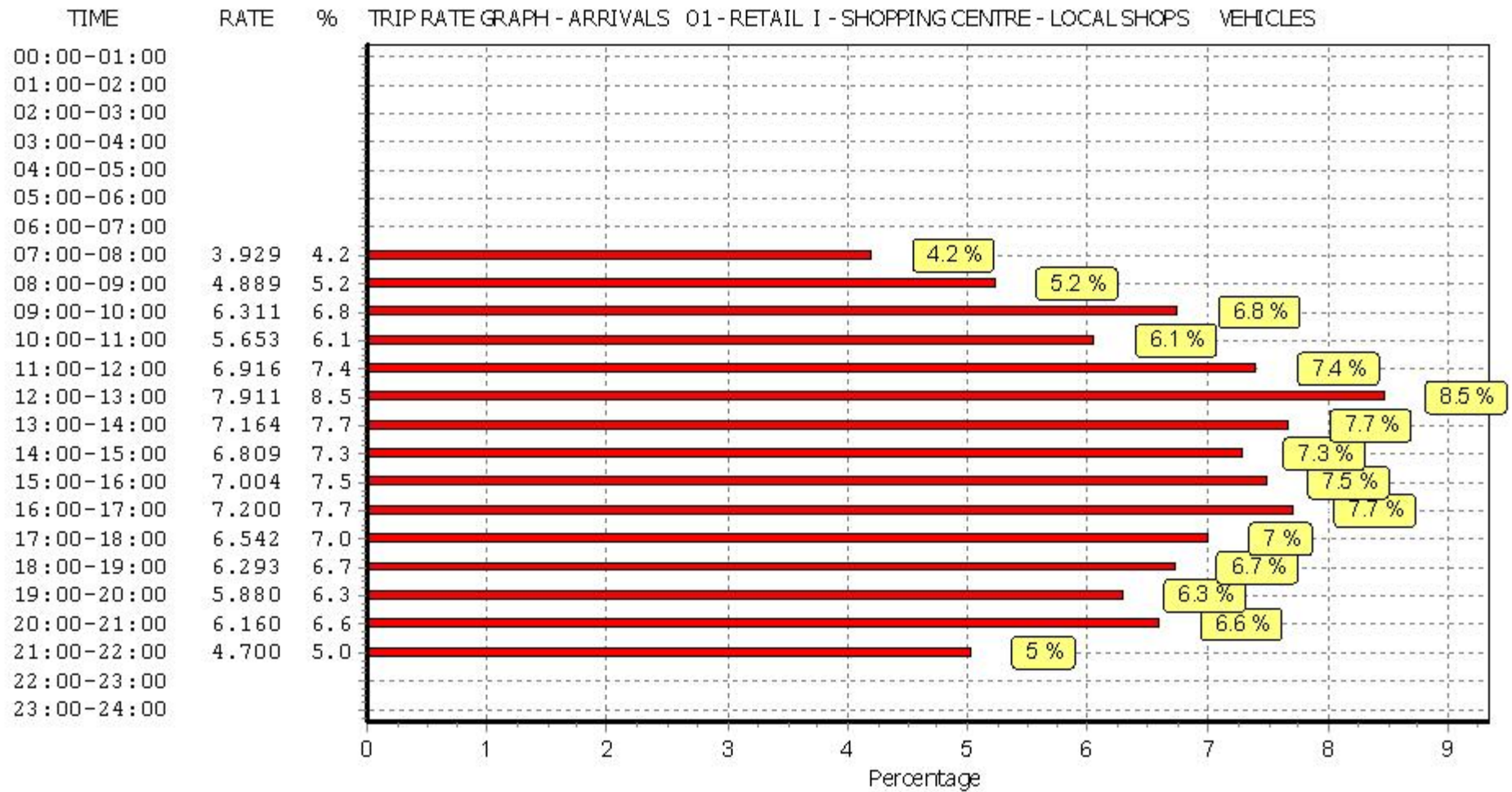
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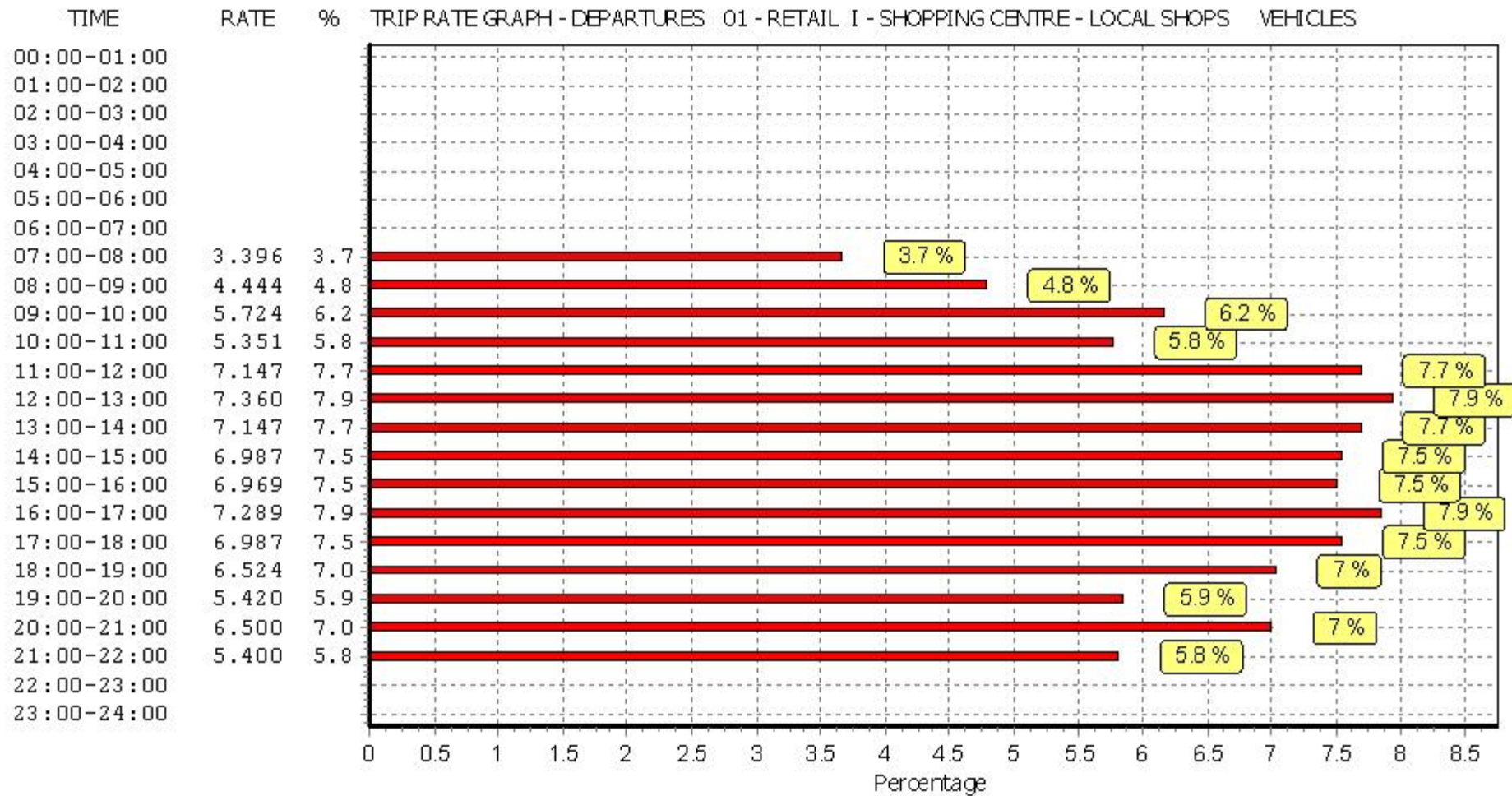
Parameter summary

Trip rate parameter range selected: 260 - 1425 (units: sqm)
 Survey date range: 01/01/09 - 10/11/15
 Number of weekdays (Monday-Friday): 7
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

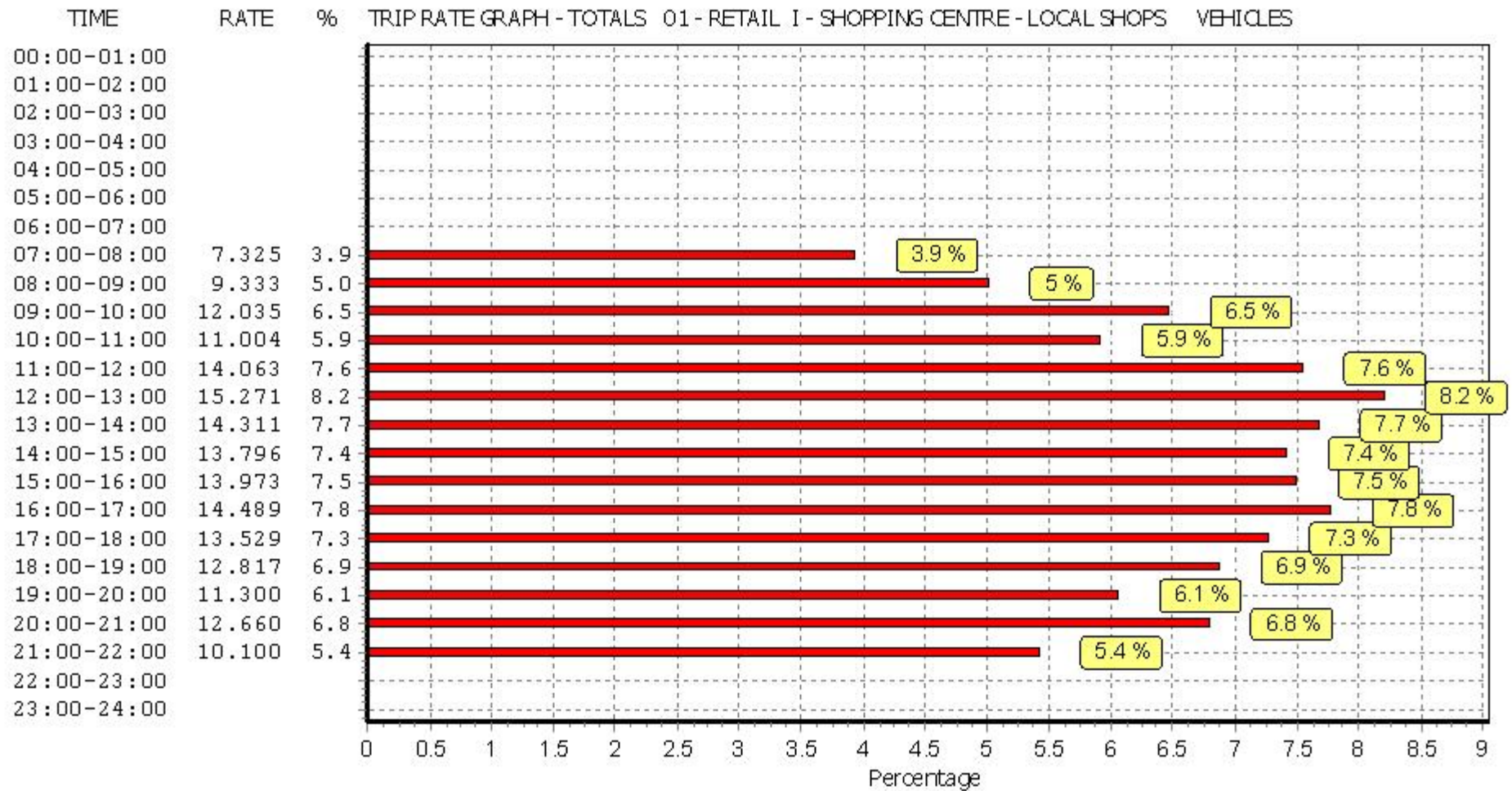
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TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	804	0.107	7	804	0.107	7	804	0.214
08:00 - 09:00	7	804	0.267	7	804	0.249	7	804	0.516
09:00 - 10:00	7	804	0.338	7	804	0.338	7	804	0.676
10:00 - 11:00	7	804	0.302	7	804	0.231	7	804	0.533
11:00 - 12:00	7	804	0.284	7	804	0.320	7	804	0.604
12:00 - 13:00	7	804	0.196	7	804	0.178	7	804	0.374
13:00 - 14:00	7	804	0.142	7	804	0.196	7	804	0.338
14:00 - 15:00	7	804	0.231	7	804	0.249	7	804	0.480
15:00 - 16:00	7	804	0.302	7	804	0.267	7	804	0.569
16:00 - 17:00	7	804	0.178	7	804	0.160	7	804	0.338
17:00 - 18:00	7	804	0.213	7	804	0.249	7	804	0.462
18:00 - 19:00	7	804	0.196	7	804	0.178	7	804	0.374
19:00 - 20:00	5	1000	0.260	5	1000	0.220	5	1000	0.480
20:00 - 21:00	5	1000	0.400	5	1000	0.360	5	1000	0.760
21:00 - 22:00	5	1000	0.520	5	1000	0.460	5	1000	0.980
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.936			3.762			7.698

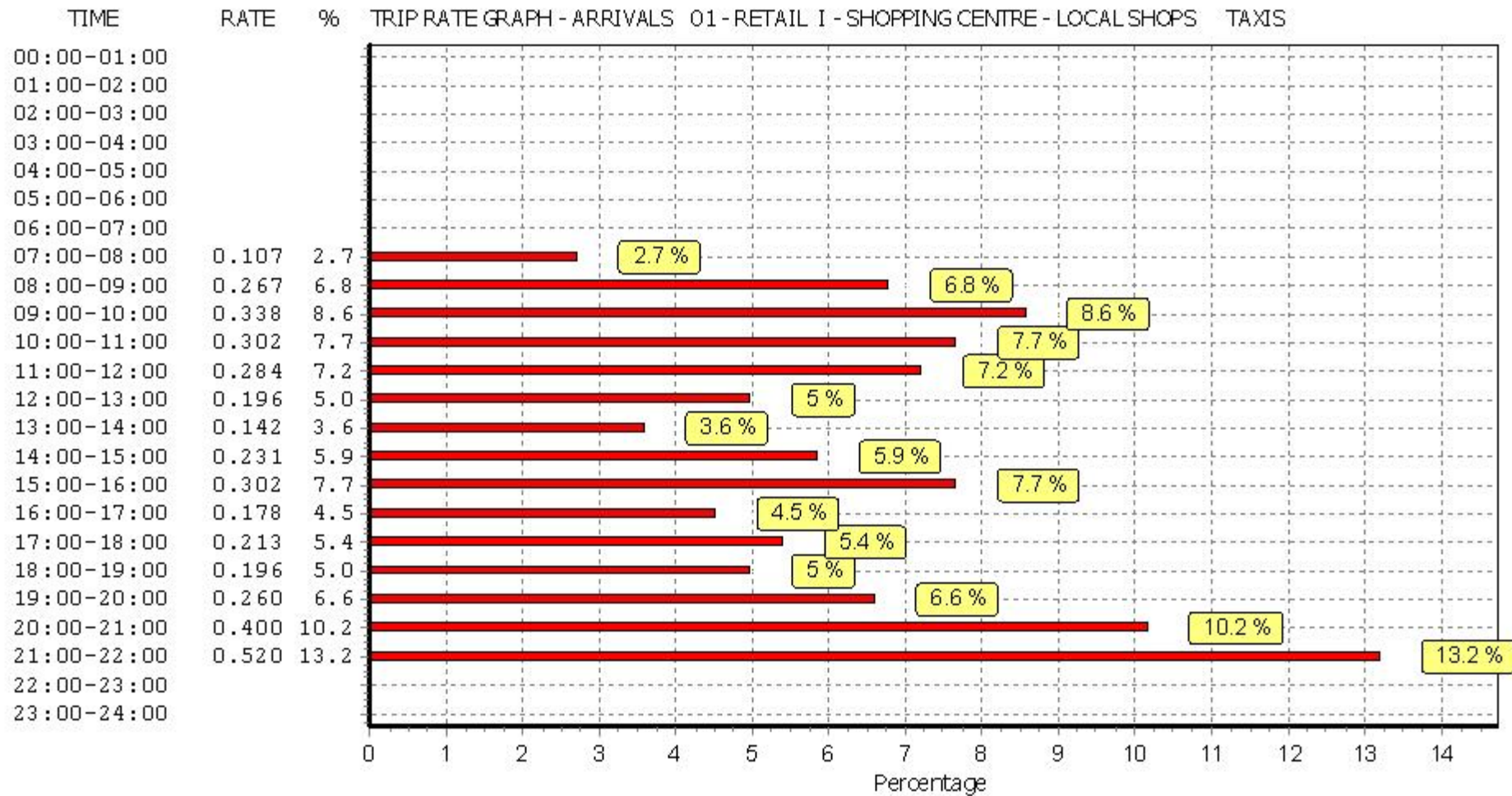
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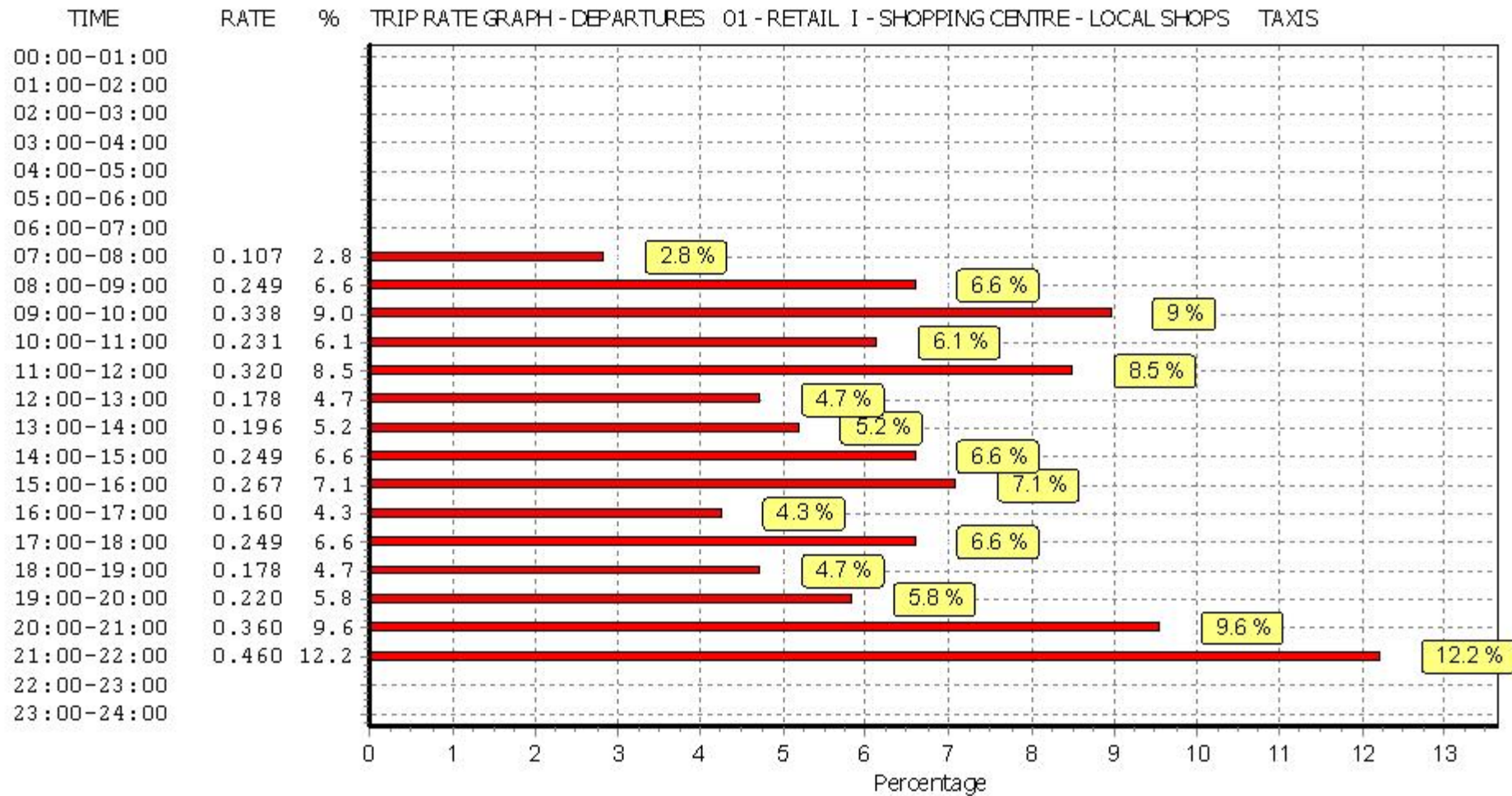
Parameter summary

Trip rate parameter range selected:	260 - 1425 (units: sqm)
Survey date date range:	01/01/09 - 10/11/15
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

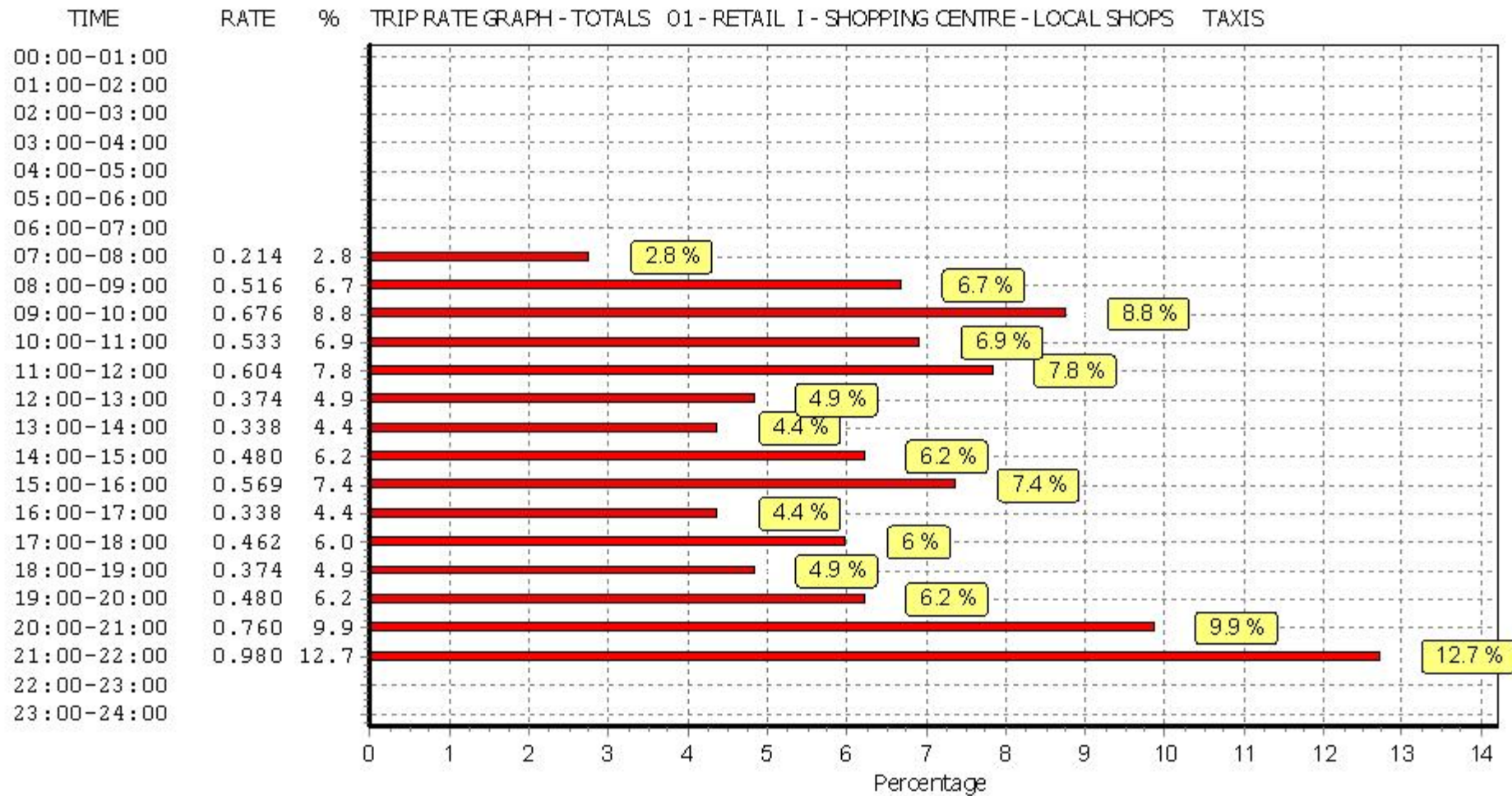
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TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	804	0.196	7	804	0.142	7	804	0.338
08:00 - 09:00	7	804	0.213	7	804	0.160	7	804	0.373
09:00 - 10:00	7	804	0.213	7	804	0.302	7	804	0.515
10:00 - 11:00	7	804	0.160	7	804	0.124	7	804	0.284
11:00 - 12:00	7	804	0.124	7	804	0.124	7	804	0.248
12:00 - 13:00	7	804	0.178	7	804	0.267	7	804	0.445
13:00 - 14:00	7	804	0.213	7	804	0.231	7	804	0.444
14:00 - 15:00	7	804	0.142	7	804	0.107	7	804	0.249
15:00 - 16:00	7	804	0.124	7	804	0.107	7	804	0.231
16:00 - 17:00	7	804	0.089	7	804	0.071	7	804	0.160
17:00 - 18:00	7	804	0.018	7	804	0.018	7	804	0.036
18:00 - 19:00	7	804	0.036	7	804	0.053	7	804	0.089
19:00 - 20:00	5	1000	0.060	5	1000	0.040	5	1000	0.100
20:00 - 21:00	5	1000	0.000	5	1000	0.020	5	1000	0.020
21:00 - 22:00	5	1000	0.000	5	1000	0.000	5	1000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.766			1.766			3.532

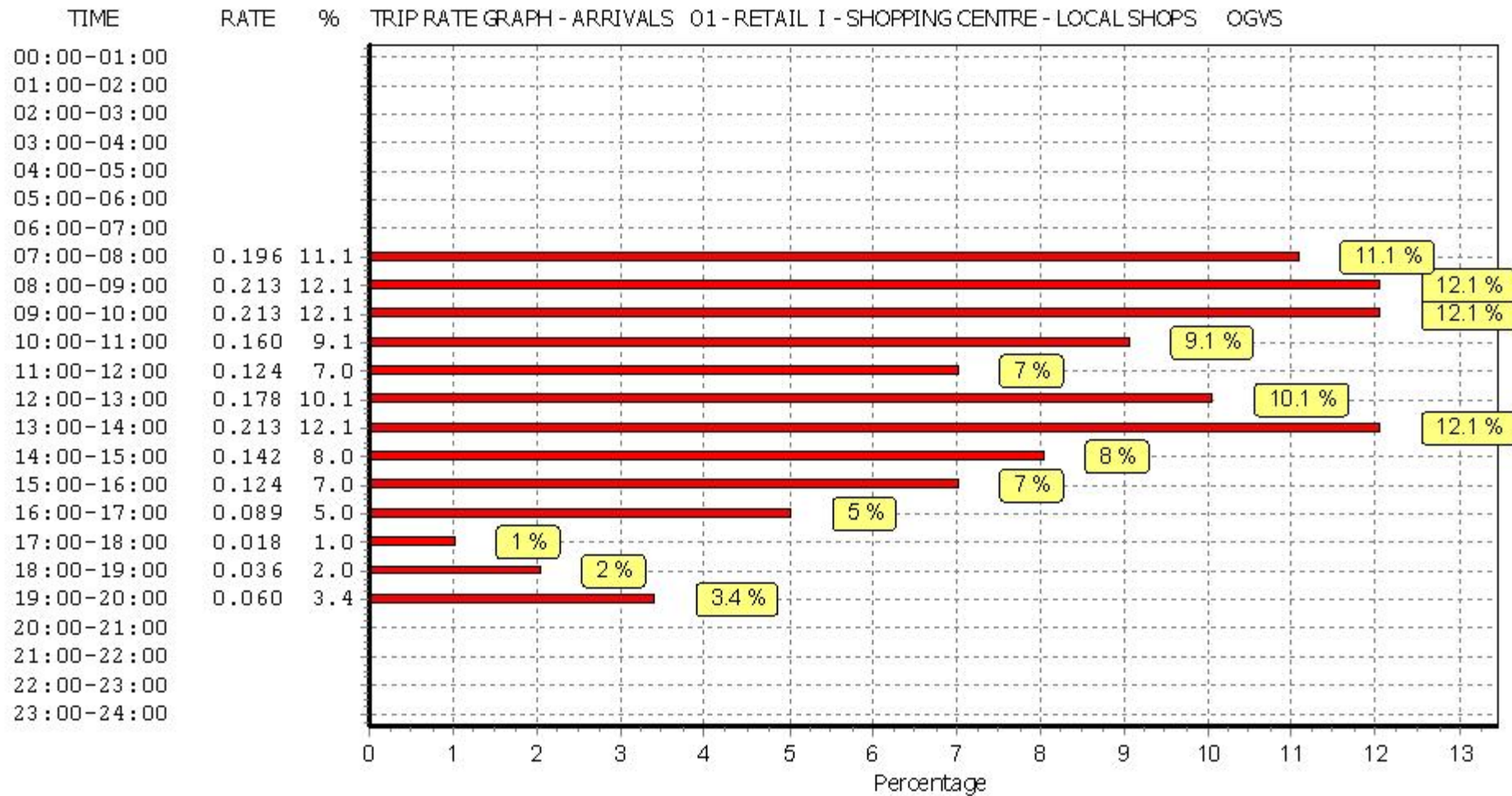
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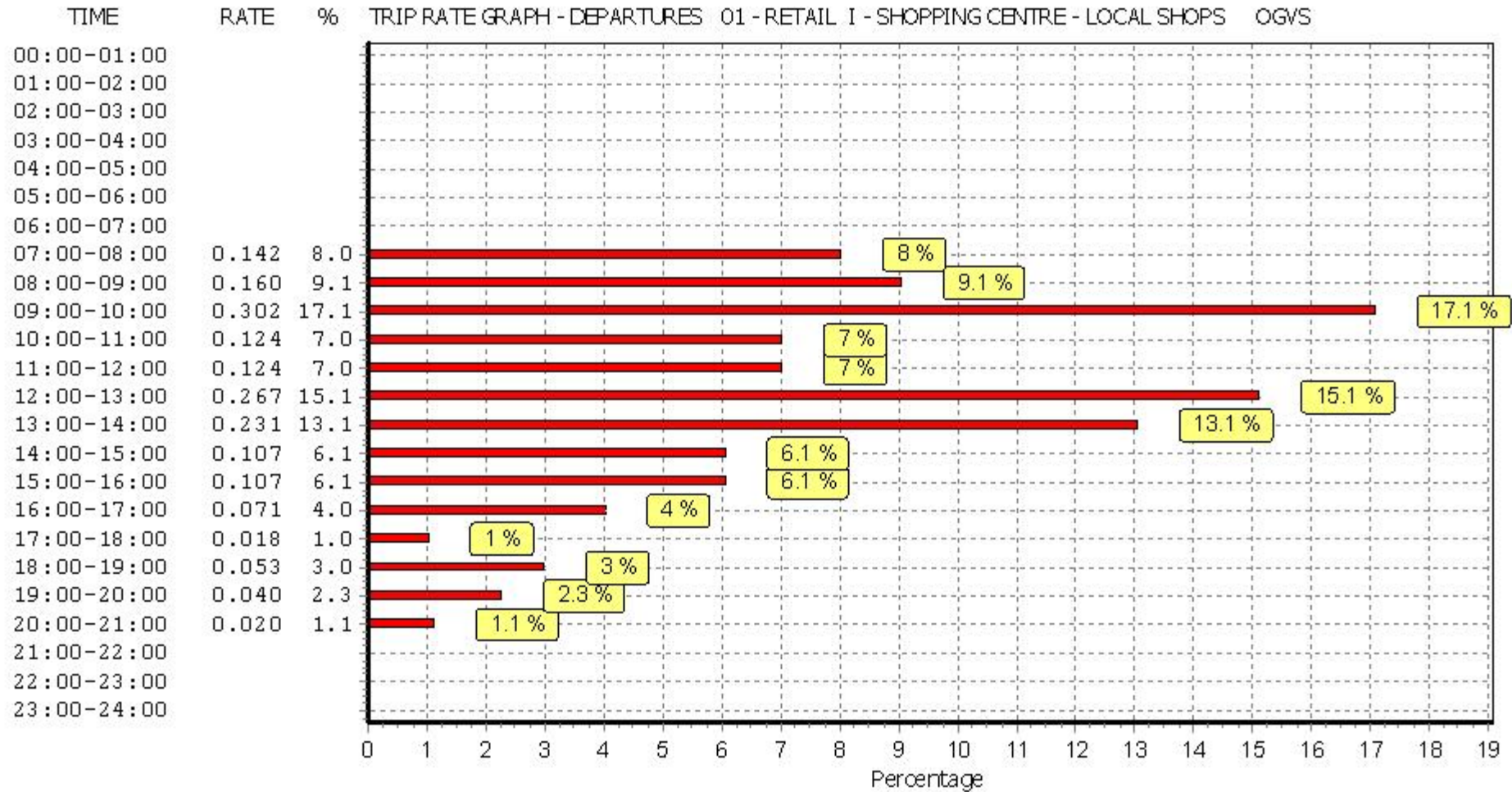
Parameter summary

Trip rate parameter range selected:	260 - 1425 (units: sqm)
Survey date date range:	01/01/09 - 10/11/15
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

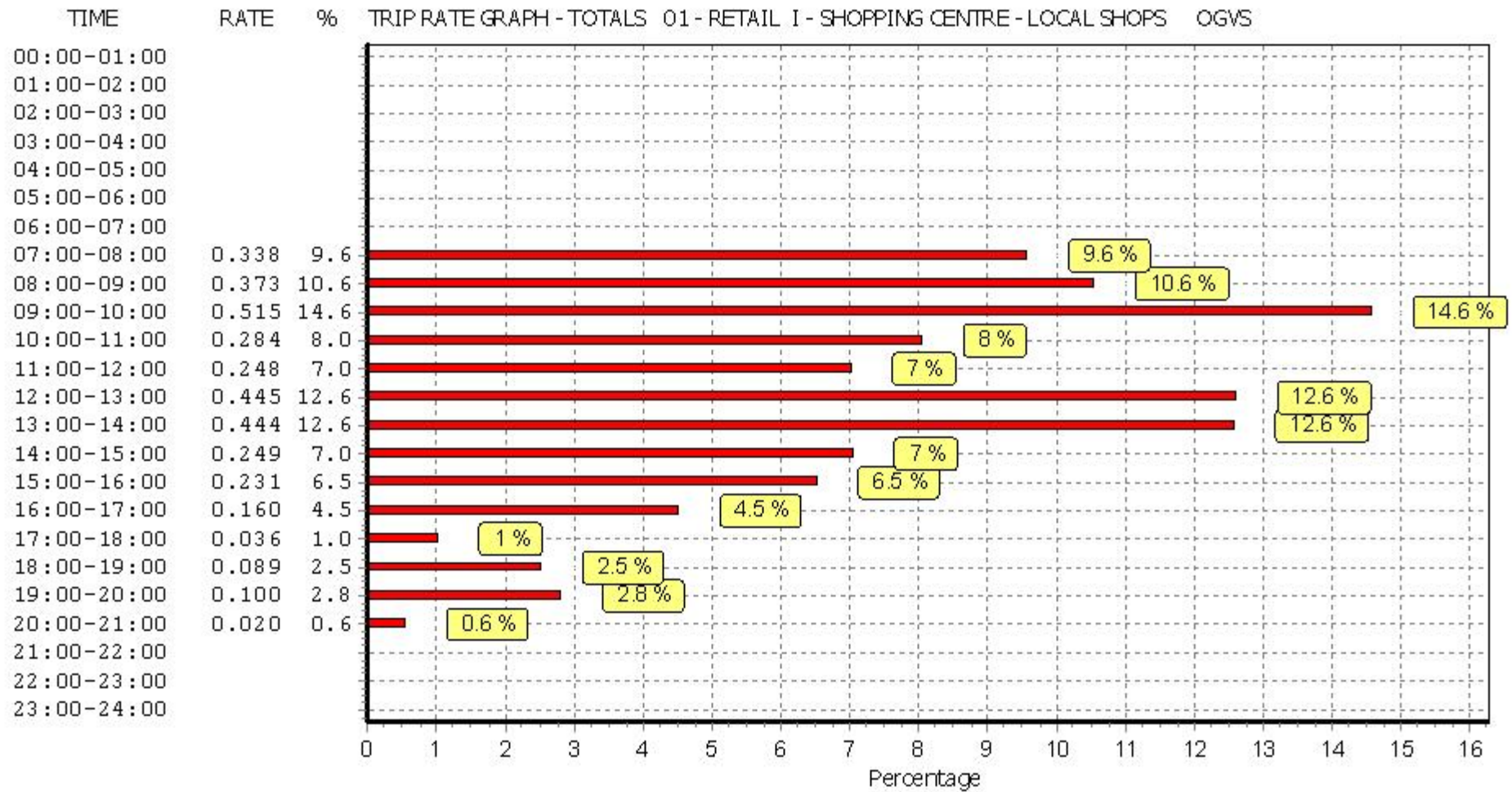
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TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	804	0.000	7	804	0.000	7	804	0.000
08:00 - 09:00	7	804	0.000	7	804	0.000	7	804	0.000
09:00 - 10:00	7	804	0.018	7	804	0.000	7	804	0.018
10:00 - 11:00	7	804	0.000	7	804	0.018	7	804	0.018
11:00 - 12:00	7	804	0.000	7	804	0.000	7	804	0.000
12:00 - 13:00	7	804	0.018	7	804	0.018	7	804	0.036
13:00 - 14:00	7	804	0.000	7	804	0.000	7	804	0.000
14:00 - 15:00	7	804	0.000	7	804	0.000	7	804	0.000
15:00 - 16:00	7	804	0.000	7	804	0.000	7	804	0.000
16:00 - 17:00	7	804	0.036	7	804	0.036	7	804	0.072
17:00 - 18:00	7	804	0.000	7	804	0.000	7	804	0.000
18:00 - 19:00	7	804	0.000	7	804	0.000	7	804	0.000
19:00 - 20:00	5	1000	0.000	5	1000	0.000	5	1000	0.000
20:00 - 21:00	5	1000	0.000	5	1000	0.000	5	1000	0.000
21:00 - 22:00	5	1000	0.000	5	1000	0.000	5	1000	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.072			0.072			0.144

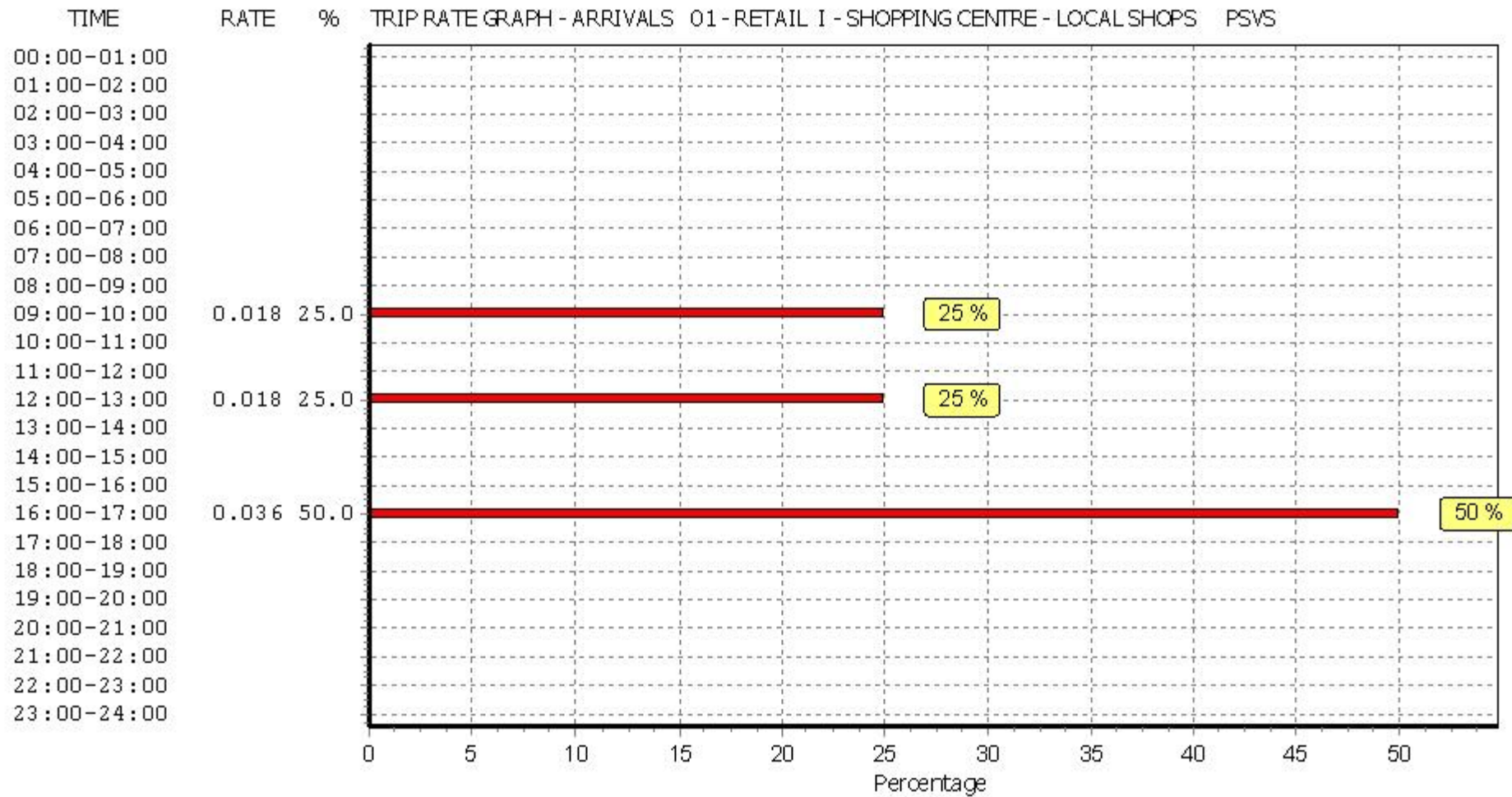
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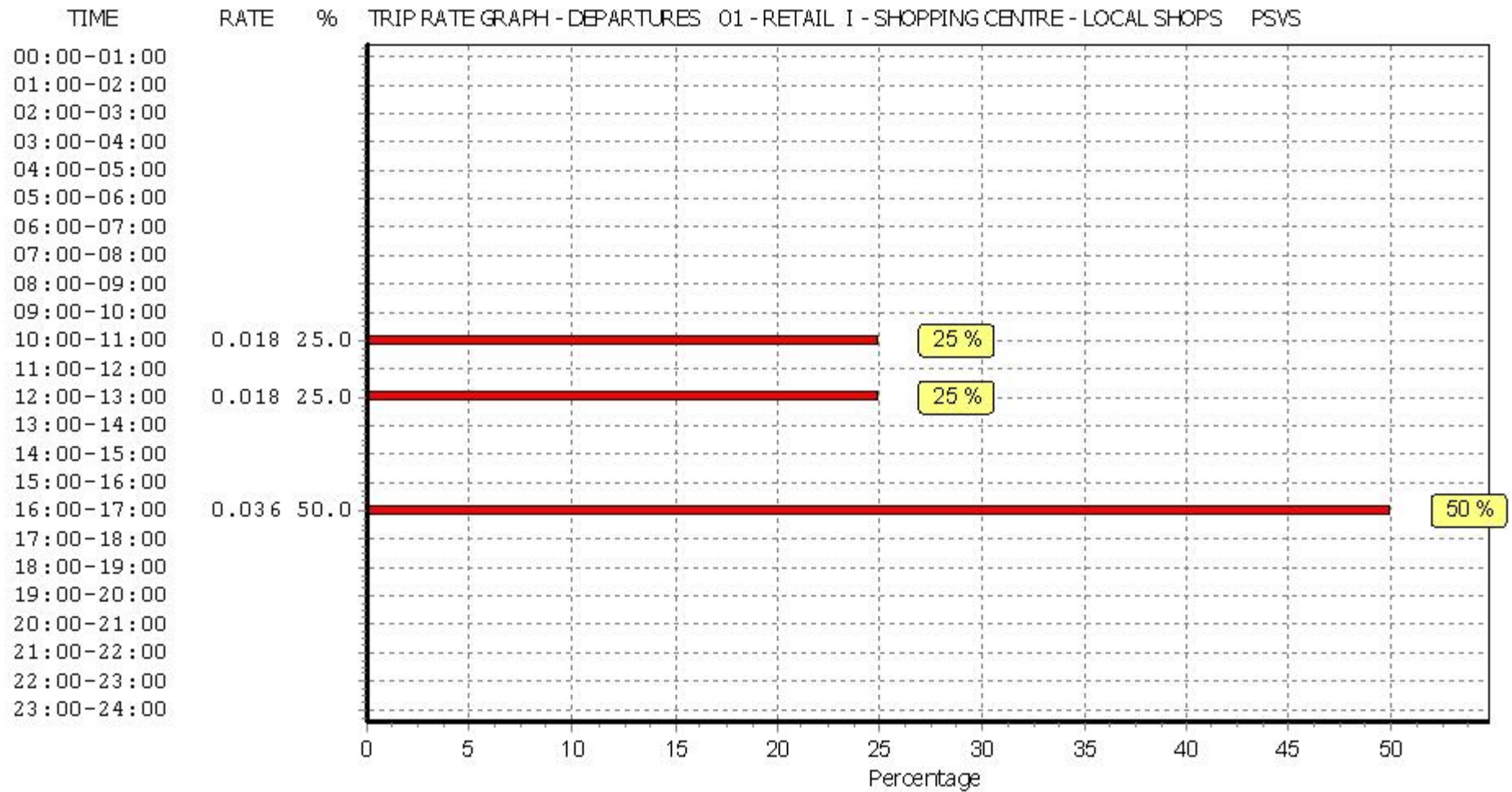
Parameter summary

Trip rate parameter range selected:	260 - 1425 (units: sqm)
Survey date date range:	01/01/09 - 10/11/15
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

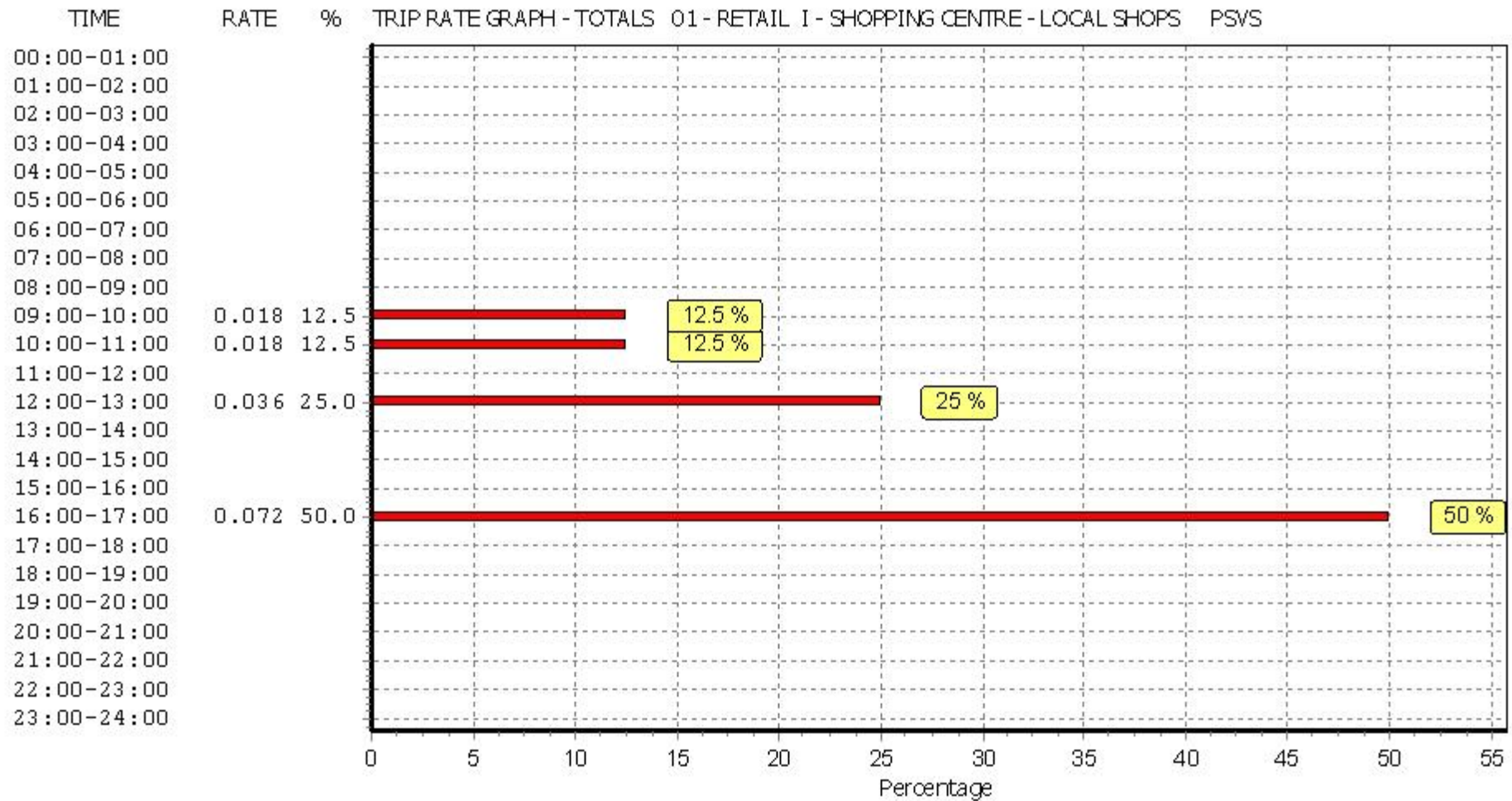
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TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	804	0.160	7	804	0.107	7	804	0.267
08:00 - 09:00	7	804	0.124	7	804	0.142	7	804	0.266
09:00 - 10:00	7	804	0.071	7	804	0.053	7	804	0.124
10:00 - 11:00	7	804	0.036	7	804	0.036	7	804	0.072
11:00 - 12:00	7	804	0.071	7	804	0.089	7	804	0.160
12:00 - 13:00	7	804	0.089	7	804	0.107	7	804	0.196
13:00 - 14:00	7	804	0.089	7	804	0.089	7	804	0.178
14:00 - 15:00	7	804	0.036	7	804	0.071	7	804	0.107
15:00 - 16:00	7	804	0.213	7	804	0.178	7	804	0.391
16:00 - 17:00	7	804	0.124	7	804	0.124	7	804	0.248
17:00 - 18:00	7	804	0.036	7	804	0.053	7	804	0.089
18:00 - 19:00	7	804	0.124	7	804	0.107	7	804	0.231
19:00 - 20:00	5	1000	0.060	5	1000	0.080	5	1000	0.140
20:00 - 21:00	5	1000	0.040	5	1000	0.000	5	1000	0.040
21:00 - 22:00	5	1000	0.060	5	1000	0.080	5	1000	0.140
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.333			1.316			2.649

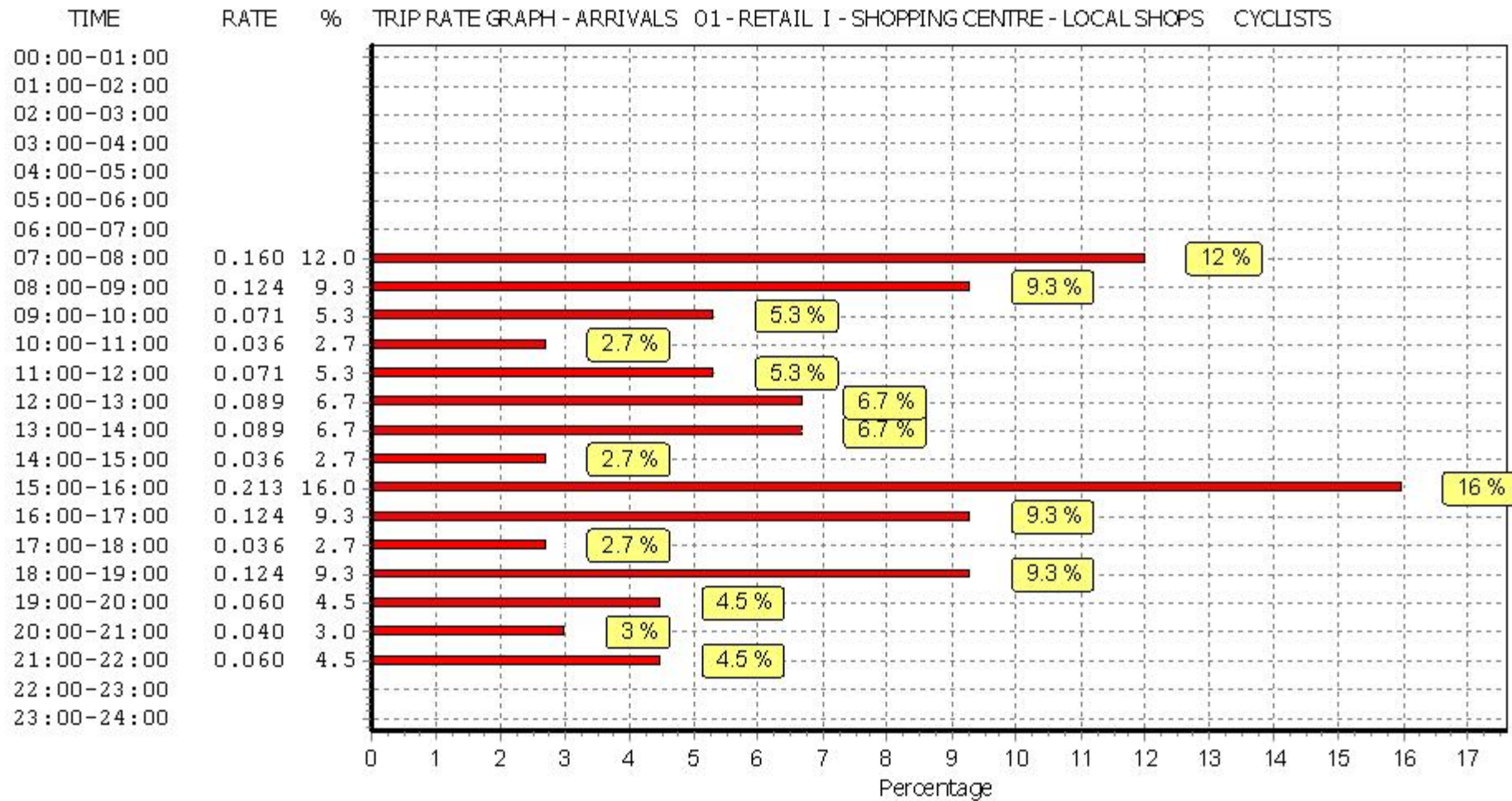
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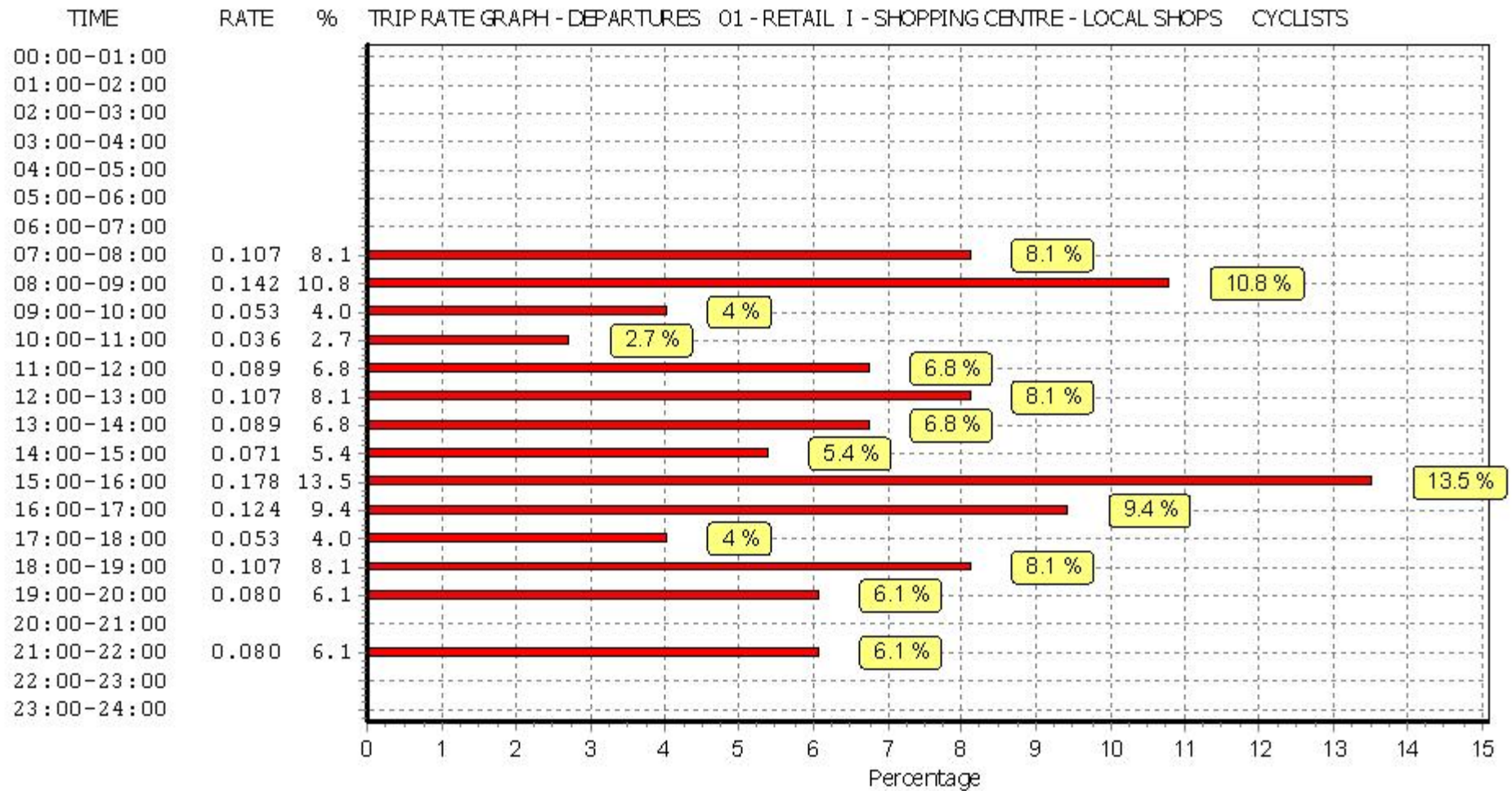
Parameter summary

Trip rate parameter range selected: 260 - 1425 (units: sqm)
 Survey date date range: 01/01/09 - 10/11/15
 Number of weekdays (Monday-Friday): 7
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 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 shown. 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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Calculation Reference: AUDIT-638801-170821-0838

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	KC KENT	1 days
05	EAST MIDLANDS	
	NR NORTHAMPTONSHIRE	1 days
10	WALES	
	BG BRIDGEND	1 days
	GW GWYNEDD	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: 182 to 1300 (units: sqm)
 Range Selected by User: 120 to 2350 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 10/12/14

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	3 days
Wednesday	2 days
Friday	2 days

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

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	4
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
Commercial Zone	1
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 7 days

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

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	2 days
5,001 to 10,000	1 days
10,001 to 15,000	2 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	1 days
75,001 to 100,000	3 days
100,001 to 125,000	1 days

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

Car ownership within 5 miles:

1.1 to 1.5 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 7 days

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

PTAL Rating:

No PTAL Present 7 days

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

LIST OF SITES relevant to selection parameters

1	BG-04-D-01 GEORGE STREET BRIDGEND IND. ESTATE BRIDGEND Edge of Town Industrial Zone Total Gross floor area: Survey date: MONDAY	210 sqm 13/10/14	BRIDGEND	Survey Type: MANUAL
2	DE-04-D-01 COURTAULD WAY EGLINTON NEAR LONDONDERRY Free Standing (PPS6 Out of Town) Industrial Zone Total Gross floor area: Survey date: FRIDAY	1300 sqm 22/06/12	DERRY	Survey Type: MANUAL
3	GW-04-D-01 FFORDD GELLI MORGAN PARC MENAI BANGOR Edge of Town Commercial Zone Total Gross floor area: Survey date: MONDAY	200 sqm 13/07/09	GWYNEDD	Survey Type: MANUAL
4	KC-04-D-01 PEMBURY ROAD TONBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: Survey date: WEDNESDAY	210 sqm 09/12/09	KENT	Survey Type: MANUAL
5	NR-04-D-02 PARK AVENUE KETTERING Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: Survey date: WEDNESDAY	182 sqm 26/09/12	NORTHAMPTONSHIRE	Survey Type: MANUAL
6	RO-04-D-01 PARK VIEW CRUBY HILL ROSCOMMON Edge of Town Residential Zone Total Gross floor area: Survey date: FRIDAY	500 sqm 26/09/14	ROSCOMMON	Survey Type: MANUAL
7	SR-04-D-01 HENDERSON STREET BRIDGE OF ALLAN STIRLING Edge of Town No Sub Category Total Gross floor area: Survey date: MONDAY	250 sqm 16/06/14	STIRLING	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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	407	1.508	7	407	0.771	7	407	2.279
08:00 - 09:00	7	407	5.049	7	407	3.927	7	407	8.976
09:00 - 10:00	7	407	1.964	7	407	2.069	7	407	4.033
10:00 - 11:00	7	407	0.386	7	407	0.316	7	407	0.702
11:00 - 12:00	7	407	0.526	7	407	0.421	7	407	0.947
12:00 - 13:00	7	407	1.788	7	407	1.823	7	407	3.611
13:00 - 14:00	7	407	1.192	7	407	1.438	7	407	2.630
14:00 - 15:00	7	407	0.912	7	407	0.771	7	407	1.683
15:00 - 16:00	7	407	0.666	7	407	1.052	7	407	1.718
16:00 - 17:00	7	407	1.823	7	407	1.893	7	407	3.716
17:00 - 18:00	7	407	3.226	7	407	4.173	7	407	7.399
18:00 - 19:00	6	442	0.113	6	442	0.641	6	442	0.754
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			19.153			19.295			38.448

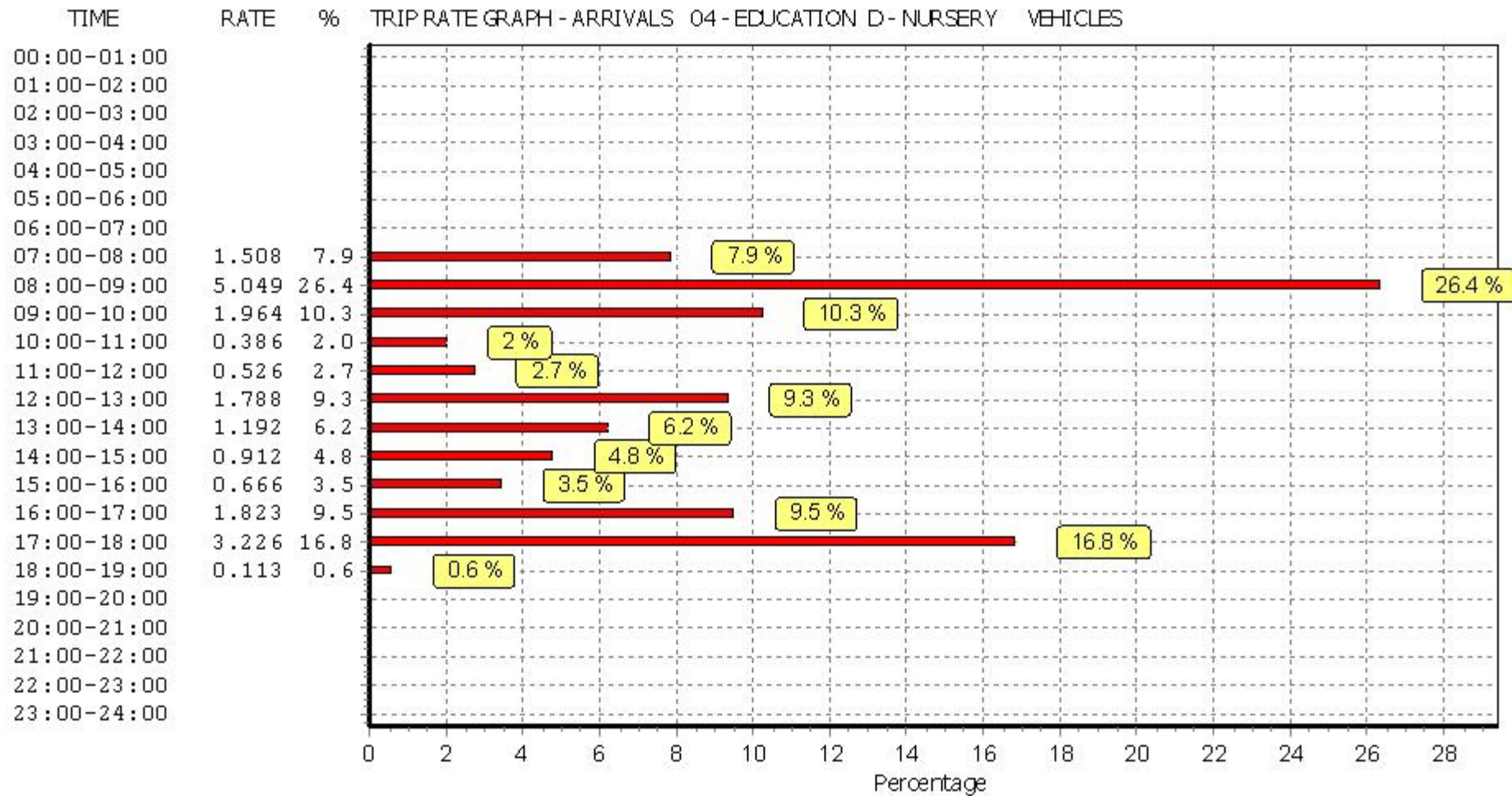
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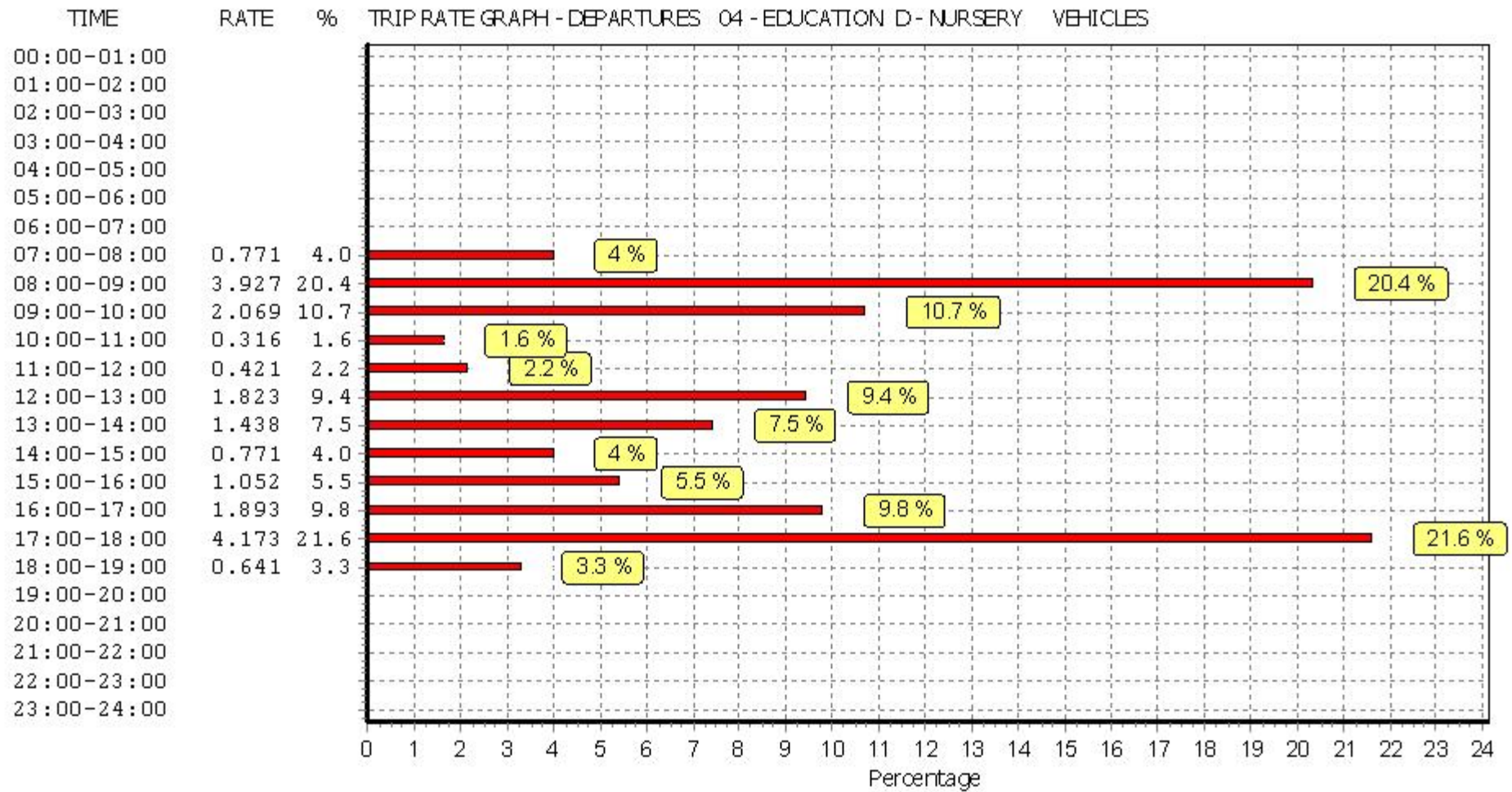
Parameter summary

Trip rate parameter range selected: 182 - 1300 (units: sqm)
 Survey date date range: 01/01/09 - 10/12/14
 Number of weekdays (Monday-Friday): 7
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

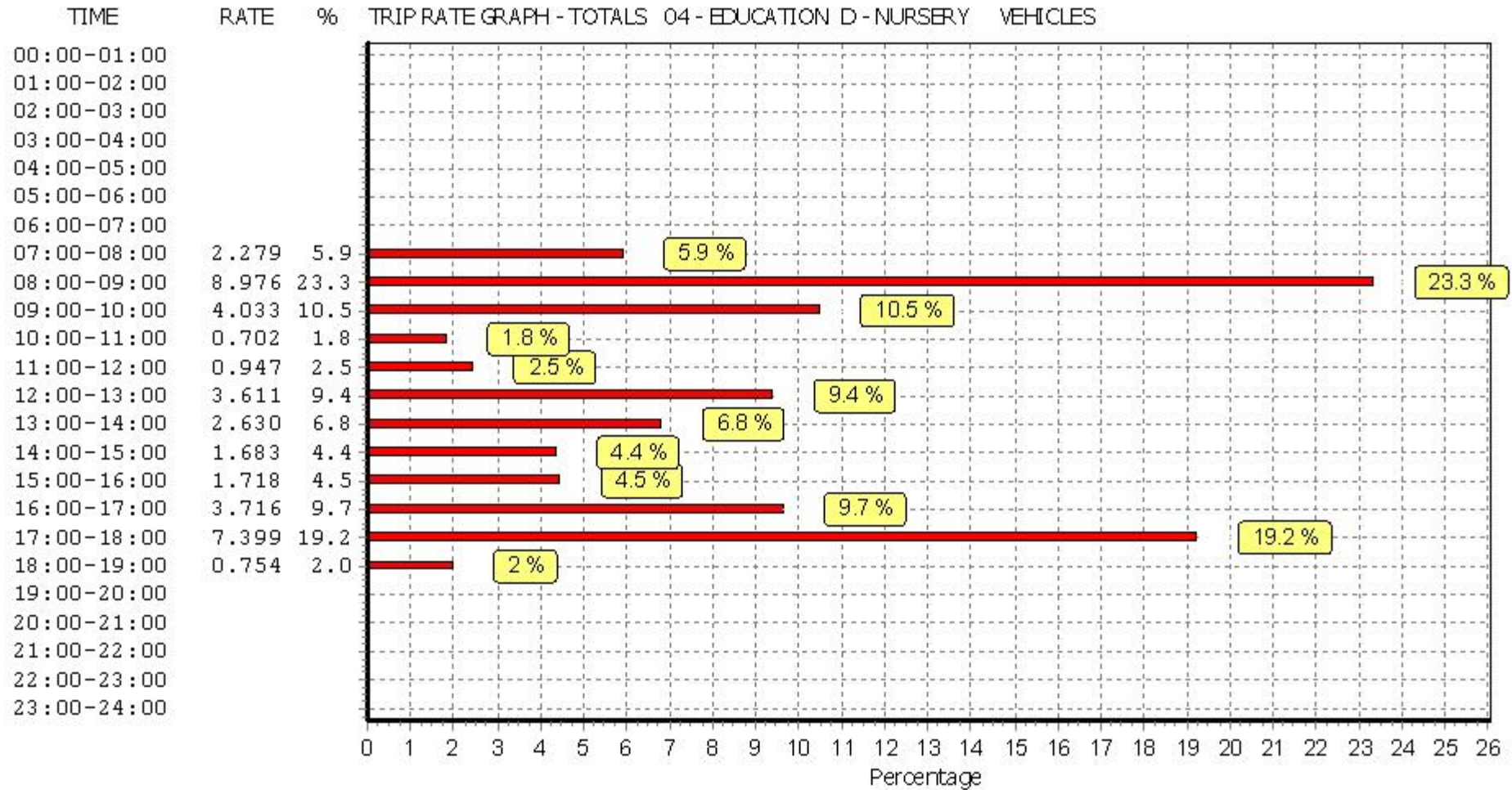
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TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	407	0.000	7	407	0.000	7	407	0.000
08:00 - 09:00	7	407	0.035	7	407	0.035	7	407	0.070
09:00 - 10:00	7	407	0.000	7	407	0.000	7	407	0.000
10:00 - 11:00	7	407	0.000	7	407	0.000	7	407	0.000
11:00 - 12:00	7	407	0.035	7	407	0.035	7	407	0.070
12:00 - 13:00	7	407	0.000	7	407	0.000	7	407	0.000
13:00 - 14:00	7	407	0.000	7	407	0.000	7	407	0.000
14:00 - 15:00	7	407	0.000	7	407	0.000	7	407	0.000
15:00 - 16:00	7	407	0.000	7	407	0.000	7	407	0.000
16:00 - 17:00	7	407	0.000	7	407	0.000	7	407	0.000
17:00 - 18:00	7	407	0.035	7	407	0.035	7	407	0.070
18:00 - 19:00	6	442	0.000	6	442	0.000	6	442	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.105			0.105			0.210

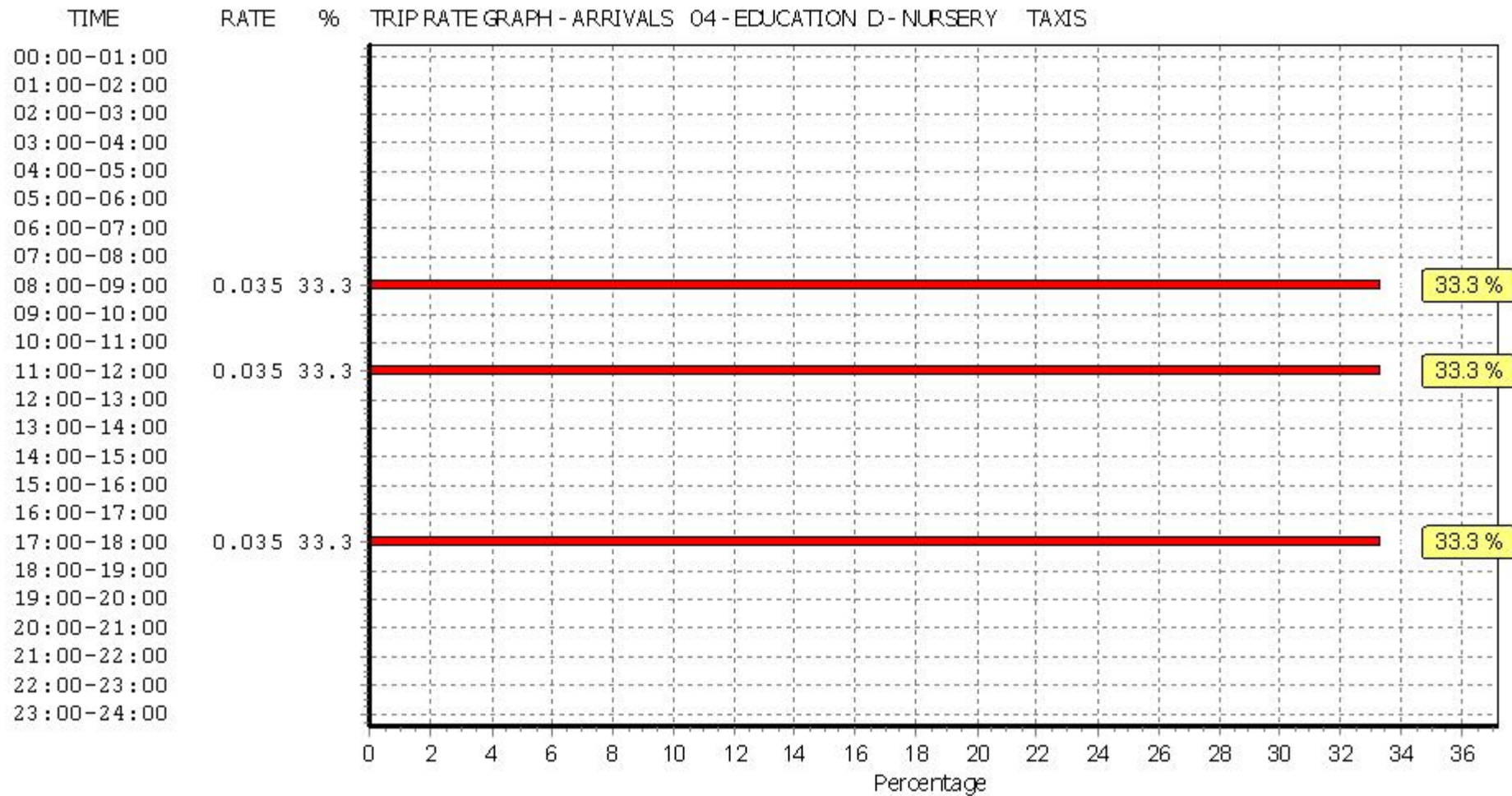
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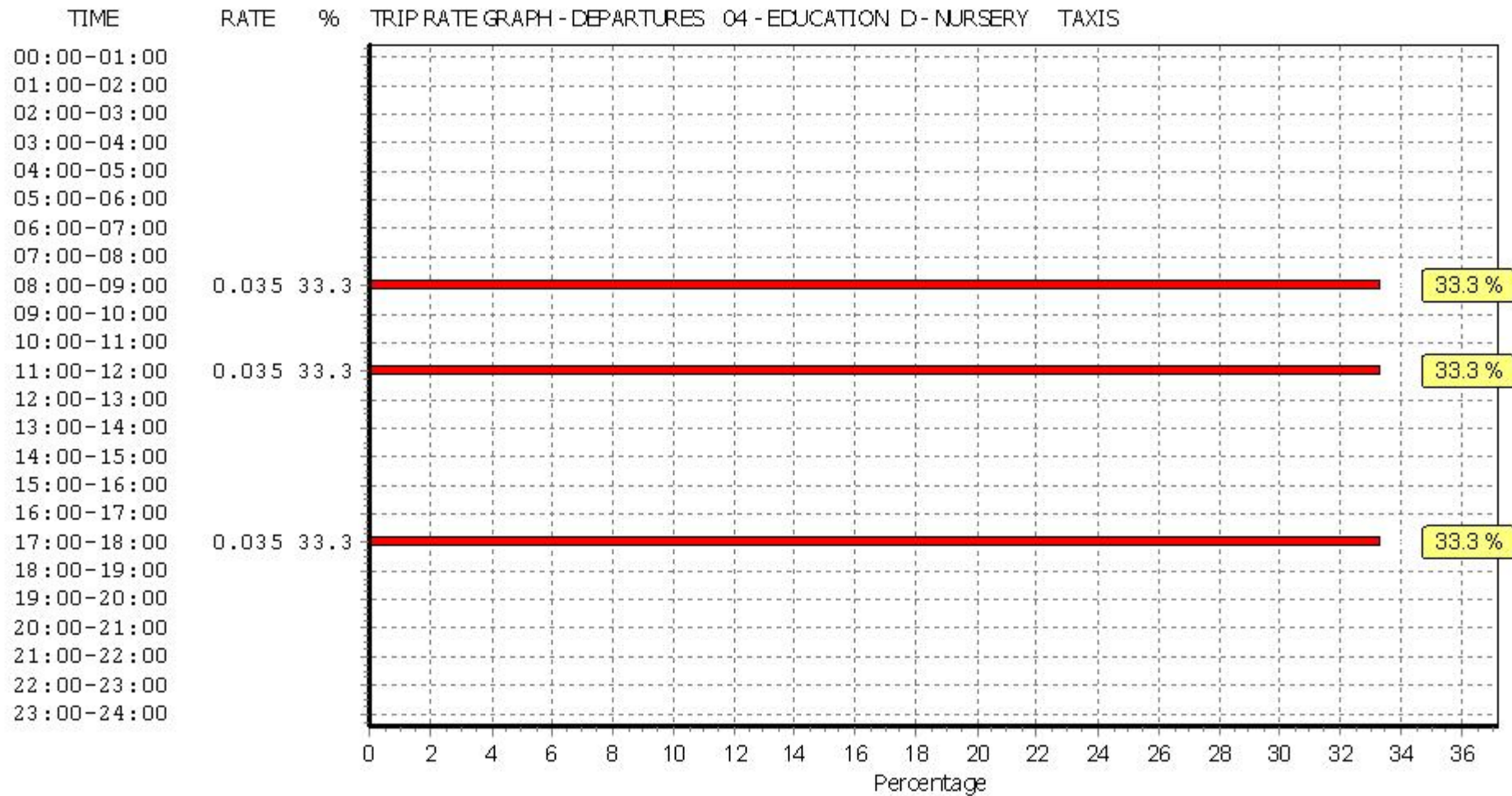
Parameter summary

Trip rate parameter range selected:	182 - 1300 (units: sqm)
Survey date date range:	01/01/09 - 10/12/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

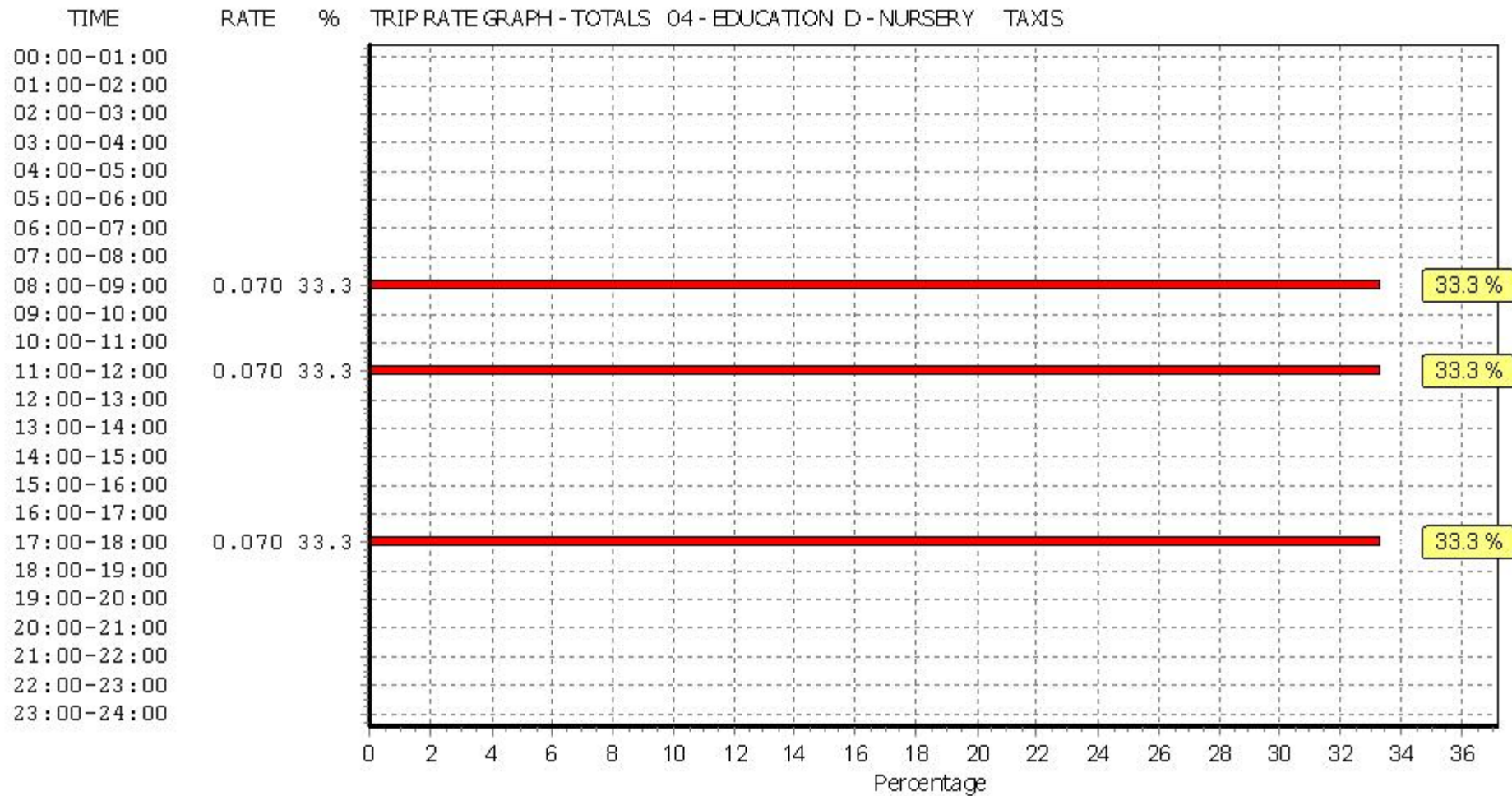
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TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	407	0.000	7	407	0.000	7	407	0.000
08:00 - 09:00	7	407	0.035	7	407	0.000	7	407	0.035
09:00 - 10:00	7	407	0.035	7	407	0.070	7	407	0.105
10:00 - 11:00	7	407	0.035	7	407	0.000	7	407	0.035
11:00 - 12:00	7	407	0.000	7	407	0.035	7	407	0.035
12:00 - 13:00	7	407	0.070	7	407	0.070	7	407	0.140
13:00 - 14:00	7	407	0.000	7	407	0.000	7	407	0.000
14:00 - 15:00	7	407	0.000	7	407	0.000	7	407	0.000
15:00 - 16:00	7	407	0.000	7	407	0.000	7	407	0.000
16:00 - 17:00	7	407	0.035	7	407	0.035	7	407	0.070
17:00 - 18:00	7	407	0.000	7	407	0.000	7	407	0.000
18:00 - 19:00	6	442	0.000	6	442	0.000	6	442	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.210			0.210			0.420

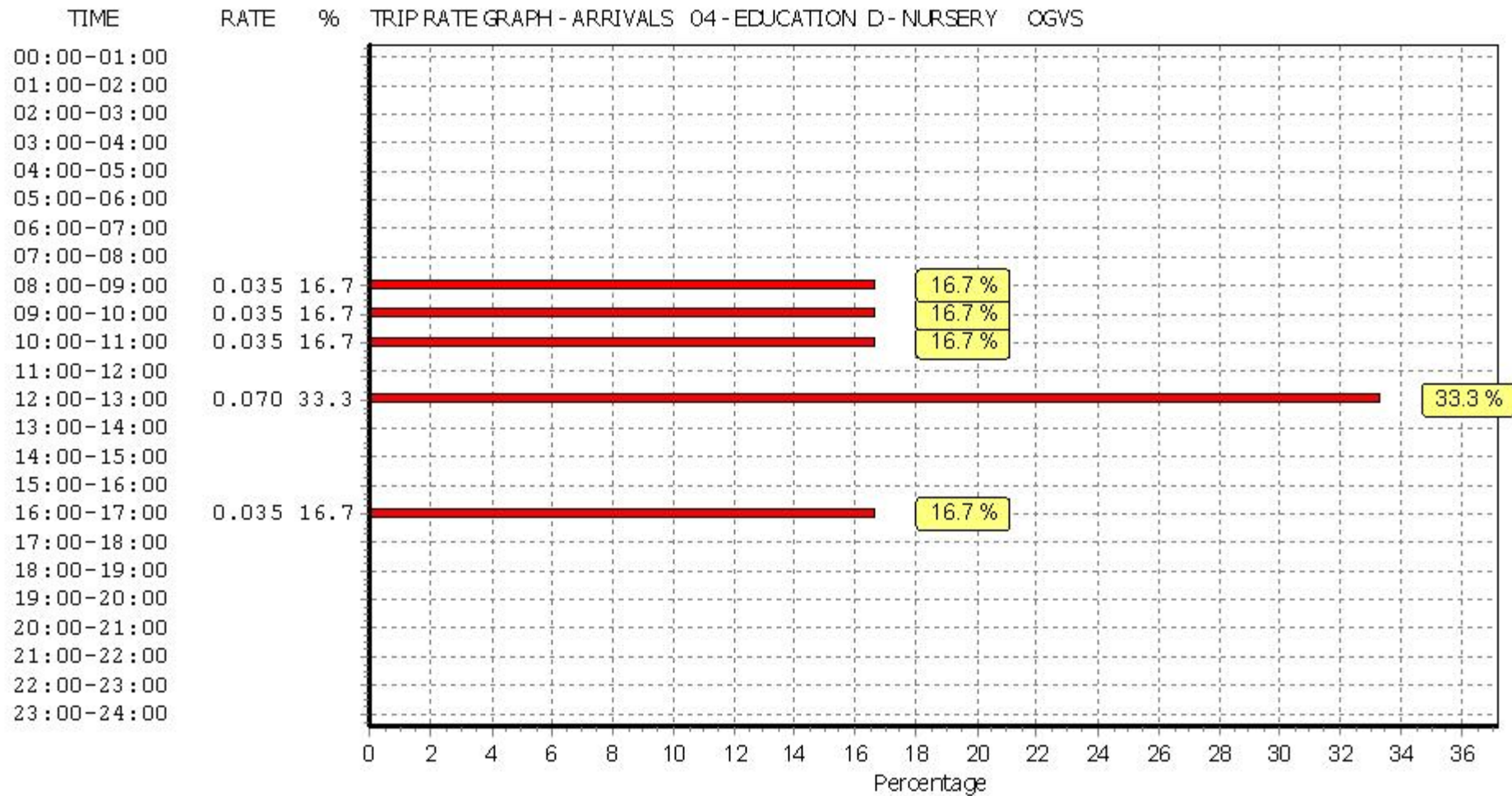
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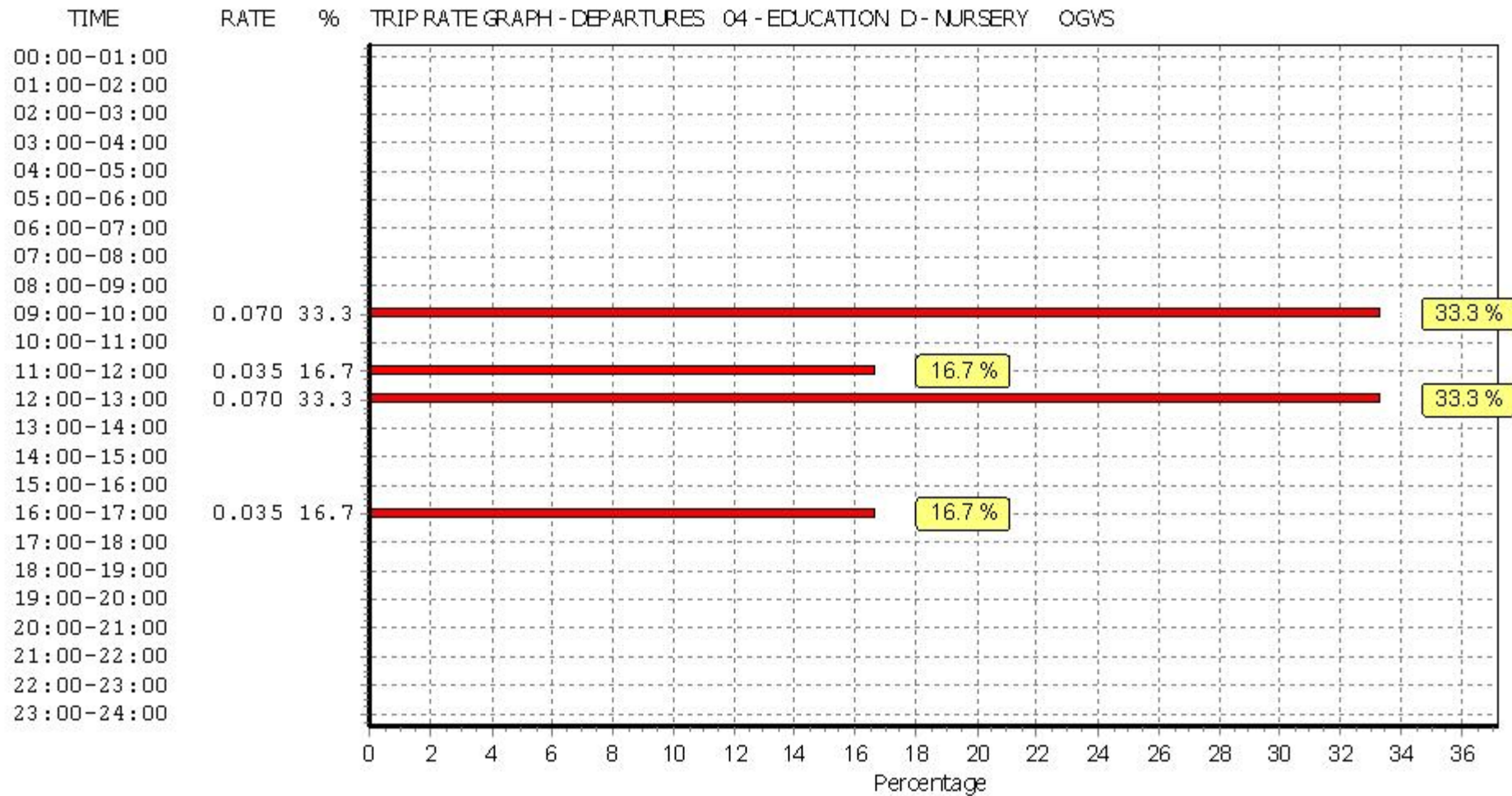
Parameter summary

Trip rate parameter range selected:	182 - 1300 (units: sqm)
Survey date date range:	01/01/09 - 10/12/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

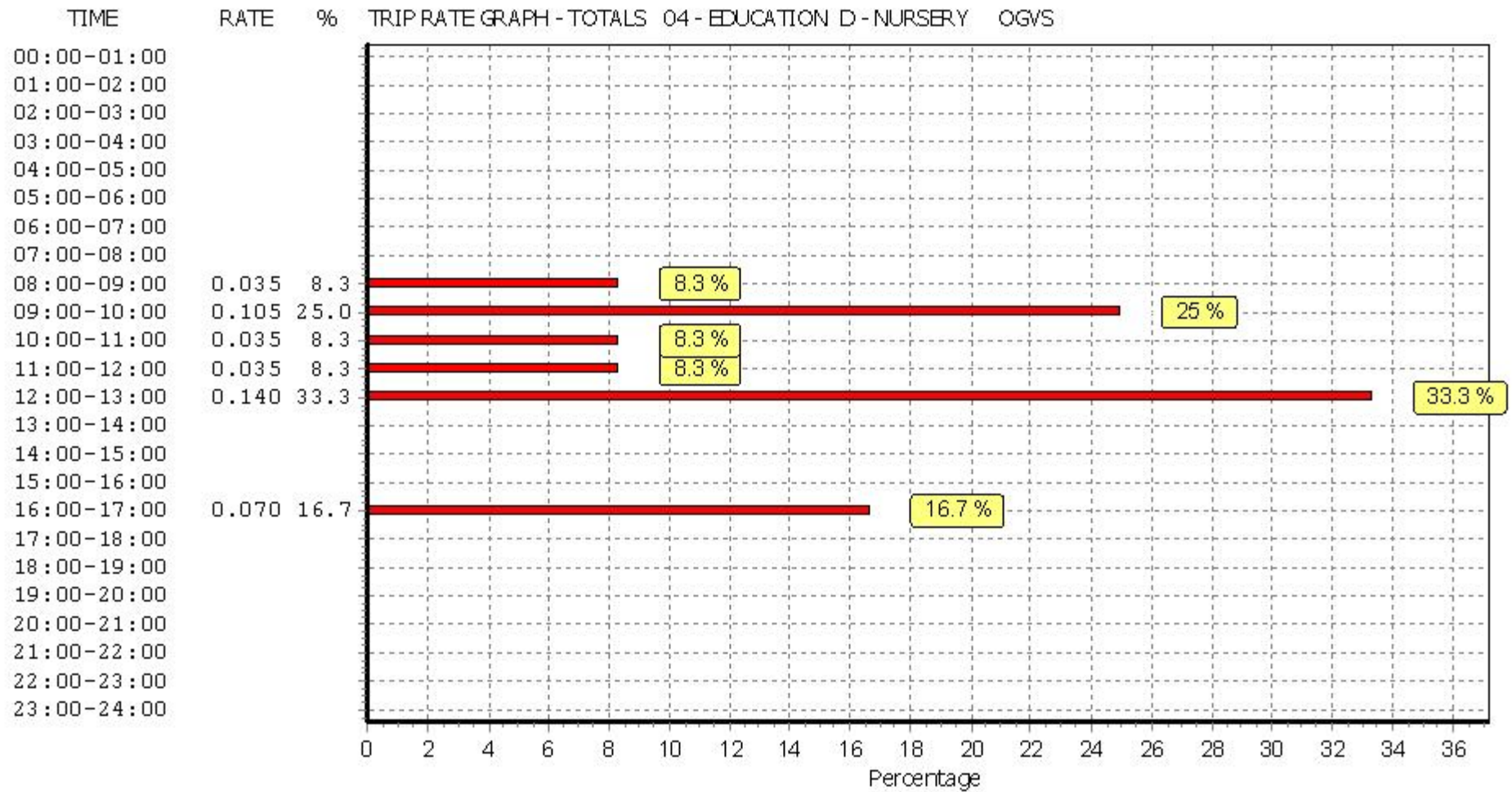
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TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	407	0.000	7	407	0.000	7	407	0.000
08:00 - 09:00	7	407	0.000	7	407	0.000	7	407	0.000
09:00 - 10:00	7	407	0.000	7	407	0.000	7	407	0.000
10:00 - 11:00	7	407	0.000	7	407	0.000	7	407	0.000
11:00 - 12:00	7	407	0.000	7	407	0.000	7	407	0.000
12:00 - 13:00	7	407	0.000	7	407	0.000	7	407	0.000
13:00 - 14:00	7	407	0.000	7	407	0.000	7	407	0.000
14:00 - 15:00	7	407	0.000	7	407	0.000	7	407	0.000
15:00 - 16:00	7	407	0.000	7	407	0.000	7	407	0.000
16:00 - 17:00	7	407	0.000	7	407	0.000	7	407	0.000
17:00 - 18:00	7	407	0.000	7	407	0.000	7	407	0.000
18:00 - 19:00	6	442	0.000	6	442	0.000	6	442	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

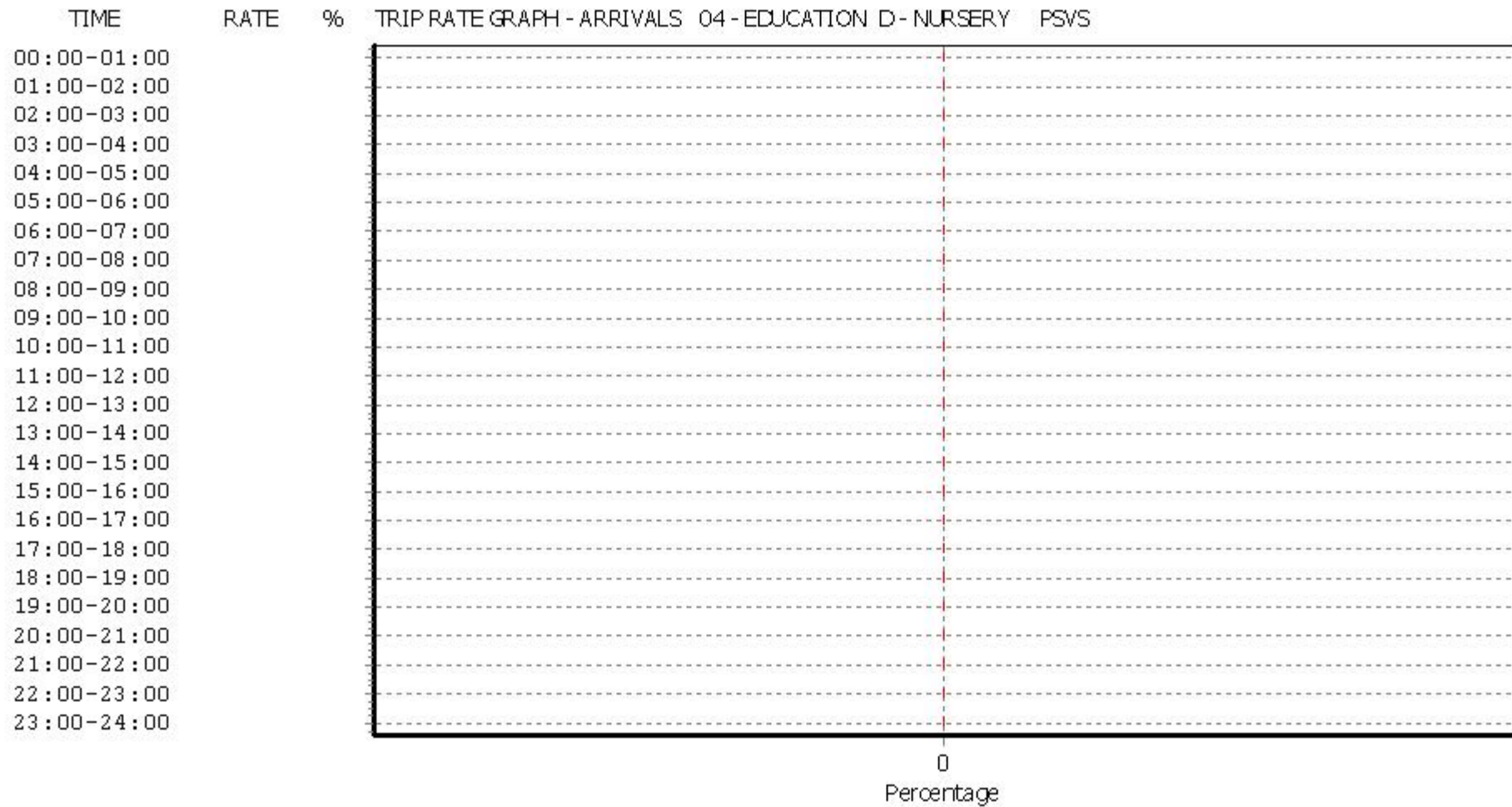
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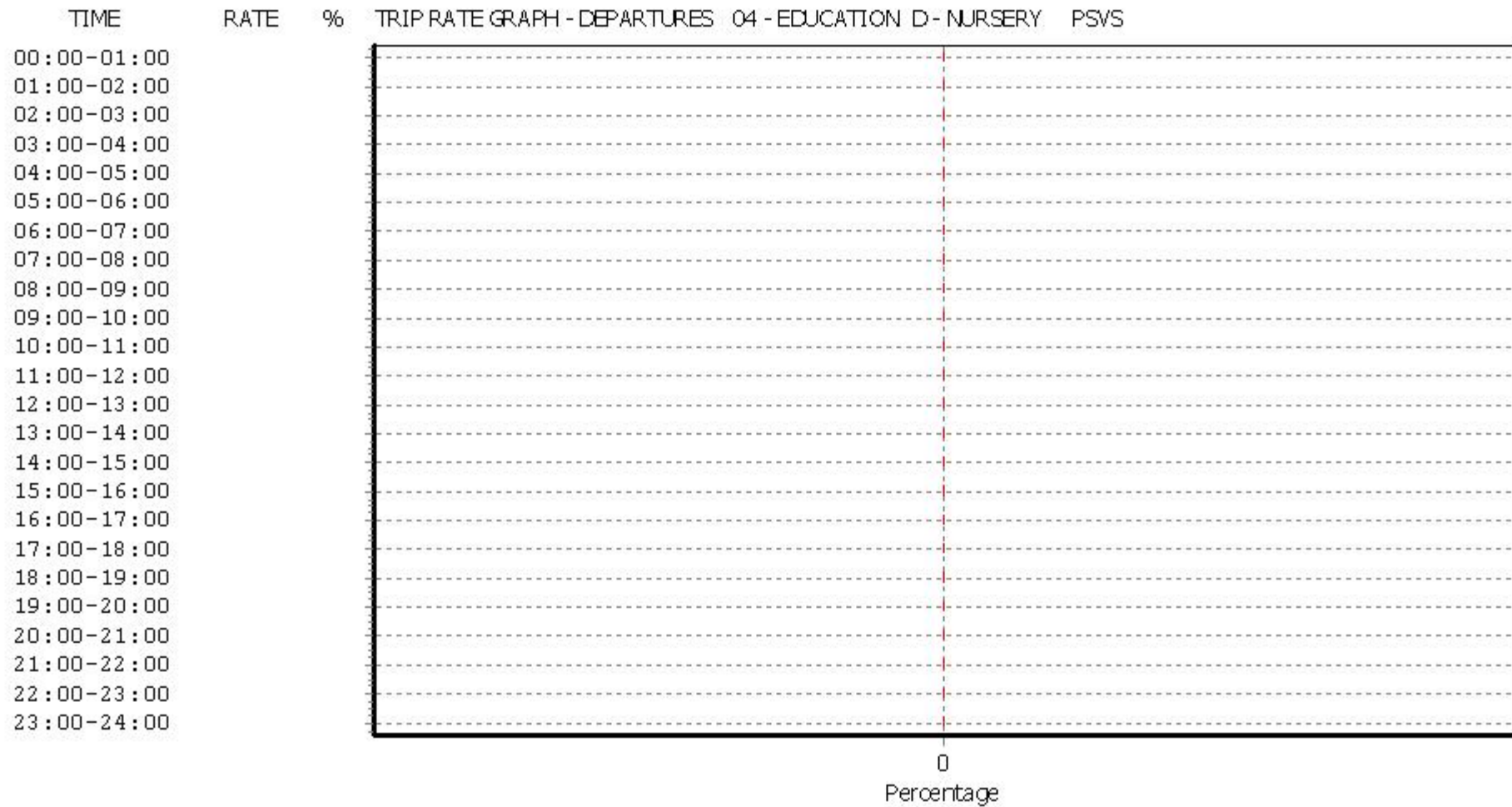
Parameter summary

Trip rate parameter range selected:	182 - 1300 (units: sqm)
Survey date date range:	01/01/09 - 10/12/14
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

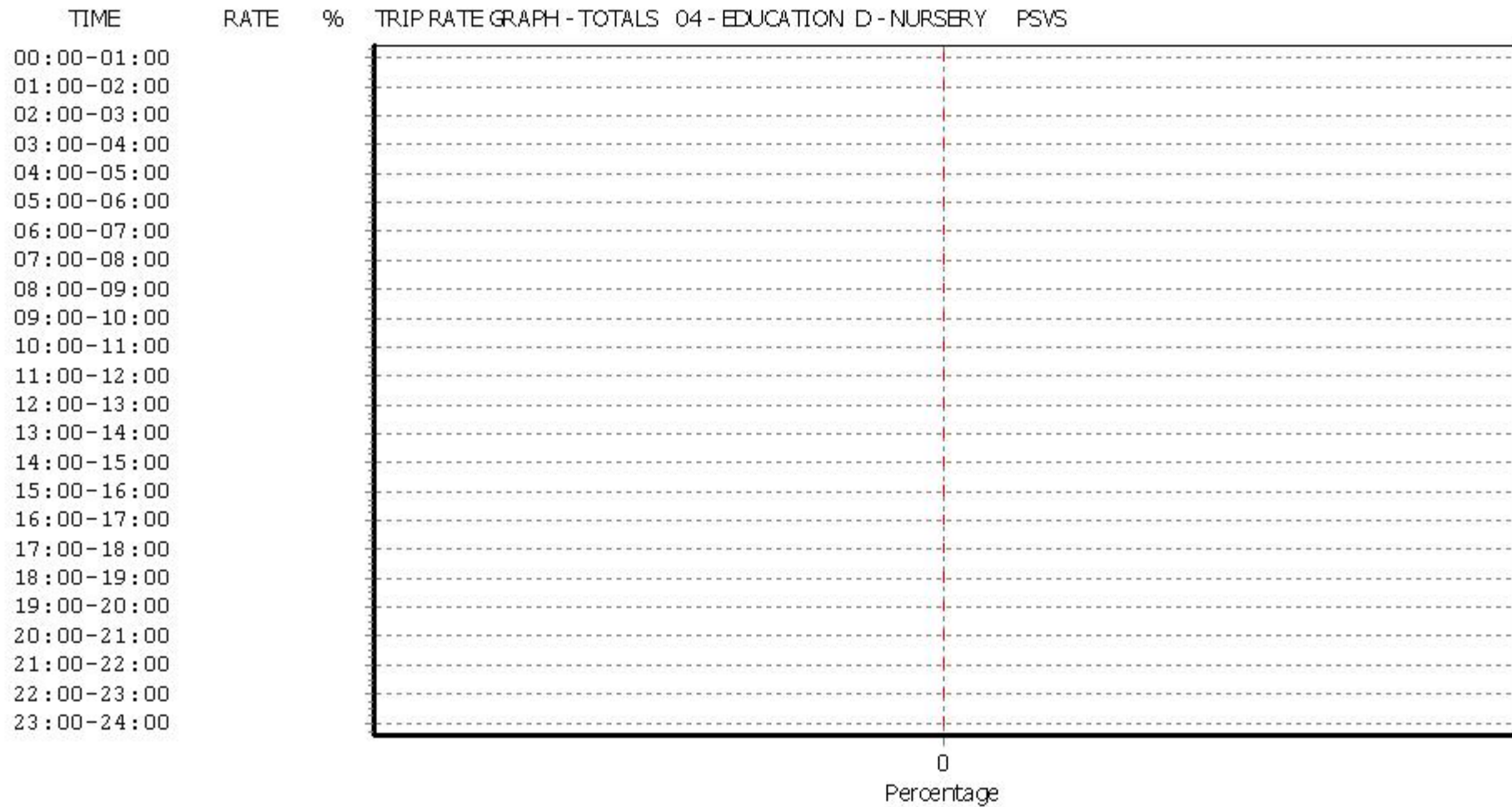
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TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	407	0.000	7	407	0.000	7	407	0.000
08:00 - 09:00	7	407	0.105	7	407	0.070	7	407	0.175
09:00 - 10:00	7	407	0.000	7	407	0.000	7	407	0.000
10:00 - 11:00	7	407	0.000	7	407	0.000	7	407	0.000
11:00 - 12:00	7	407	0.000	7	407	0.000	7	407	0.000
12:00 - 13:00	7	407	0.000	7	407	0.000	7	407	0.000
13:00 - 14:00	7	407	0.000	7	407	0.000	7	407	0.000
14:00 - 15:00	7	407	0.000	7	407	0.000	7	407	0.000
15:00 - 16:00	7	407	0.000	7	407	0.000	7	407	0.000
16:00 - 17:00	7	407	0.035	7	407	0.035	7	407	0.070
17:00 - 18:00	7	407	0.070	7	407	0.105	7	407	0.175
18:00 - 19:00	6	442	0.000	6	442	0.000	6	442	0.000
19:00 - 20:00									
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21:00 - 22:00									
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23:00 - 24:00									
Total Rates:			0.210			0.210			0.420

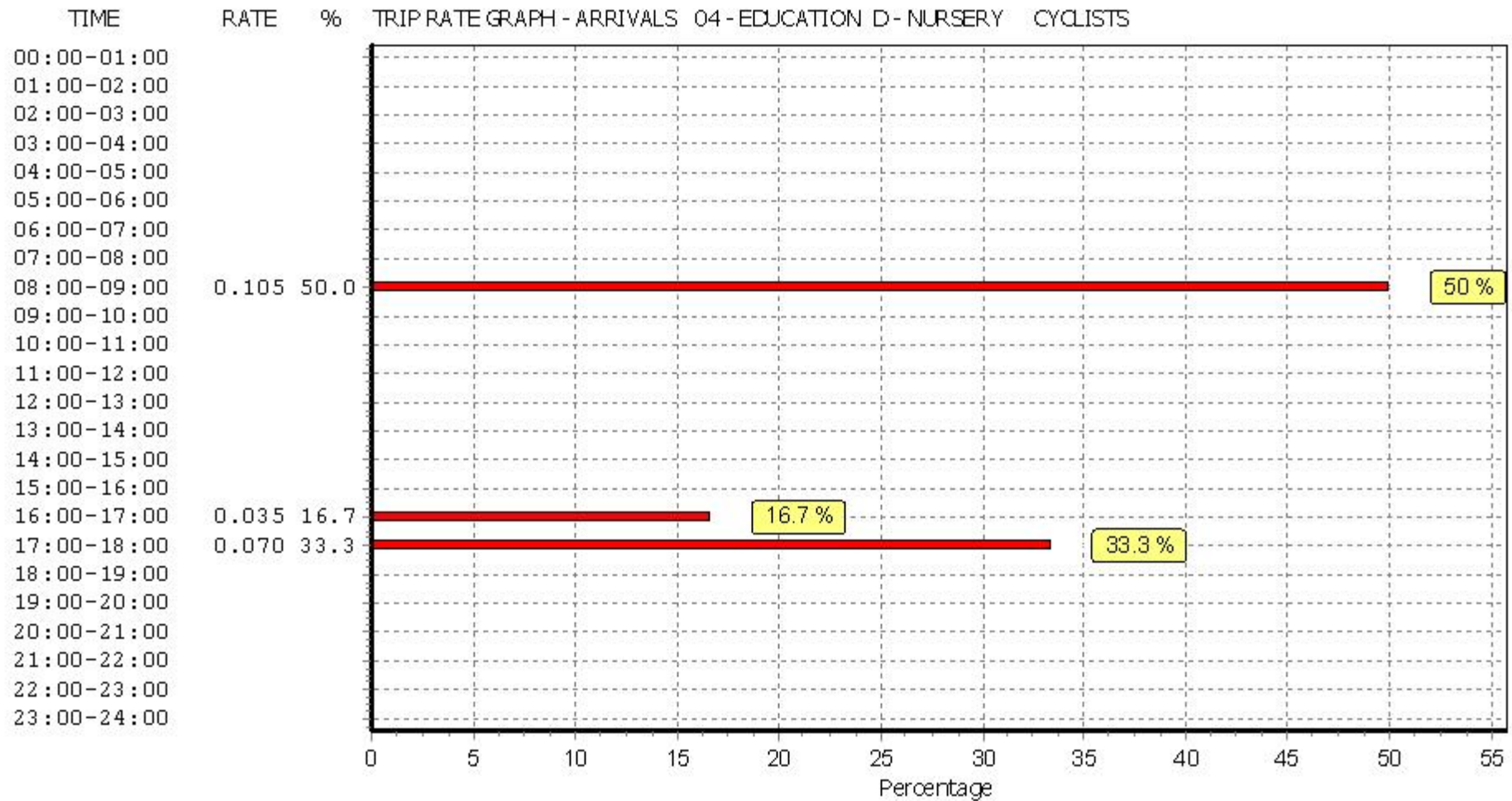
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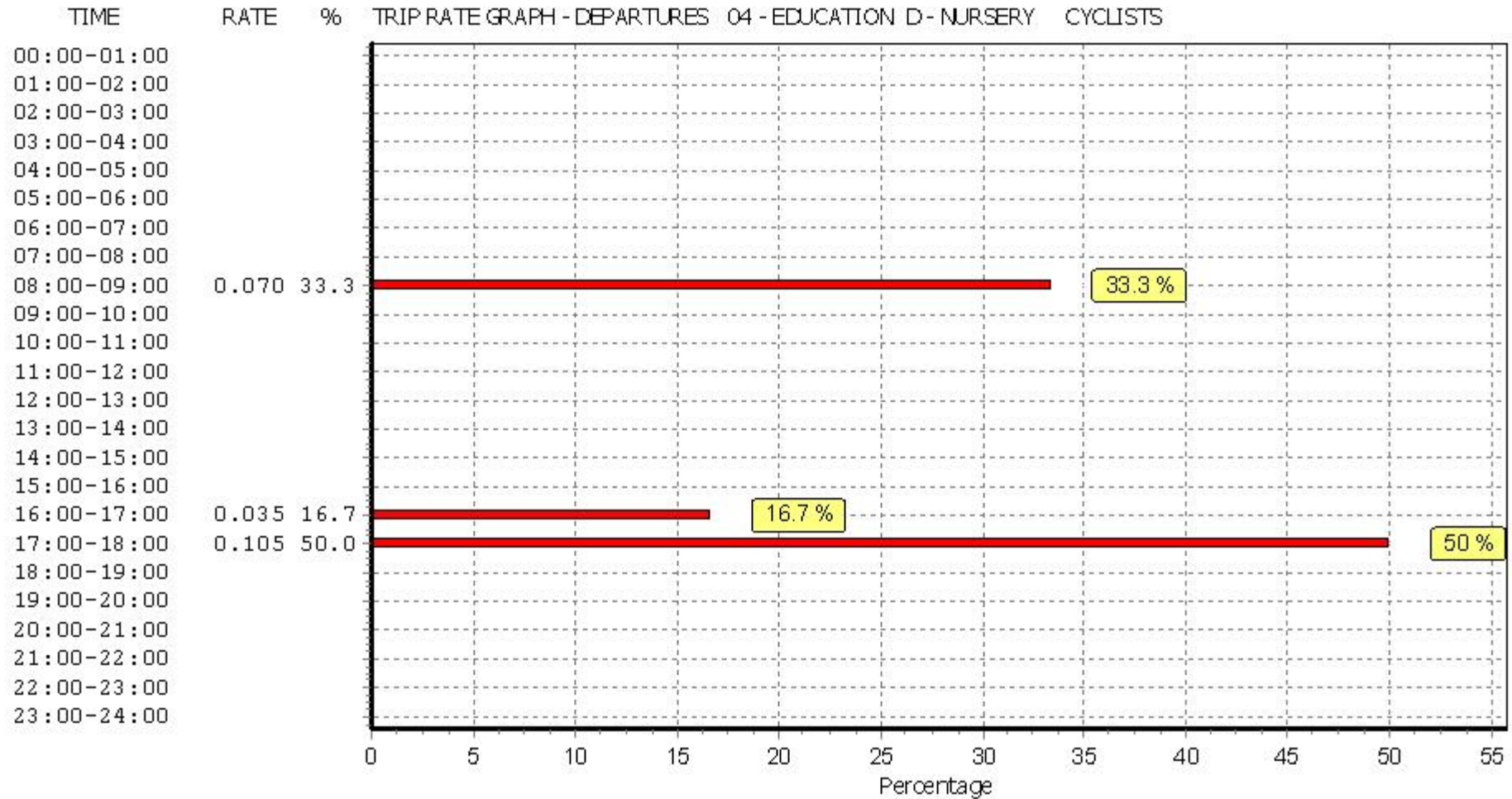
Parameter summary

Trip rate parameter range selected: 182 - 1300 (units: sqm)
 Survey date date range: 01/01/09 - 10/12/14
 Number of weekdays (Monday-Friday): 7
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

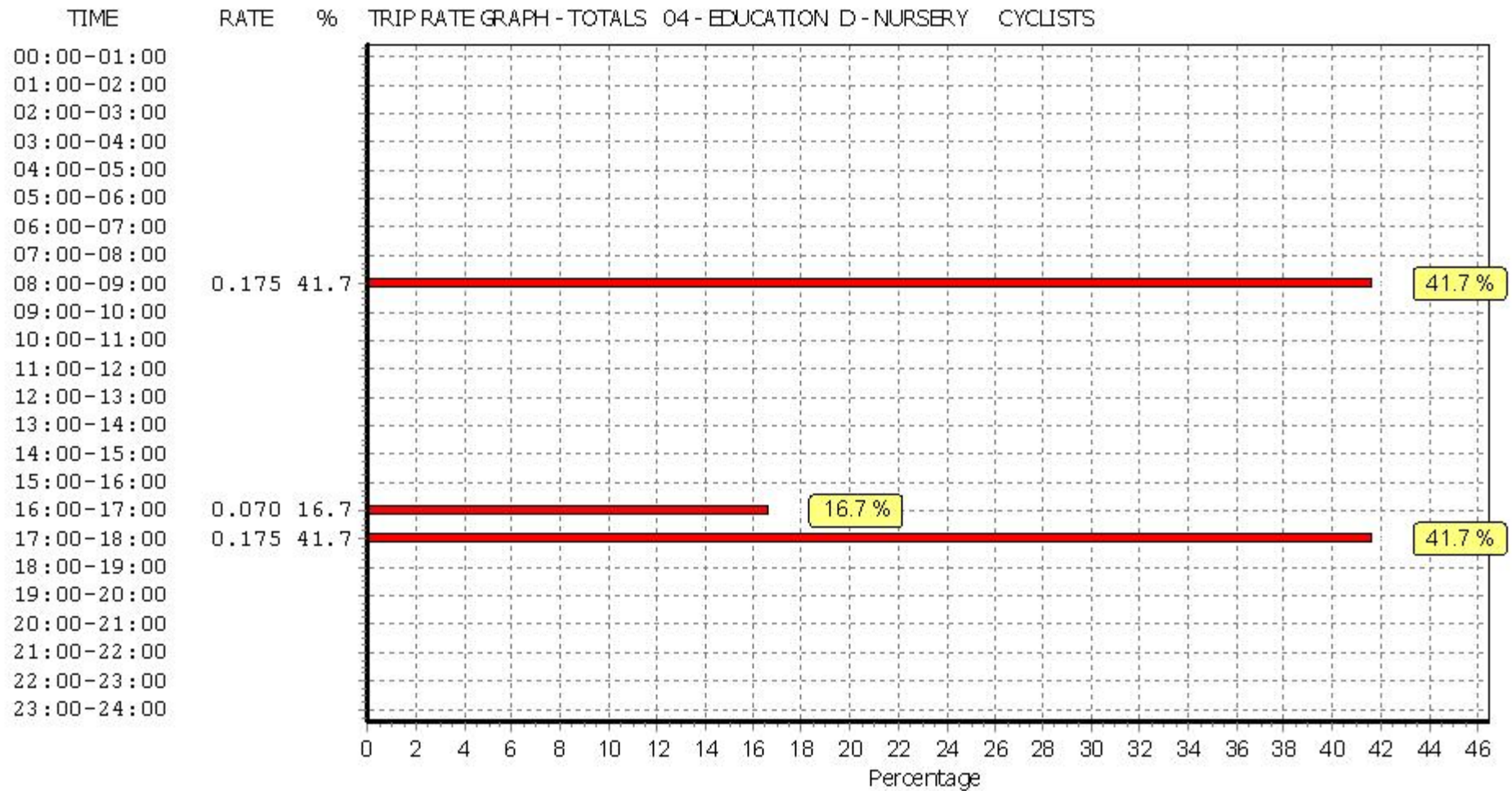
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TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

06	WEST MIDLANDS ST STAFFORDSHIRE	1 days
14	LEINSTER LU LOUTH	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: Gross floor area
 Actual Range: 259 to 2200 (units: sqm)
 Range Selected by User: 75 to 2400 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 17/09/16

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:

Thursday	1 days
Friday	2 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	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:

Retail Zone	2
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:

A3 3 days

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

Population within 1 mile:

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

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.6 to 1.0 1 days
1.1 to 1.5 2 days

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

Travel Plan:

No 3 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 3 days

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

LIST OF SITES relevant to selection parameters

1	AN-06-B-02 HILSBOROUGH ROAD	FRANKIE & BENNY'S	ANTRIM
	LISBURN Edge of Town Retail Zone Total Gross floor area: 275 sqm Survey date: FRIDAY 19/06/15		
2	LU-06-B-02 DONORE ROAD LAGAVOOREN DROGHEDA	RESTAURANT	LOUTH
	Edge of Town No Sub Category Total Gross floor area: 2200 sqm Survey date: FRIDAY 19/06/15		
3	ST-06-B-01 STONE ROAD TRENTHAM STOKE-ON-TRENT	RESTAURANT	STAFFORDSHIRE
	Edge of Town Retail Zone Total Gross floor area: 259 sqm Survey date: THURSDAY 24/10/13		

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 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	911	0.658	3	911	0.293	3	911	0.951
11:00 - 12:00	3	911	1.463	3	911	1.097	3	911	2.560
12:00 - 13:00	3	911	3.731	3	911	1.939	3	911	5.670
13:00 - 14:00	3	911	3.219	3	911	3.109	3	911	6.328
14:00 - 15:00	3	911	1.719	3	911	2.560	3	911	4.279
15:00 - 16:00	3	911	1.024	3	911	1.756	3	911	2.780
16:00 - 17:00	3	911	1.500	3	911	1.244	3	911	2.744
17:00 - 18:00	3	911	2.743	3	911	1.244	3	911	3.987
18:00 - 19:00	3	911	3.438	3	911	3.036	3	911	6.474
19:00 - 20:00	3	911	3.219	3	911	3.292	3	911	6.511
20:00 - 21:00	3	911	1.719	3	911	2.670	3	911	4.389
21:00 - 22:00	3	911	1.536	3	911	1.719	3	911	3.255
22:00 - 23:00	3	911	0.951	3	911	1.646	3	911	2.597
23:00 - 24:00	3	911	0.256	3	911	1.207	3	911	1.463
Total Rates:			27.176			26.812			53.988

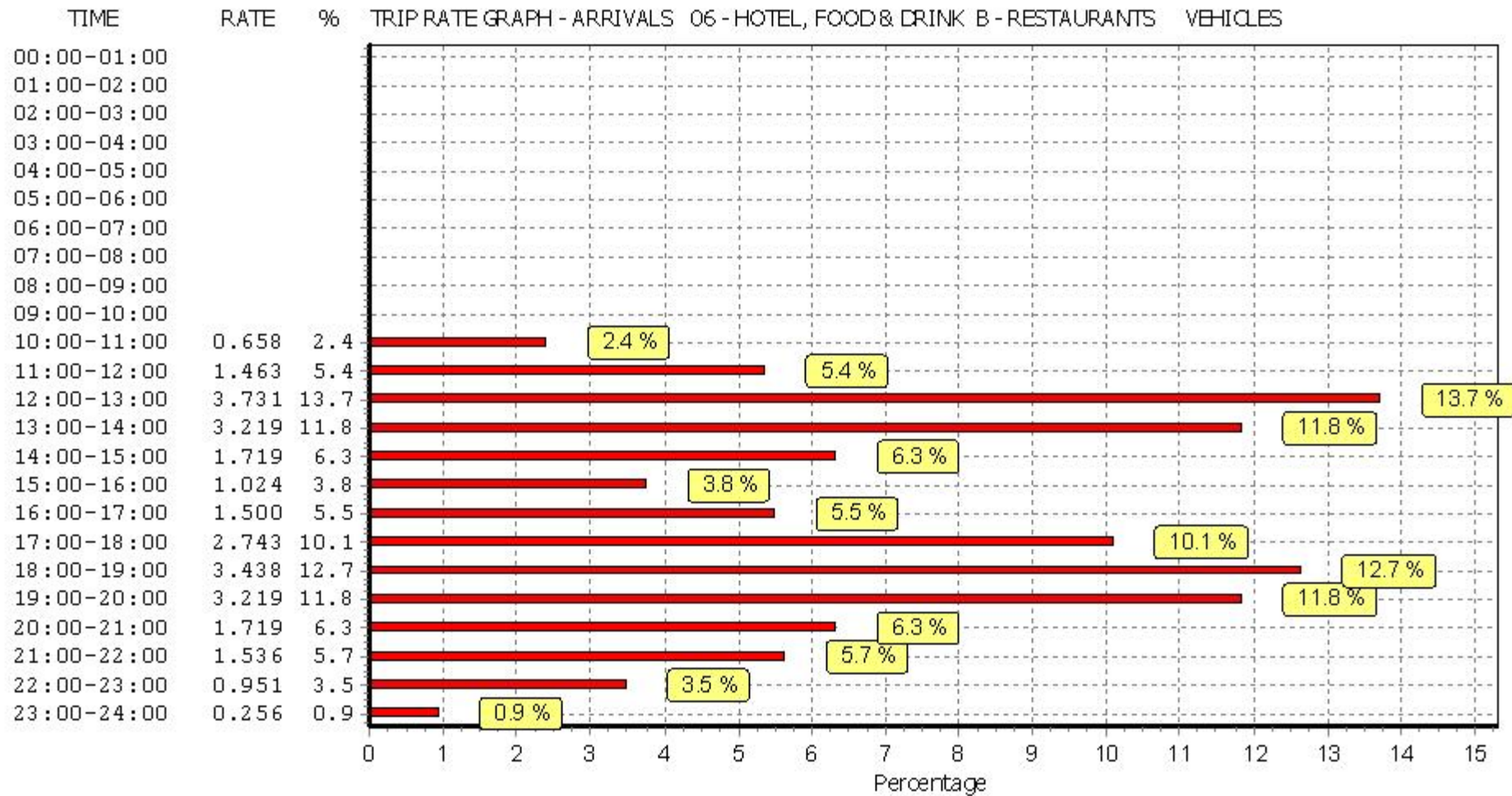
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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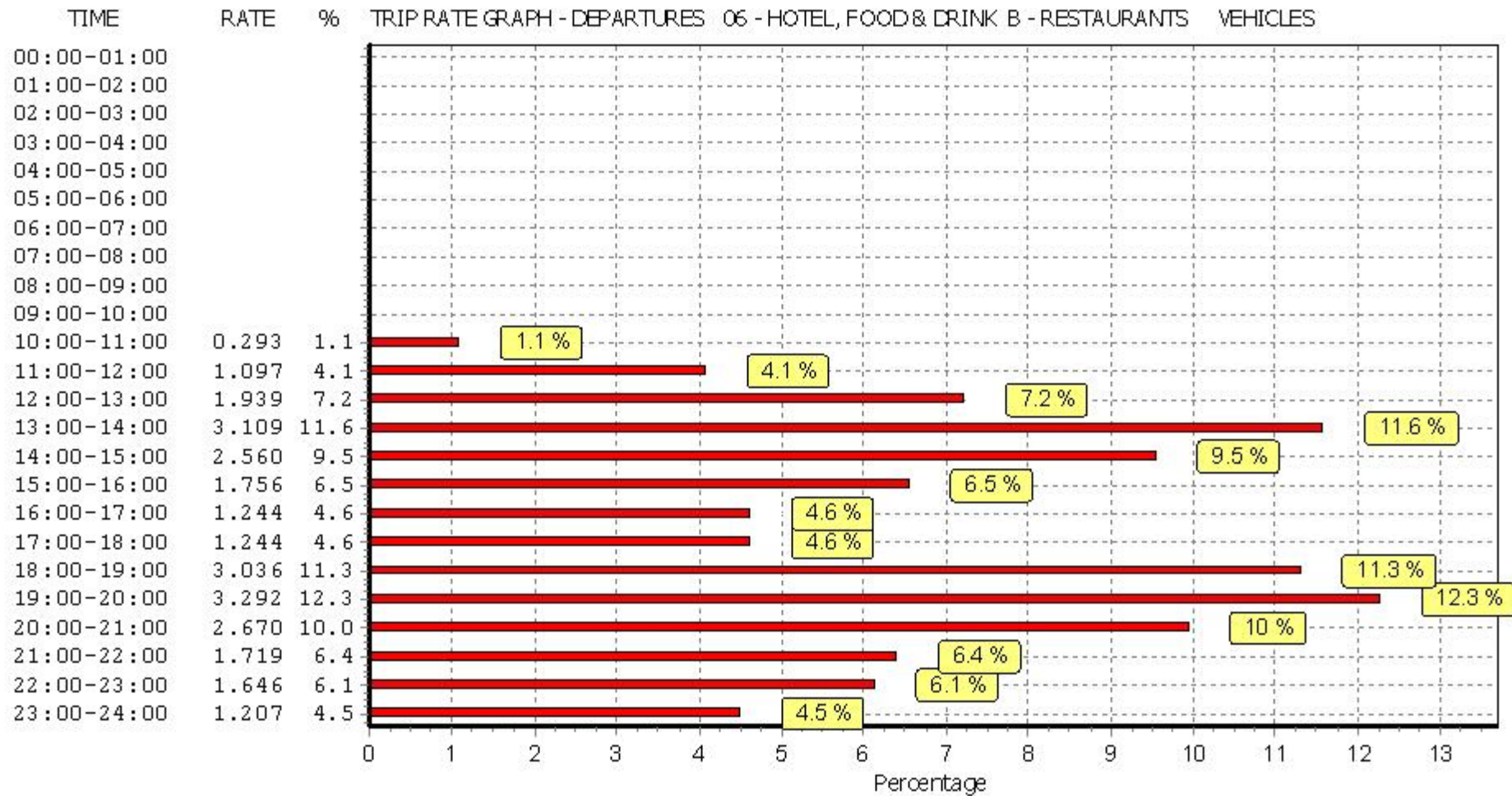
Parameter summary

Trip rate parameter range selected: 259 - 2200 (units: sqm)
 Survey date date range: 01/01/09 - 17/09/16
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

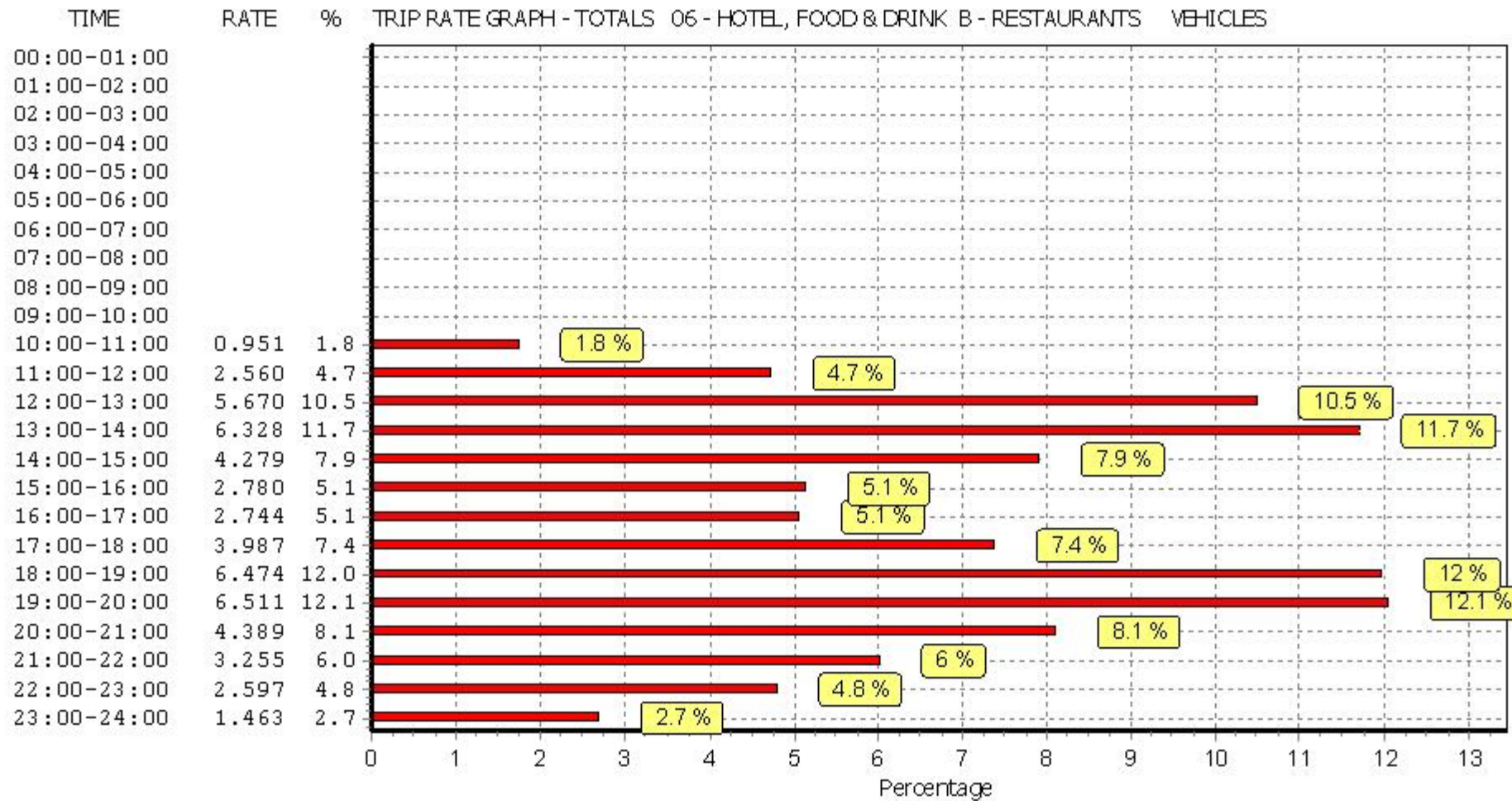
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	911	0.110	3	911	0.110	3	911	0.220
11:00 - 12:00	3	911	0.110	3	911	0.110	3	911	0.220
12:00 - 13:00	3	911	0.110	3	911	0.073	3	911	0.183
13:00 - 14:00	3	911	0.110	3	911	0.146	3	911	0.256
14:00 - 15:00	3	911	0.073	3	911	0.073	3	911	0.146
15:00 - 16:00	3	911	0.073	3	911	0.073	3	911	0.146
16:00 - 17:00	3	911	0.037	3	911	0.037	3	911	0.074
17:00 - 18:00	3	911	0.110	3	911	0.110	3	911	0.220
18:00 - 19:00	3	911	0.183	3	911	0.146	3	911	0.329
19:00 - 20:00	3	911	0.256	3	911	0.293	3	911	0.549
20:00 - 21:00	3	911	0.183	3	911	0.183	3	911	0.366
21:00 - 22:00	3	911	0.073	3	911	0.073	3	911	0.146
22:00 - 23:00	3	911	0.073	3	911	0.073	3	911	0.146
23:00 - 24:00	3	911	0.183	3	911	0.183	3	911	0.366
Total Rates:			1.684			1.683			3.367

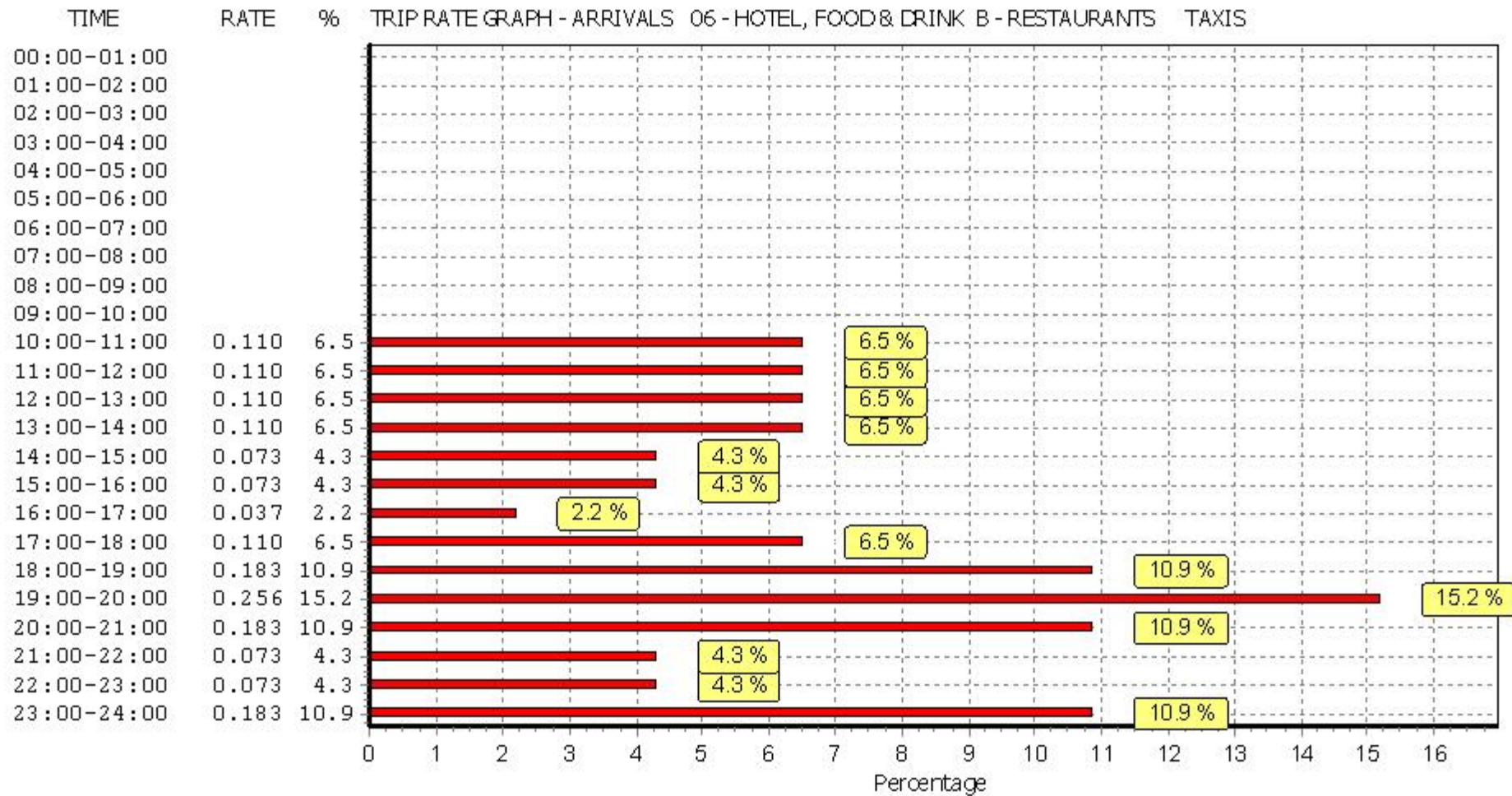
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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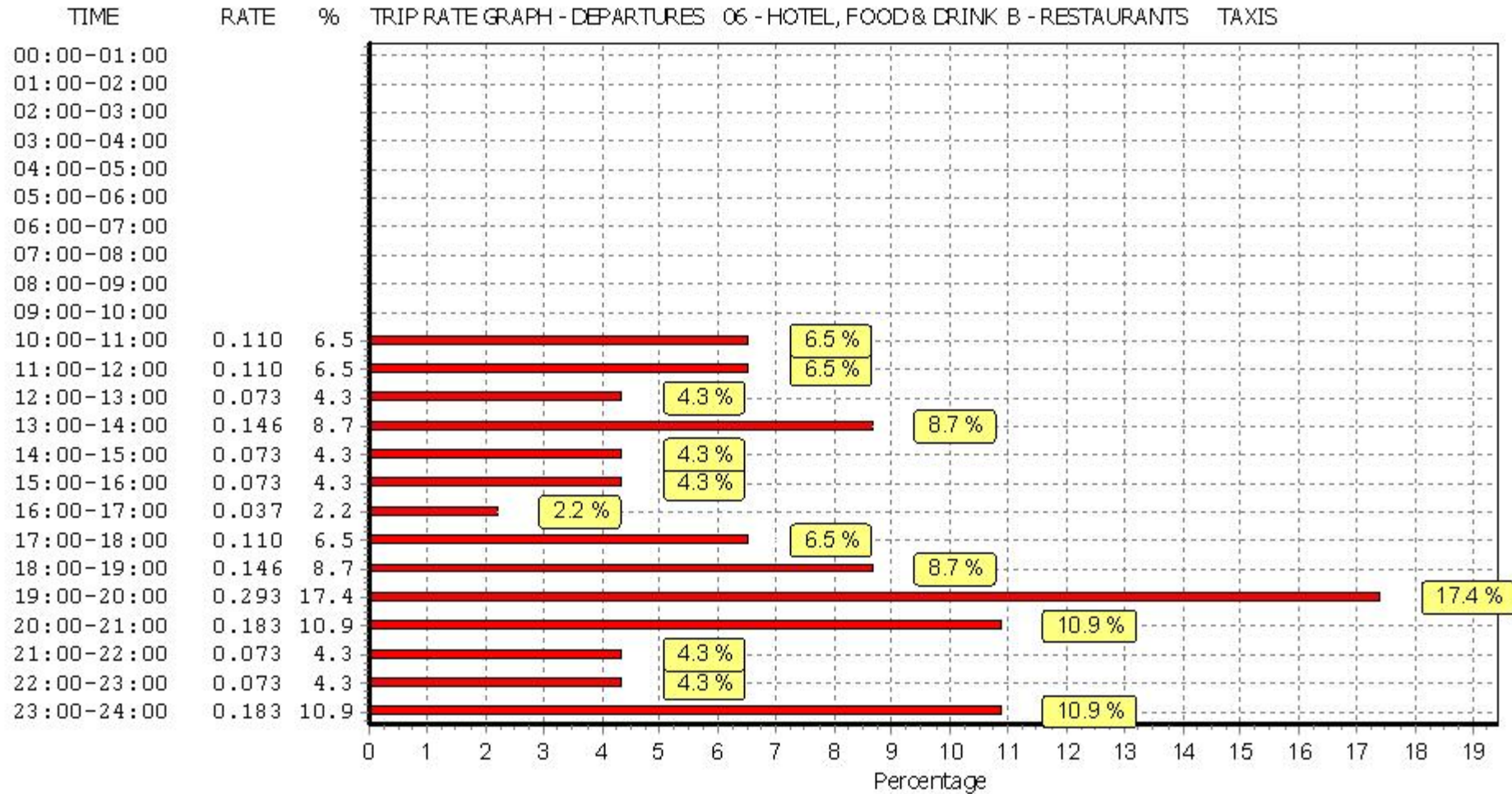
Parameter summary

Trip rate parameter range selected:	259 - 2200 (units: sqm)
Survey date date range:	01/01/09 - 17/09/16
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

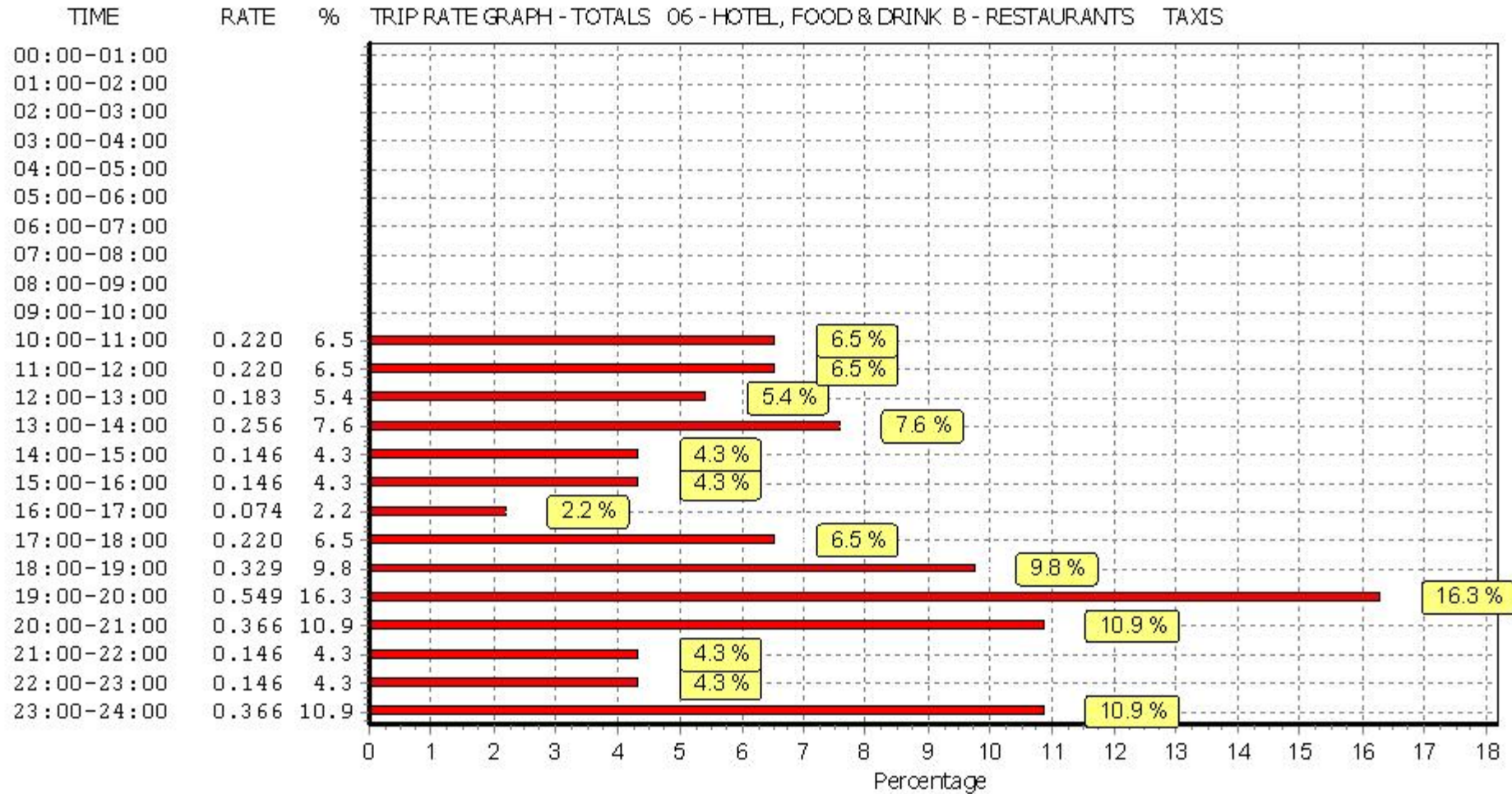
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	911	0.000	3	911	0.000	3	911	0.000
11:00 - 12:00	3	911	0.037	3	911	0.037	3	911	0.074
12:00 - 13:00	3	911	0.037	3	911	0.037	3	911	0.074
13:00 - 14:00	3	911	0.037	3	911	0.037	3	911	0.074
14:00 - 15:00	3	911	0.000	3	911	0.000	3	911	0.000
15:00 - 16:00	3	911	0.000	3	911	0.000	3	911	0.000
16:00 - 17:00	3	911	0.000	3	911	0.000	3	911	0.000
17:00 - 18:00	3	911	0.000	3	911	0.000	3	911	0.000
18:00 - 19:00	3	911	0.037	3	911	0.000	3	911	0.037
19:00 - 20:00	3	911	0.000	3	911	0.037	3	911	0.037
20:00 - 21:00	3	911	0.000	3	911	0.000	3	911	0.000
21:00 - 22:00	3	911	0.000	3	911	0.000	3	911	0.000
22:00 - 23:00	3	911	0.000	3	911	0.000	3	911	0.000
23:00 - 24:00	3	911	0.000	3	911	0.000	3	911	0.000
Total Rates:			0.148			0.148			0.296

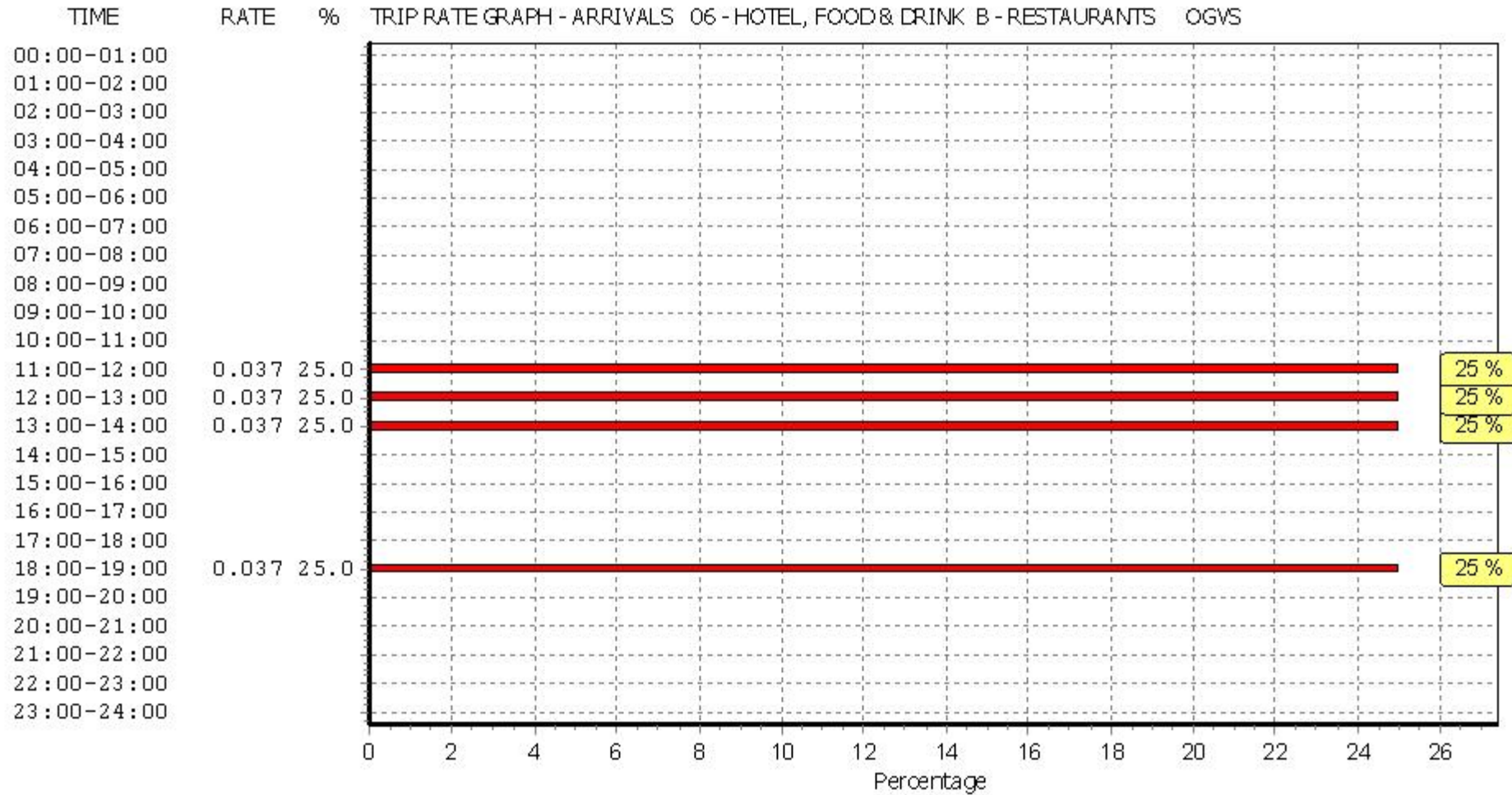
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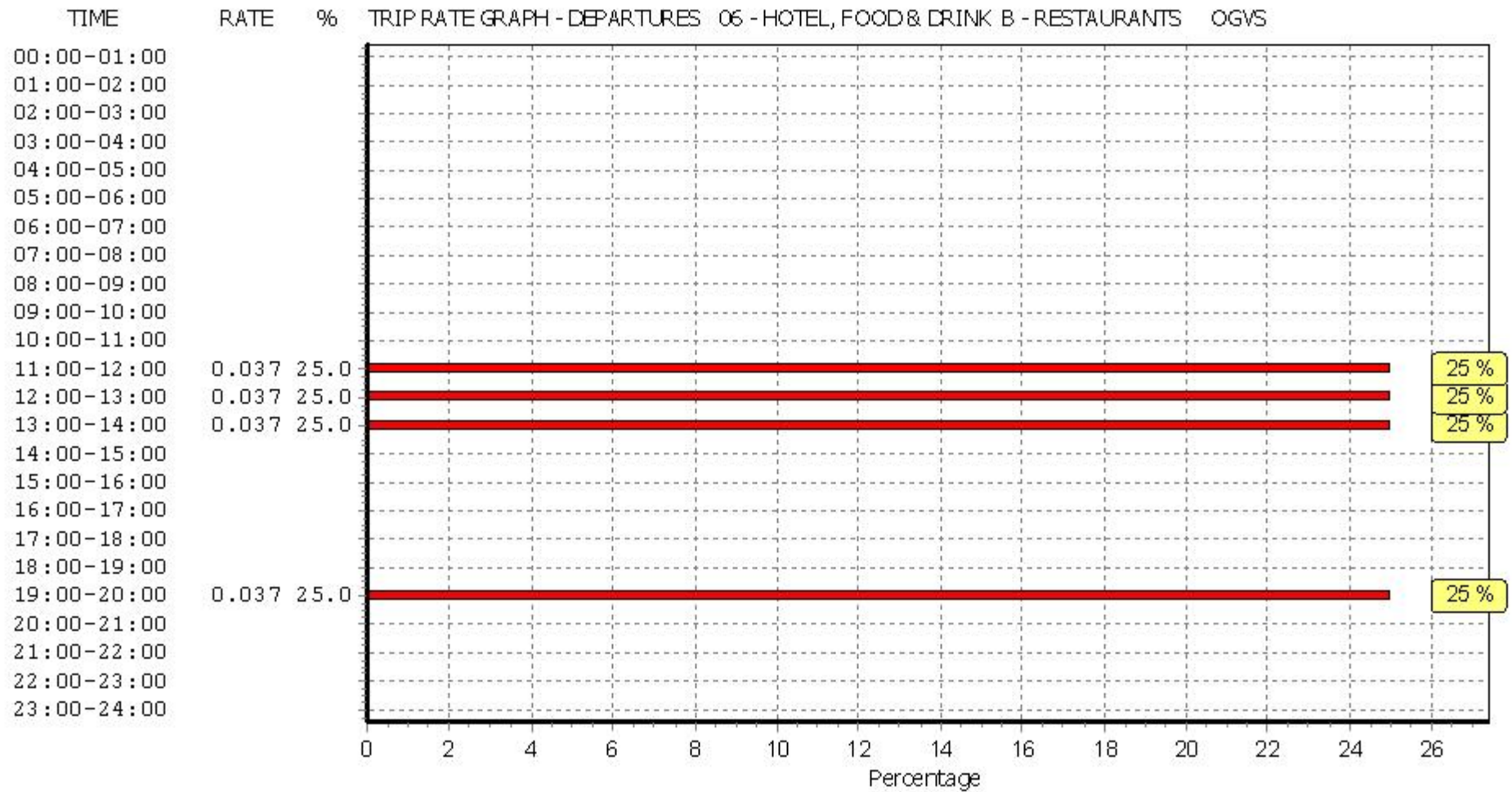
Parameter summary

Trip rate parameter range selected: 259 - 2200 (units: sqm)
 Survey date date range: 01/01/09 - 17/09/16
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

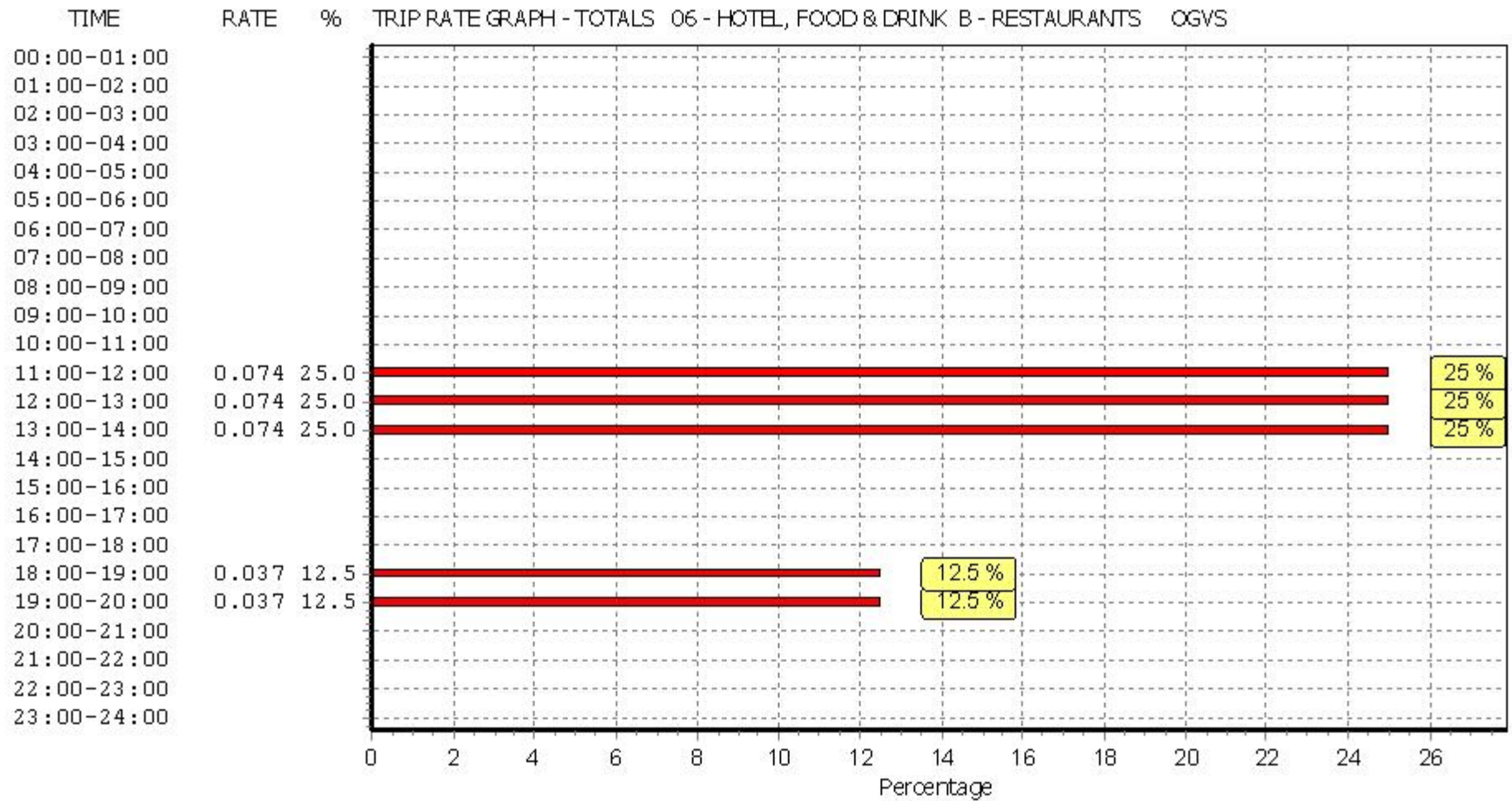
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	911	0.000	3	911	0.000	3	911	0.000
11:00 - 12:00	3	911	0.000	3	911	0.000	3	911	0.000
12:00 - 13:00	3	911	0.000	3	911	0.000	3	911	0.000
13:00 - 14:00	3	911	0.000	3	911	0.000	3	911	0.000
14:00 - 15:00	3	911	0.000	3	911	0.000	3	911	0.000
15:00 - 16:00	3	911	0.000	3	911	0.000	3	911	0.000
16:00 - 17:00	3	911	0.000	3	911	0.000	3	911	0.000
17:00 - 18:00	3	911	0.000	3	911	0.000	3	911	0.000
18:00 - 19:00	3	911	0.000	3	911	0.000	3	911	0.000
19:00 - 20:00	3	911	0.000	3	911	0.000	3	911	0.000
20:00 - 21:00	3	911	0.000	3	911	0.000	3	911	0.000
21:00 - 22:00	3	911	0.000	3	911	0.000	3	911	0.000
22:00 - 23:00	3	911	0.000	3	911	0.000	3	911	0.000
23:00 - 24:00	3	911	0.000	3	911	0.000	3	911	0.000
Total Rates:			0.000			0.000			0.000

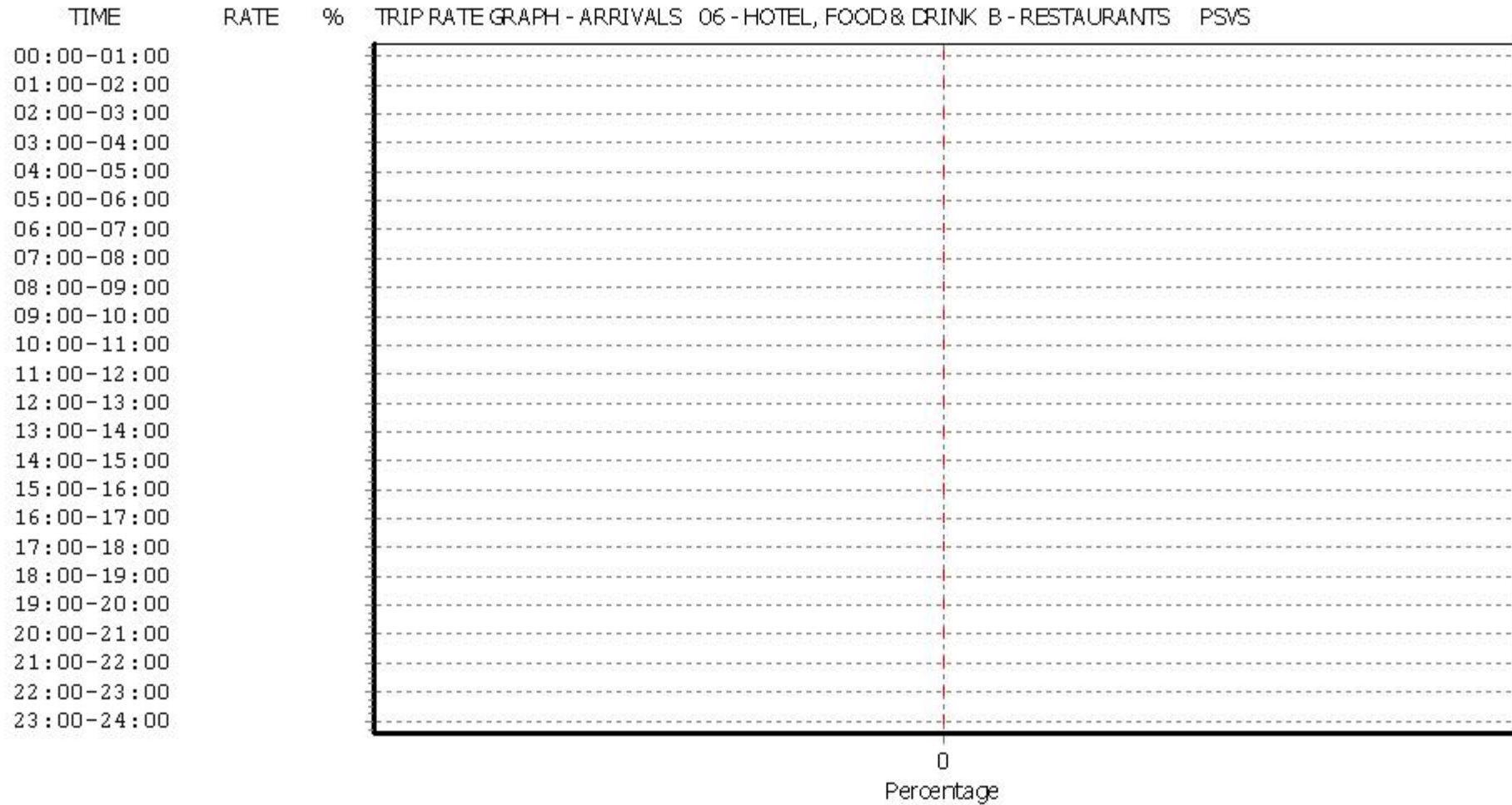
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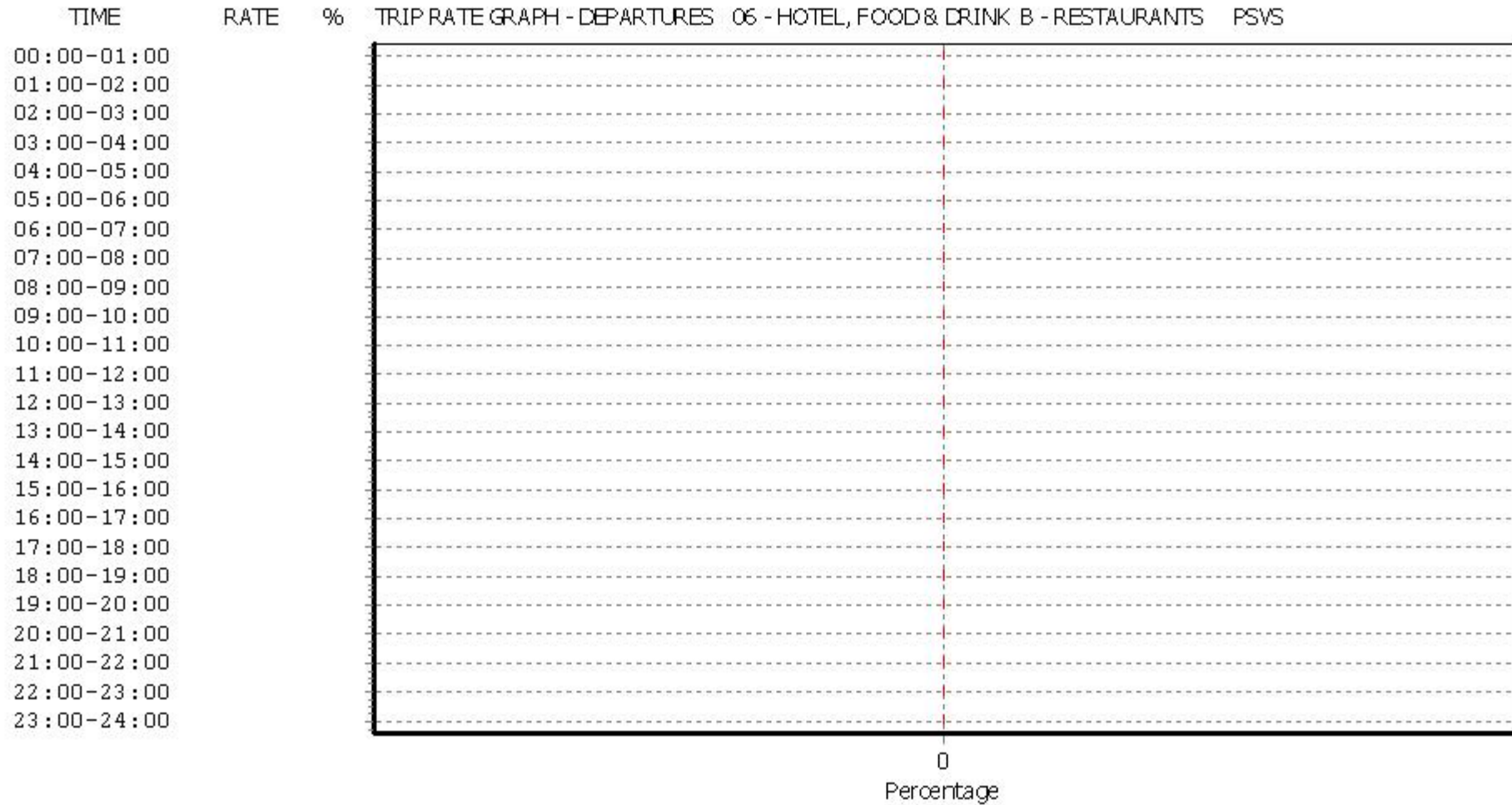
Parameter summary

Trip rate parameter range selected:	259 - 2200 (units: sqm)
Survey date date range:	01/01/09 - 17/09/16
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

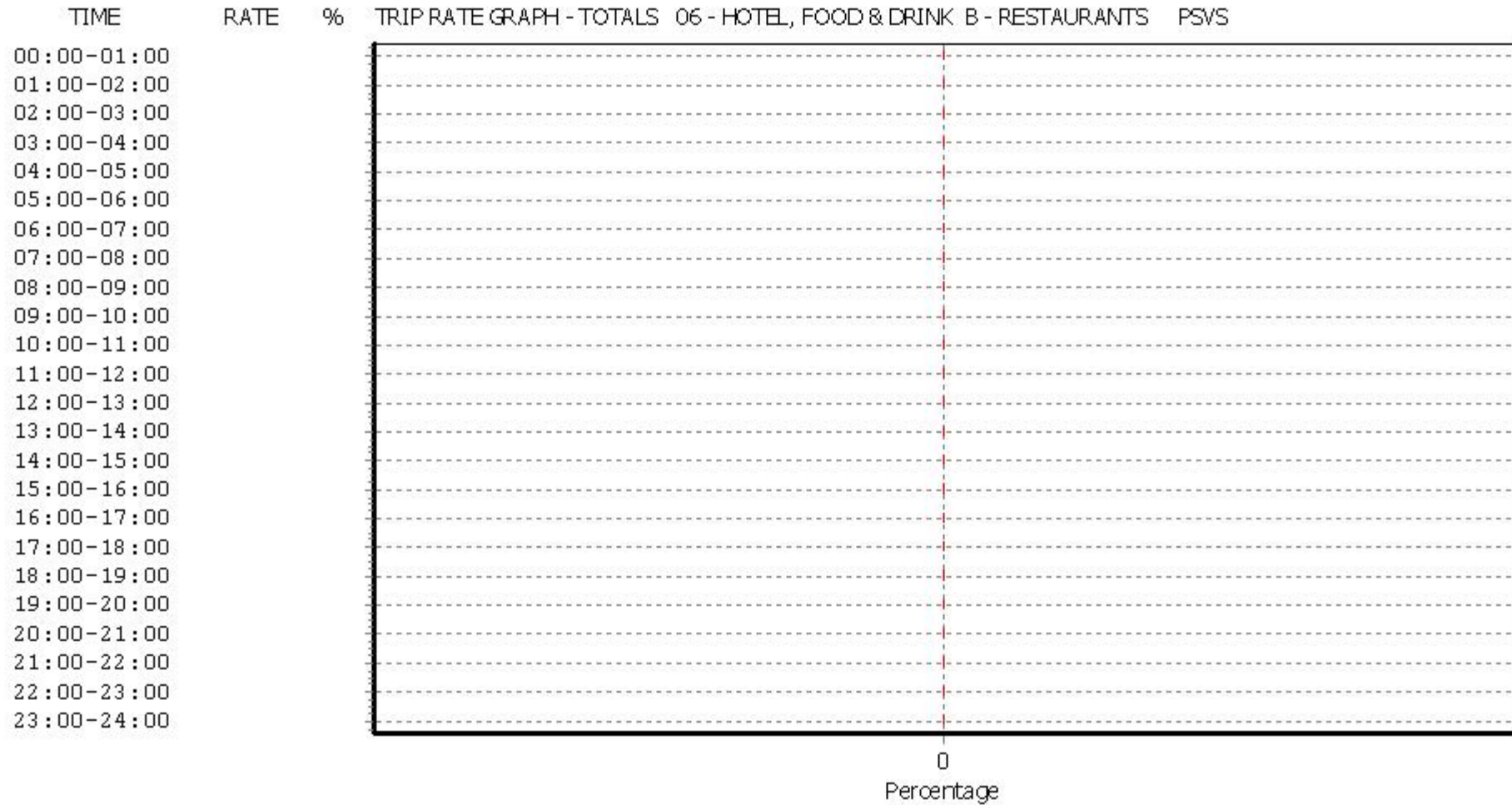
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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	911	0.000	3	911	0.000	3	911	0.000
11:00 - 12:00	3	911	0.000	3	911	0.000	3	911	0.000
12:00 - 13:00	3	911	0.000	3	911	0.000	3	911	0.000
13:00 - 14:00	3	911	0.000	3	911	0.000	3	911	0.000
14:00 - 15:00	3	911	0.000	3	911	0.000	3	911	0.000
15:00 - 16:00	3	911	0.000	3	911	0.000	3	911	0.000
16:00 - 17:00	3	911	0.073	3	911	0.000	3	911	0.073
17:00 - 18:00	3	911	0.000	3	911	0.000	3	911	0.000
18:00 - 19:00	3	911	0.000	3	911	0.000	3	911	0.000
19:00 - 20:00	3	911	0.000	3	911	0.000	3	911	0.000
20:00 - 21:00	3	911	0.000	3	911	0.000	3	911	0.000
21:00 - 22:00	3	911	0.000	3	911	0.000	3	911	0.000
22:00 - 23:00	3	911	0.000	3	911	0.000	3	911	0.000
23:00 - 24:00	3	911	0.000	3	911	0.073	3	911	0.073
Total Rates:			0.073			0.073			0.146

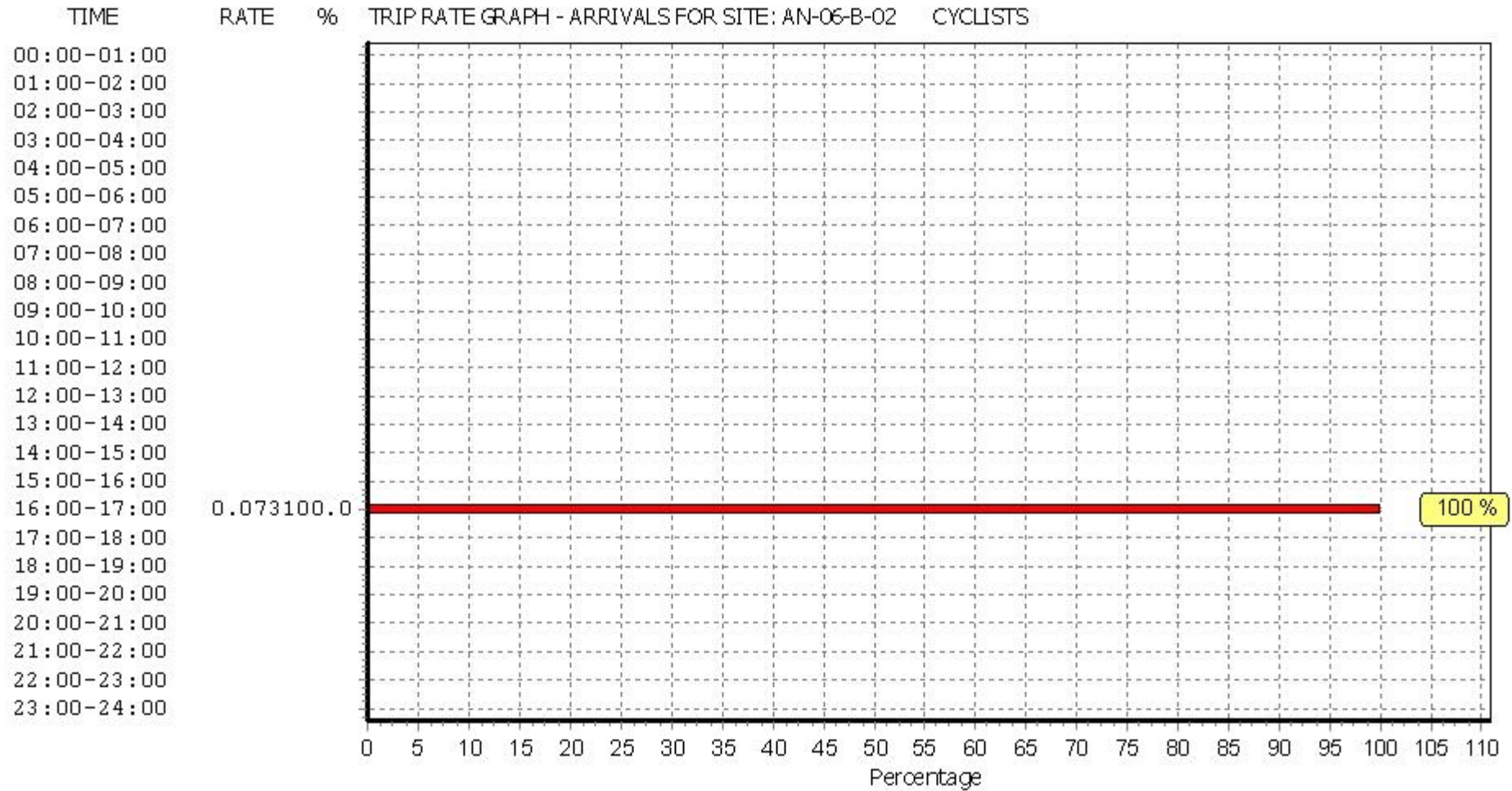
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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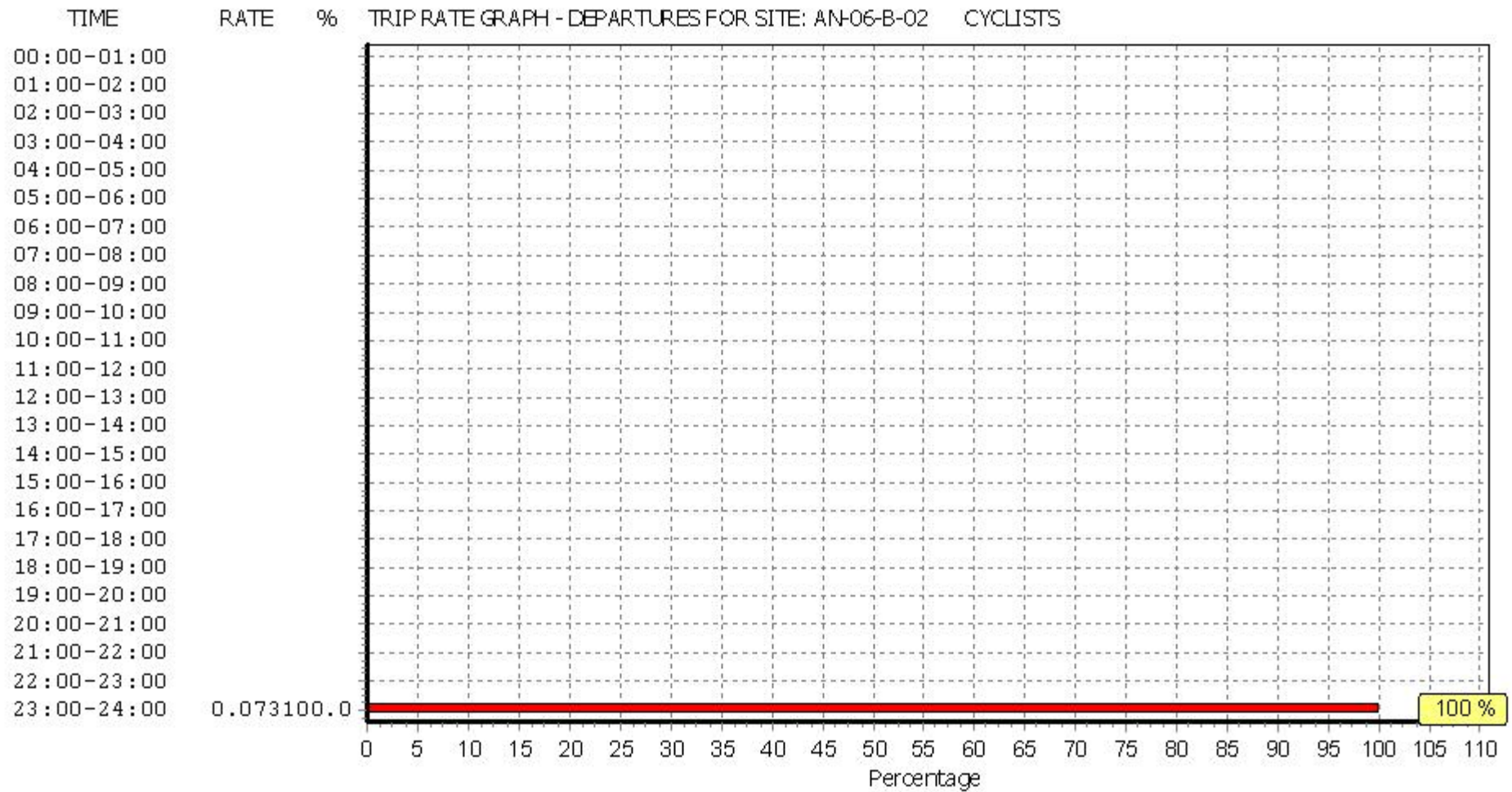
Parameter summary

Trip rate parameter range selected: 259 - 2200 (units: sqm)
 Survey date date range: 01/01/09 - 17/09/16
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

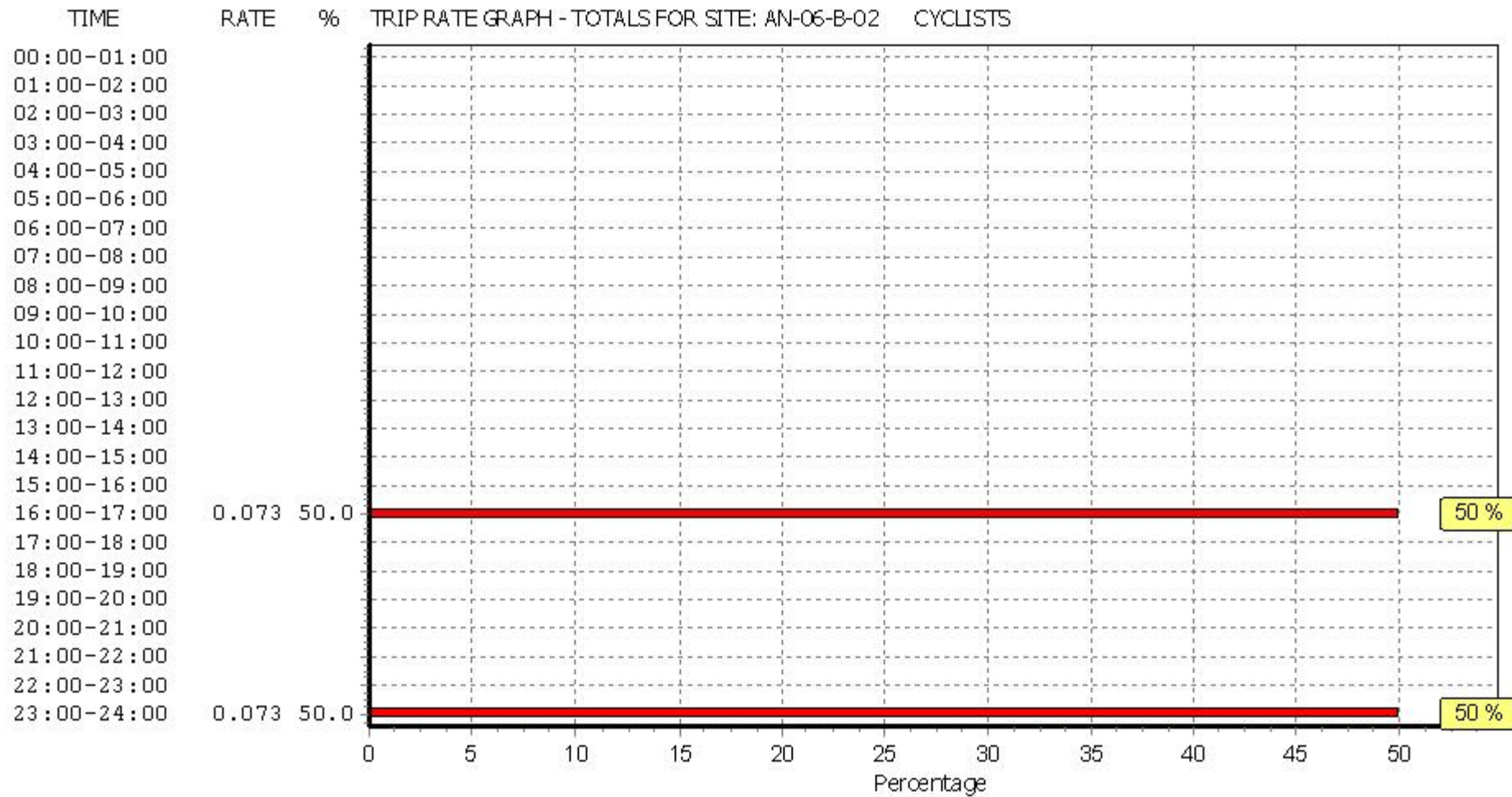
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	911	0.293	3	911	0.110	3	911	0.403
11:00 - 12:00	3	911	0.841	3	911	0.658	3	911	1.499
12:00 - 13:00	3	911	1.902	3	911	1.317	3	911	3.219
13:00 - 14:00	3	911	1.426	3	911	1.719	3	911	3.145
14:00 - 15:00	3	911	0.768	3	911	0.768	3	911	1.536
15:00 - 16:00	3	911	0.622	3	911	0.951	3	911	1.573
16:00 - 17:00	3	911	1.134	3	911	0.768	3	911	1.902
17:00 - 18:00	3	911	1.646	3	911	0.878	3	911	2.524
18:00 - 19:00	3	911	1.829	3	911	1.865	3	911	3.694
19:00 - 20:00	3	911	1.500	3	911	1.500	3	911	3.000
20:00 - 21:00	3	911	0.658	3	911	1.134	3	911	1.792
21:00 - 22:00	3	911	0.658	3	911	0.914	3	911	1.572
22:00 - 23:00	3	911	0.293	3	911	0.658	3	911	0.951
23:00 - 24:00	3	911	0.037	3	911	0.293	3	911	0.330
Total Rates:			13.607			13.533			27.140

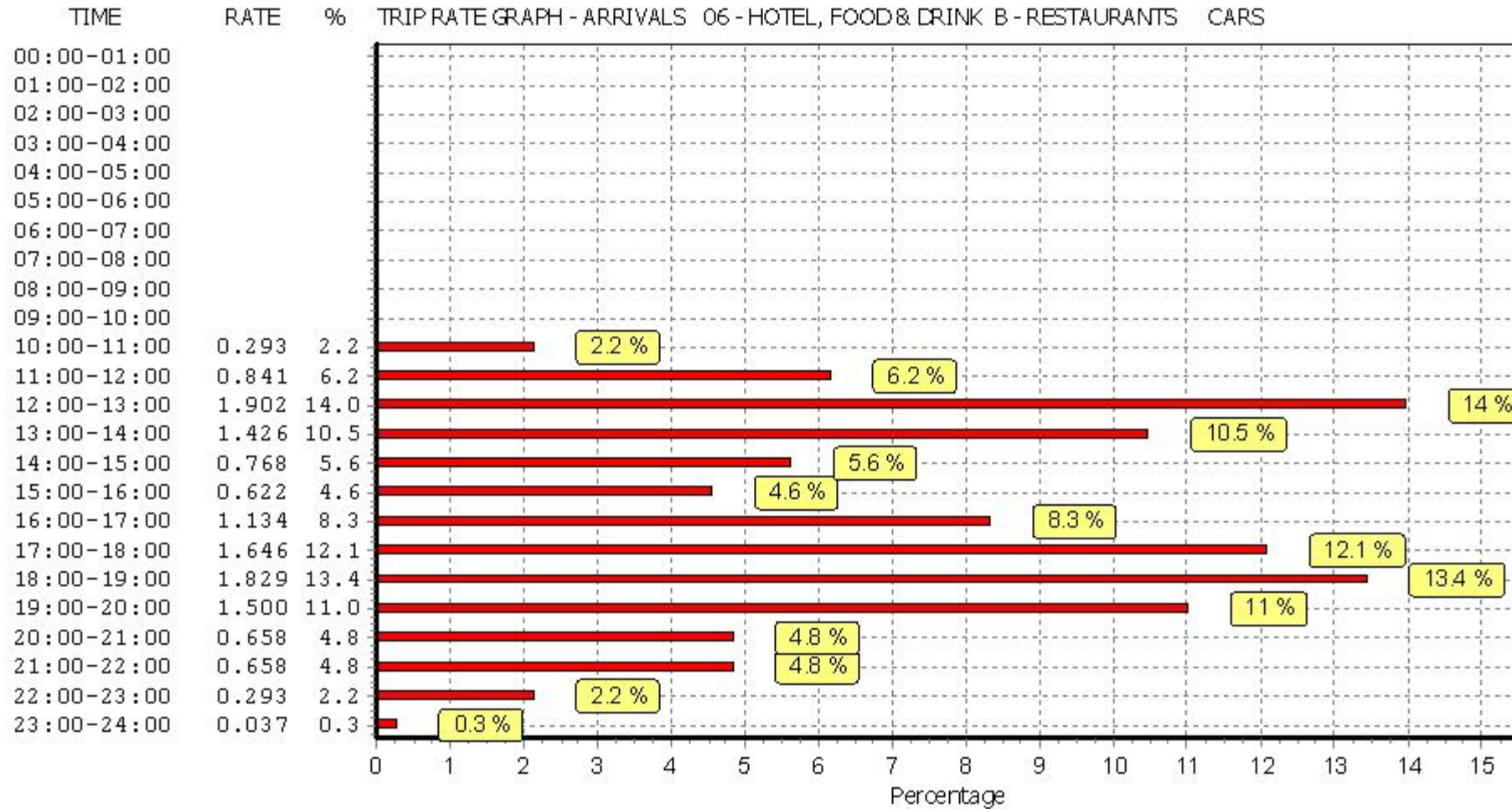
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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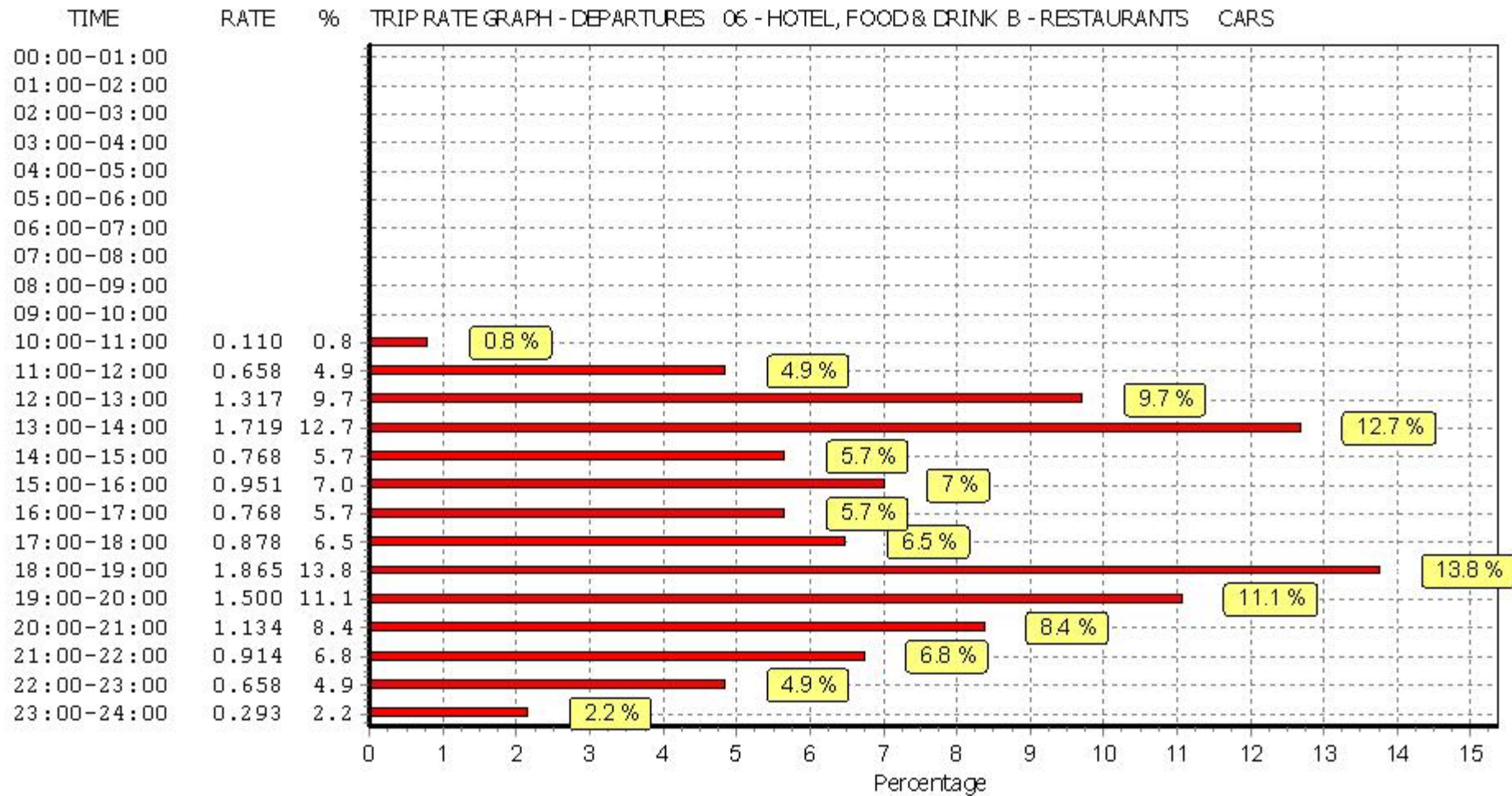
Parameter summary

Trip rate parameter range selected: 259 - 2200 (units: sqm)
 Survey date date range: 01/01/09 - 17/09/16
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

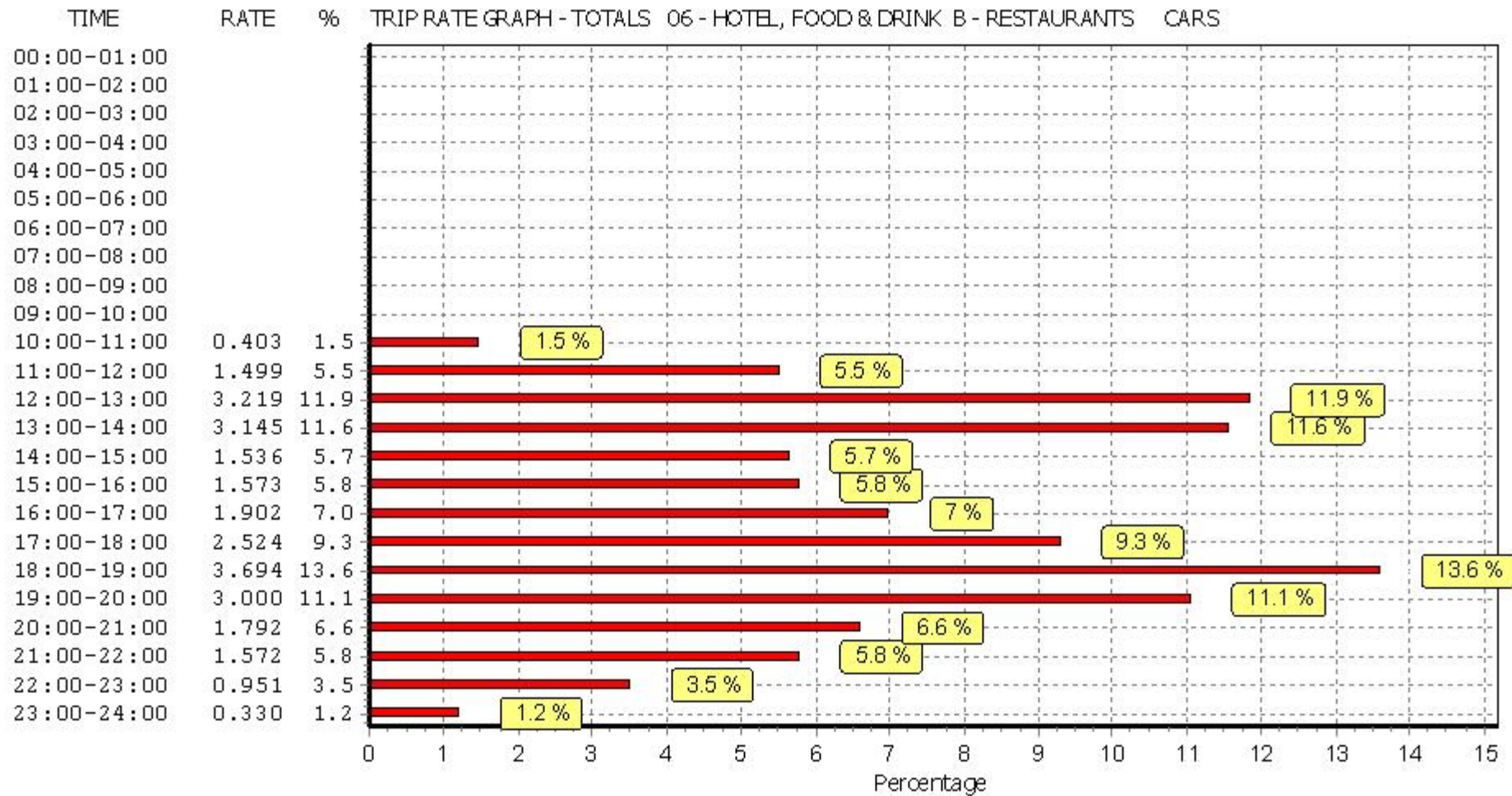
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS

LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	911	0.110	3	911	0.073	3	911	0.183
11:00 - 12:00	3	911	0.037	3	911	0.037	3	911	0.074
12:00 - 13:00	3	911	0.073	3	911	0.073	3	911	0.146
13:00 - 14:00	3	911	0.073	3	911	0.073	3	911	0.146
14:00 - 15:00	3	911	0.183	3	911	0.110	3	911	0.293
15:00 - 16:00	3	911	0.000	3	911	0.110	3	911	0.110
16:00 - 17:00	3	911	0.037	3	911	0.037	3	911	0.074
17:00 - 18:00	3	911	0.037	3	911	0.037	3	911	0.074
18:00 - 19:00	3	911	0.073	3	911	0.110	3	911	0.183
19:00 - 20:00	3	911	0.146	3	911	0.073	3	911	0.219
20:00 - 21:00	3	911	0.000	3	911	0.073	3	911	0.073
21:00 - 22:00	3	911	0.000	3	911	0.000	3	911	0.000
22:00 - 23:00	3	911	0.000	3	911	0.000	3	911	0.000
23:00 - 24:00	3	911	0.000	3	911	0.000	3	911	0.000
Total Rates:			0.769			0.806			1.575

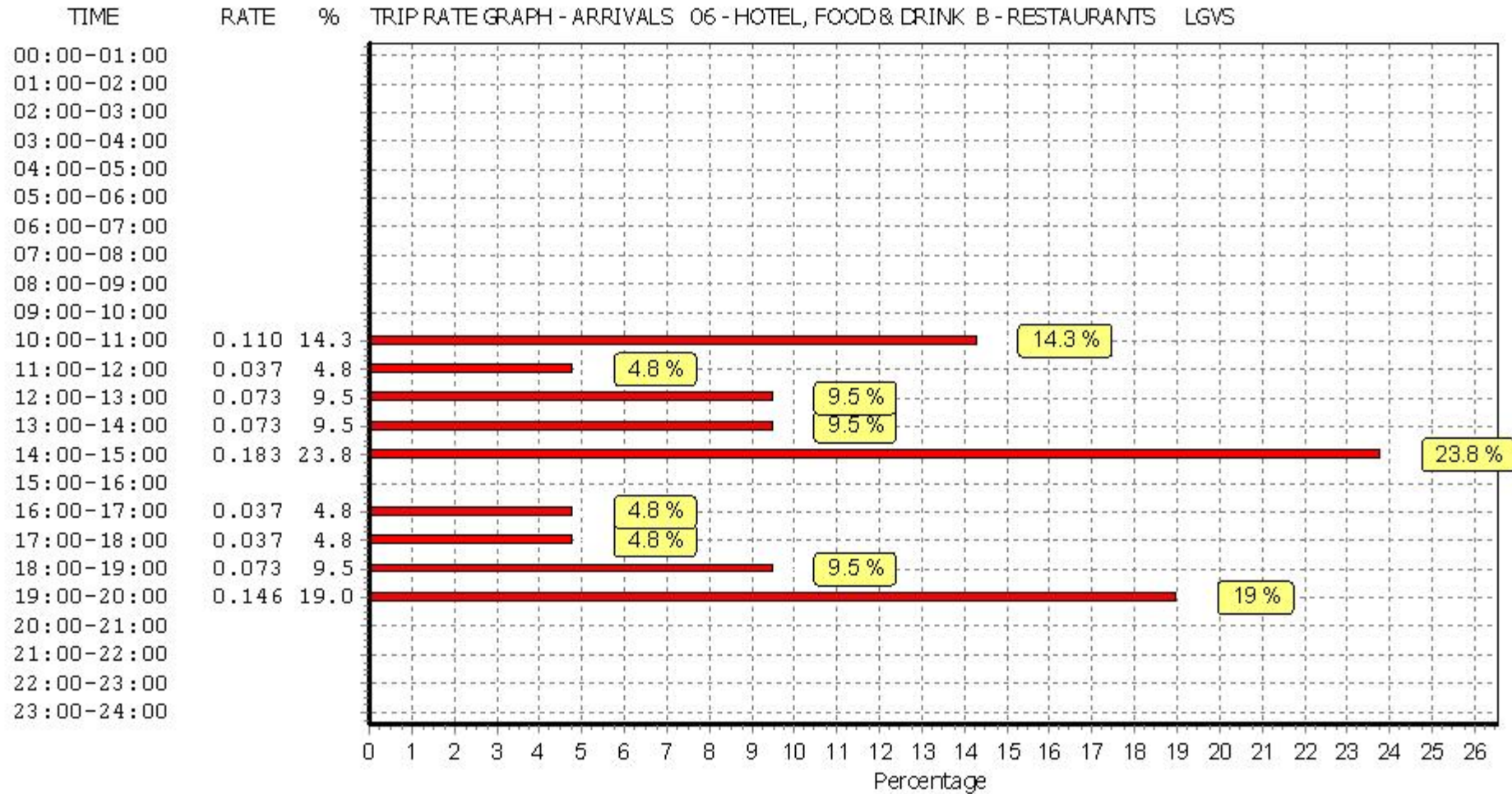
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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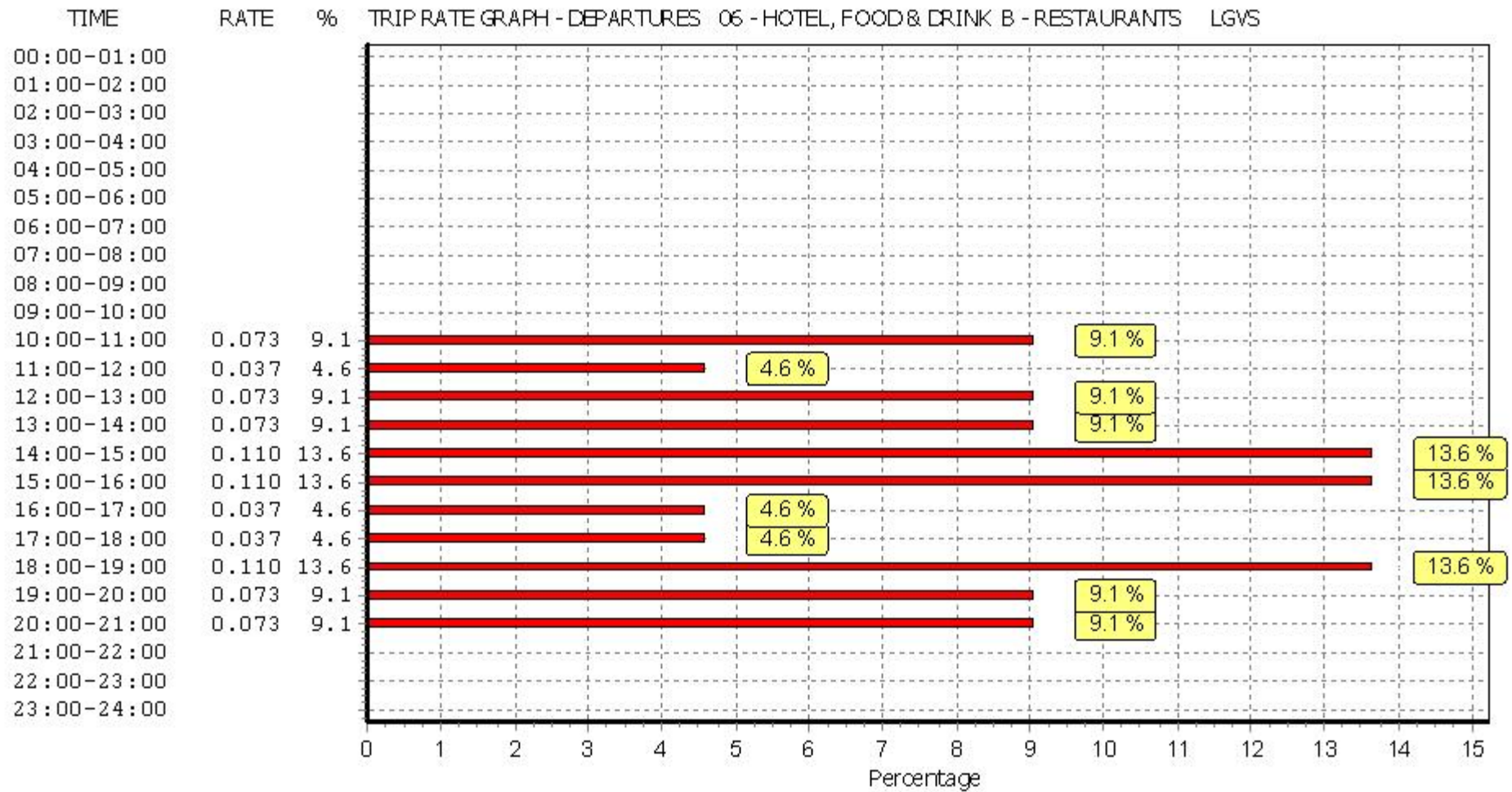
Parameter summary

Trip rate parameter range selected:	259 - 2200 (units: sqm)
Survey date date range:	01/01/09 - 17/09/16
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

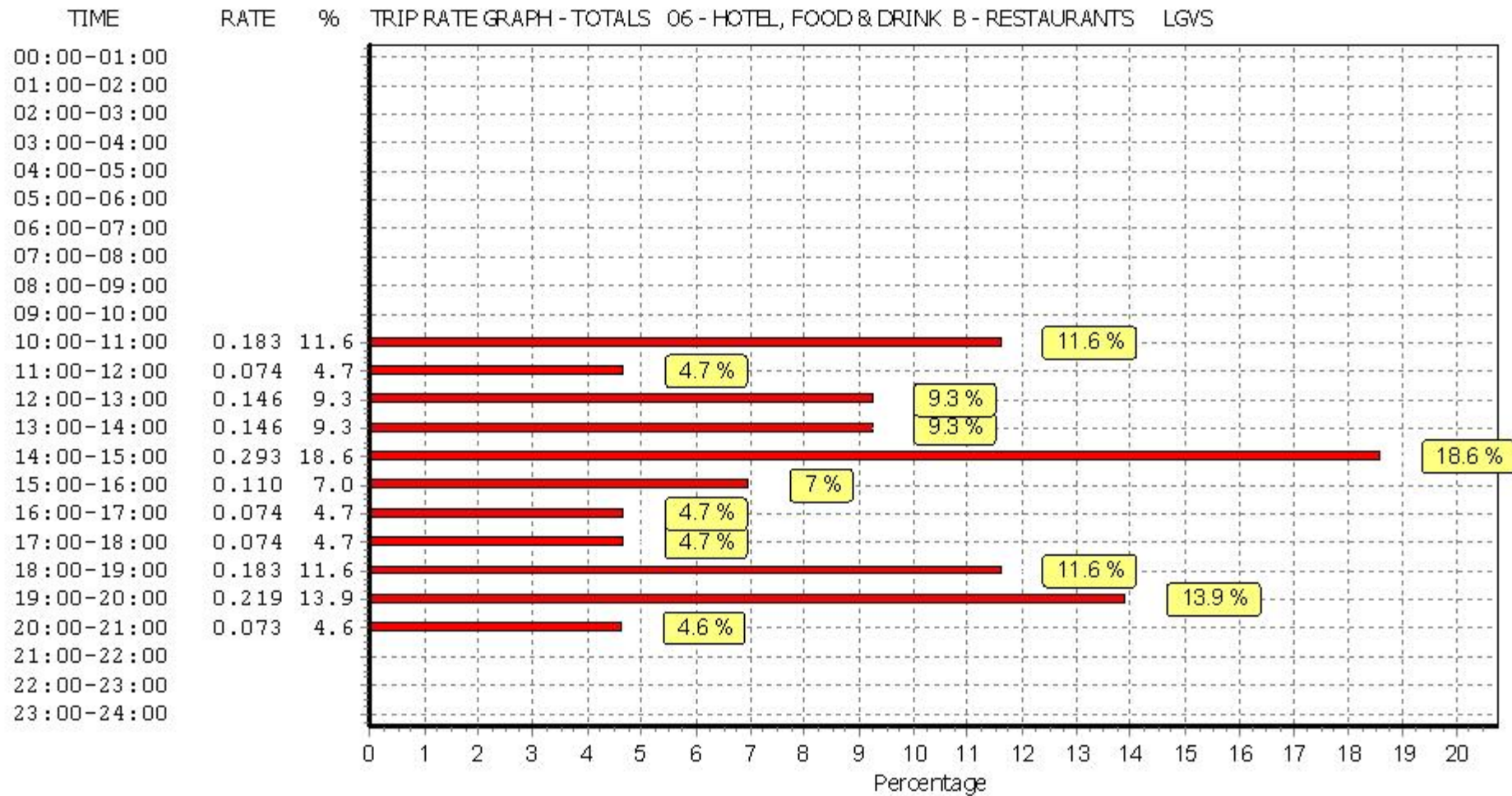
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
MOTOR CYCLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	3	911	0.000	3	911	0.000	3	911	0.000
11:00 - 12:00	3	911	0.000	3	911	0.000	3	911	0.000
12:00 - 13:00	3	911	0.037	3	911	0.000	3	911	0.037
13:00 - 14:00	3	911	0.037	3	911	0.037	3	911	0.074
14:00 - 15:00	3	911	0.000	3	911	0.037	3	911	0.037
15:00 - 16:00	3	911	0.037	3	911	0.000	3	911	0.037
16:00 - 17:00	3	911	0.000	3	911	0.037	3	911	0.037
17:00 - 18:00	3	911	0.000	3	911	0.000	3	911	0.000
18:00 - 19:00	3	911	0.000	3	911	0.000	3	911	0.000
19:00 - 20:00	3	911	0.000	3	911	0.000	3	911	0.000
20:00 - 21:00	3	911	0.000	3	911	0.000	3	911	0.000
21:00 - 22:00	3	911	0.000	3	911	0.000	3	911	0.000
22:00 - 23:00	3	911	0.000	3	911	0.000	3	911	0.000
23:00 - 24:00	3	911	0.000	3	911	0.037	3	911	0.037
Total Rates:			0.111			0.148			0.259

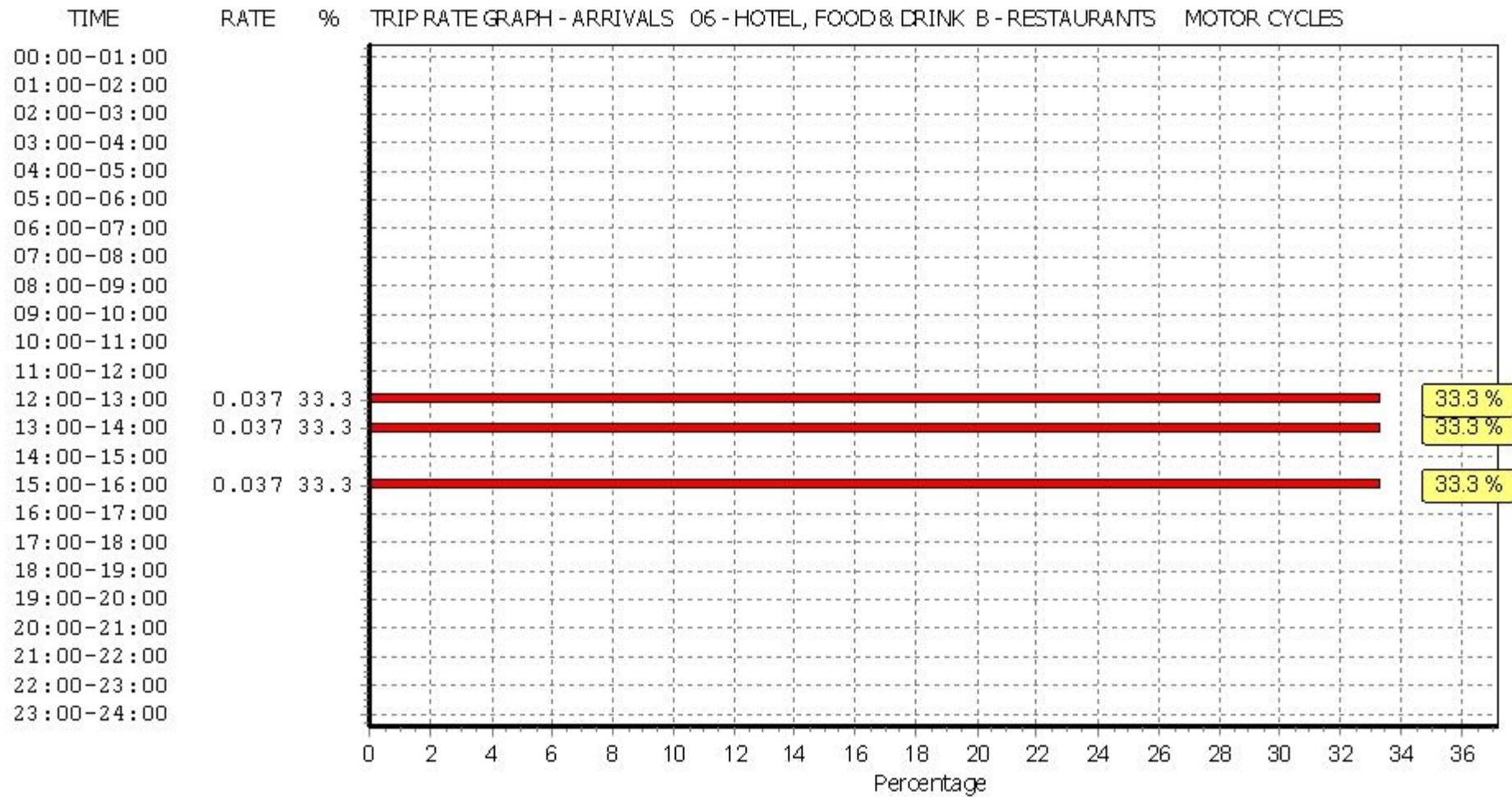
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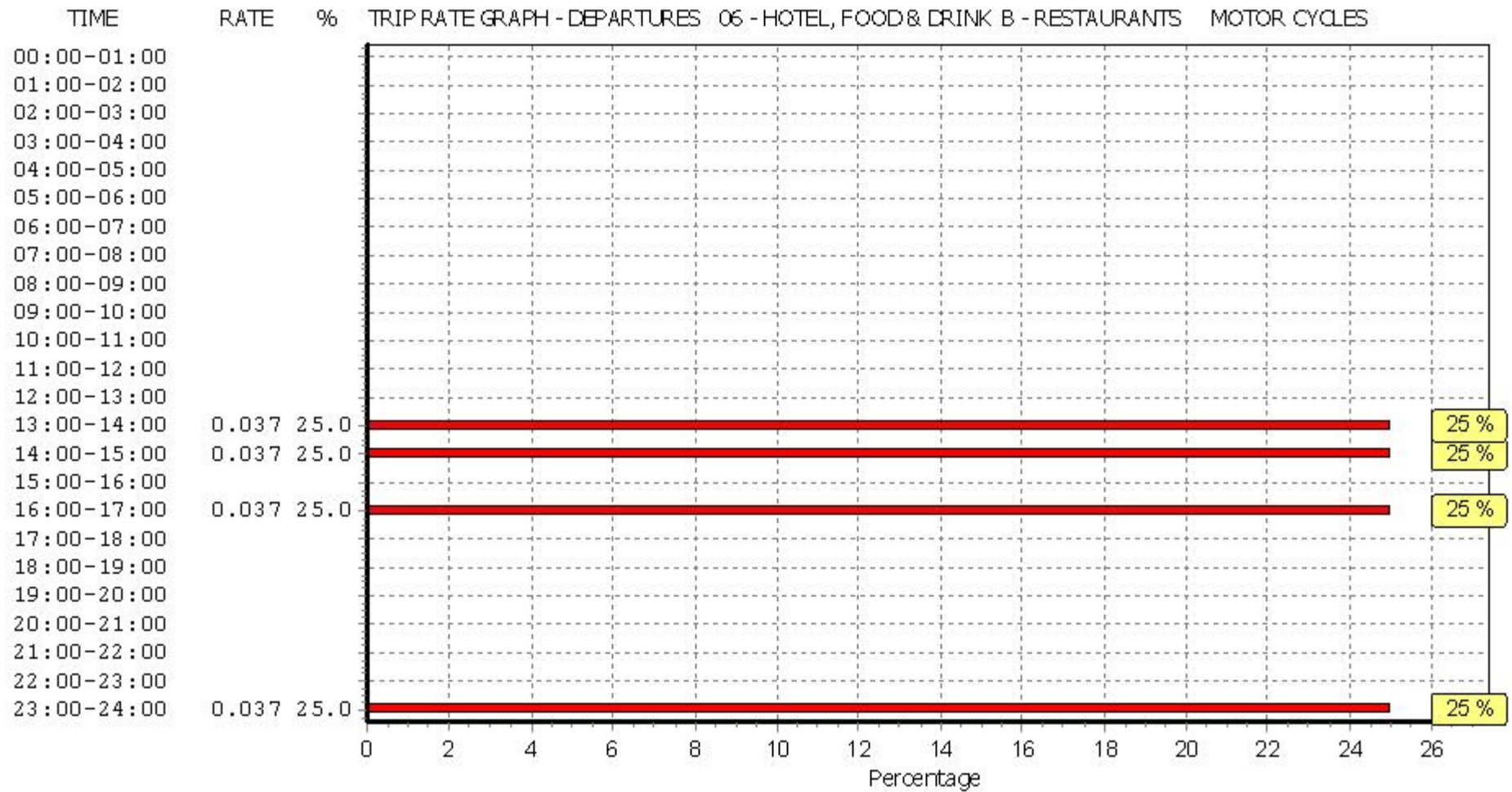
Parameter summary

Trip rate parameter range selected: 259 - 2200 (units: sqm)
 Survey date date range: 01/01/09 - 17/09/16
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

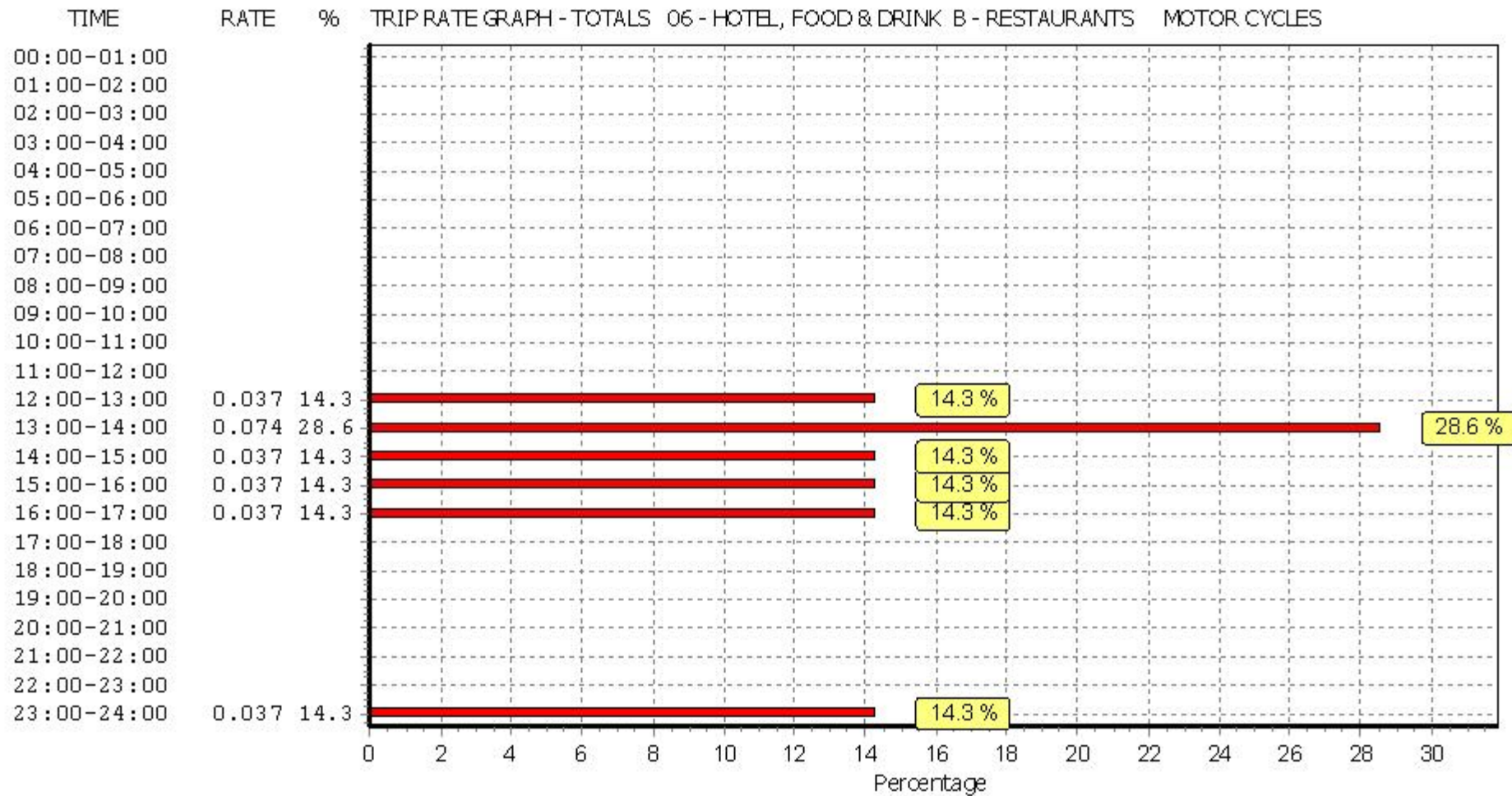
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. 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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APPENDIX D

ARCADY Output Files

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Colpe Rd Mill Rd -SHD.j9

Path: G:\2017\p170092\SHD - HOUSING\calcs\arcady\SHD

Report generation date: 11/10/2019 10:44:54

-
- »2021 DM, AM
 - »2021 DM, PM
 - »2021 DS, AM
 - »2021 DS, PM
 - »2026 DM, AM
 - »2026 DM, PM
 - »2026 DS, AM
 - »2026 DS, PM
 - »2036 DM, AM
 - »2036 DM, PM
 - »2036 DS, AM
 - »2036 DS, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2021 DM								
1 - Colpe Rd East	0.5	3.13	0.32	A	0.4	2.67	0.24	A
2 - Colpe Rd West	0.7	3.37	0.39	A	0.4	2.70	0.27	A
3 - Link Street	0.0	2.65	0.02	A	0.1	2.58	0.09	A
4 - Mill Rd	0.8	7.59	0.42	A	0.2	5.60	0.14	A
2021 DS								
1 - Colpe Rd East	0.5	3.23	0.33	A	0.4	2.74	0.25	A
2 - Colpe Rd West	0.8	3.49	0.41	A	0.5	2.81	0.29	A
3 - Link Street	0.1	2.77	0.06	A	0.1	2.66	0.12	A
4 - Mill Rd	0.9	8.17	0.45	A	0.2	5.94	0.17	A
2026 DM								
1 - Colpe Rd East	0.7	3.61	0.38	A	0.4	2.81	0.27	A
2 - Colpe Rd West	0.9	3.70	0.45	A	0.5	2.81	0.30	A
3 - Link Street	0.1	2.79	0.11	A	0.1	2.55	0.08	A
4 - Mill Rd	1.0	9.83	0.49	A	0.2	6.09	0.15	A
2026 DS								
1 - Colpe Rd East	0.7	3.77	0.39	A	0.4	2.89	0.28	A
2 - Colpe Rd West	0.9	3.81	0.46	A	0.6	2.99	0.34	A
3 - Link Street	0.2	2.93	0.15	A	0.1	2.63	0.11	A
4 - Mill Rd	1.1	10.77	0.51	B	0.2	6.32	0.16	A
2036 DM								
1 - Colpe Rd East	0.7	3.61	0.40	A	0.5	2.96	0.30	A
2 - Colpe Rd West	1.4	4.70	0.56	A	0.7	3.22	0.39	A
3 - Link Street	0.1	3.00	0.12	A	0.2	2.80	0.12	A
4 - Mill Rd	0.6	8.09	0.37	A	0.1	6.15	0.10	A
2036 DS								
1 - Colpe Rd East	0.8	3.74	0.41	A	0.5	3.03	0.31	A
2 - Colpe Rd West	1.5	4.86	0.57	A	0.8	3.41	0.42	A
3 - Link Street	0.2	3.13	0.15	A	0.2	2.88	0.14	A
4 - Mill Rd	0.7	8.59	0.38	A	0.1	6.34	0.10	A

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

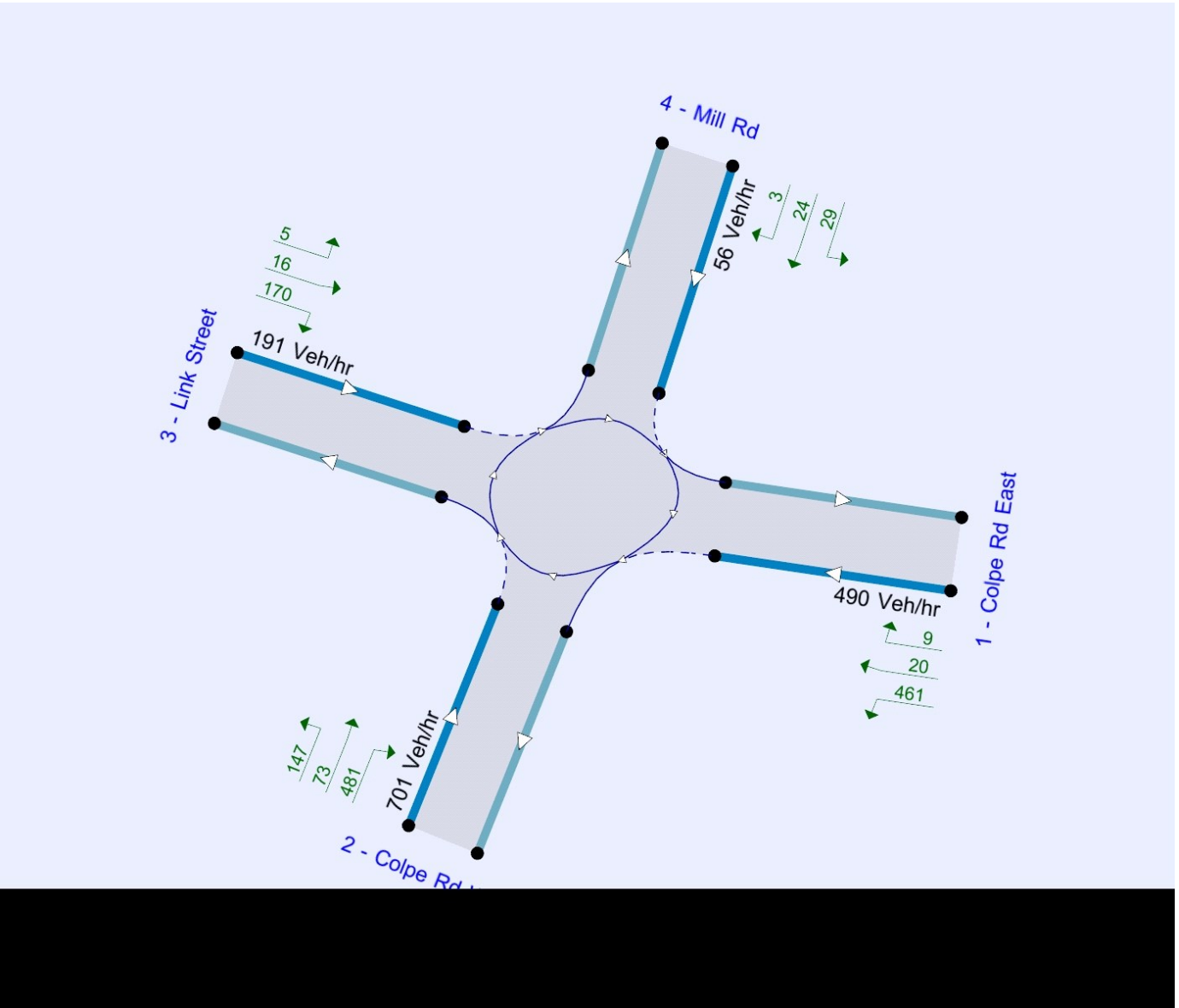
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	16/01/2018
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	Veh	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)
2021 DM	AM	ONE HOUR	08:30	10:00	15
2021 DM	PM	ONE HOUR	17:45	19:15	15
2021 DS	AM	ONE HOUR	08:30	10:00	15
2021 DS	PM	ONE HOUR	17:45	19:15	15
2026 DM	AM	ONE HOUR	08:30	10:00	15
2026 DM	PM	ONE HOUR	17:45	19:15	15
2026 DS	AM	ONE HOUR	08:30	10:00	15
2026 DS	PM	ONE HOUR	17:45	19:15	15
2036 DM	AM	ONE HOUR	08:30	10:00	15
2036 DM	PM	ONE HOUR	17:45	19:15	15
2036 DS	AM	ONE HOUR	08:30	10:00	15
2036 DS	PM	ONE HOUR	17:45	19:15	15

2021 DM, 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	4.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Colpe Rd East	
2	Colpe Rd West	
3	Link Street	
4	Mill Rd	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1 - Colpe Rd East	0.00	99999.00
2 - Colpe Rd West	0.00	99999.00
3 - Link Street	0.00	99999.00
4 - Mill Rd	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Colpe Rd East	6.63	7.27	16.1	15.0	38.0	40.1	
2 - Colpe Rd West	6.90	6.95	9.8	17.1	38.0	36.9	
3 - Link Street	7.00	7.05	9.2	15.0	38.0	30.5	
4 - Mill Rd	3.80	3.85	9.1	17.1	38.0	42.9	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Colpe Rd East	0.705	2068.881
2 - Colpe Rd West	0.704	2037.848
3 - Link Street	0.721	2097.371
4 - Mill Rd	0.510	1104.409

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	2021 DM	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	489.00	100.000
2 - Colpe Rd West		✓	632.00	100.000
3 - Link Street		✓	19.00	100.000
4 - Mill Rd		✓	306.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	391.000	9.000	89.000
	2 - Colpe Rd West	333.000	0.000	54.000	245.000
	3 - Link Street	1.000	9.000	0.000	9.000
	4 - Mill Rd	65.000	224.000	17.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
1 - Colpe Rd East	10	10	10	10
2 - Colpe Rd West	10	10	10	10
3 - Link Street	10	10	10	10
4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.32	3.13	0.5	A
2 - Colpe Rd West	0.39	3.37	0.7	A
3 - Link Street	0.02	2.65	0.0	A
4 - Mill Rd	0.42	7.59	0.8	A

Main Results for each time segment

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 - Colpe Rd East	404.96	205.78	1923.86	0.210	403.79	0.3	2.604	A
2 - Colpe Rd West	523.38	94.91	1970.99	0.266	521.80	0.4	2.730	A
3 - Link Street	15.73	550.71	1700.52	0.009	15.69	0.0	2.350	A
4 - Mill Rd	253.41	283.19	959.88	0.264	251.85	0.4	5.580	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 - Colpe Rd East	483.56	246.80	1894.95	0.255	483.23	0.4	2.805	A
2 - Colpe Rd West	624.97	113.62	1957.82	0.319	624.50	0.5	2.970	A
3 - Link Street	18.79	659.09	1622.42	0.012	18.78	0.0	2.468	A
4 - Mill Rd	302.60	338.93	931.43	0.325	302.07	0.5	6.286	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 - Colpe Rd East	592.24	302.00	1856.05	0.319	591.69	0.5	3.130	A
2 - Colpe Rd West	765.43	139.11	1939.86	0.395	764.63	0.7	3.368	A
3 - Link Street	23.01	806.99	1515.84	0.015	23.00	0.0	2.652	A
4 - Mill Rd	370.60	414.99	892.62	0.415	369.62	0.8	7.558	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 - Colpe Rd East	592.24	302.76	1855.51	0.319	592.23	0.5	3.134	A
2 - Colpe Rd West	765.43	139.28	1939.75	0.395	765.42	0.7	3.371	A
3 - Link Street	23.01	807.81	1515.25	0.015	23.01	0.0	2.653	A
4 - Mill Rd	370.60	415.41	892.40	0.415	370.58	0.8	7.588	A

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	483.56	247.99	1894.11	0.255	484.10	0.4	2.808	A
2 - Colpe Rd West	624.97	113.88	1957.63	0.319	625.76	0.5	2.976	A
3 - Link Street	18.79	660.40	1621.47	0.012	18.80	0.0	2.470	A
4 - Mill Rd	302.60	339.61	931.09	0.325	303.56	0.5	6.319	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	404.96	207.47	1922.67	0.211	405.30	0.3	2.609	A
2 - Colpe Rd West	523.38	95.33	1970.70	0.266	523.86	0.4	2.737	A
3 - Link Street	15.73	552.86	1698.97	0.009	15.75	0.0	2.352	A
4 - Mill Rd	253.41	284.31	959.31	0.264	253.96	0.4	5.618	A

2021 DM, 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	2.93	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)
D2	2021 DM	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	395.00	100.000
2 - Colpe Rd West		✓	457.00	100.000
3 - Link Street		✓	125.00	100.000
4 - Mill Rd		✓	93.00	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	377.000	1.000	17.000
	2 - Colpe Rd West	394.000	0.000	1.000	62.000
	3 - Link Street	10.000	57.000	0.000	58.000
	4 - Mill Rd	26.000	64.000	3.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.24	2.67	0.4	A
2 - Colpe Rd West	0.27	2.70	0.4	A
3 - Link Street	0.09	2.58	0.1	A
4 - Mill Rd	0.14	5.60	0.2	A

Main Results for each time segment

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 - Colpe Rd East	327.11	102.28	1996.80	0.164	326.26	0.2	2.369	A
2 - Colpe Rd West	378.46	17.34	2025.64	0.187	377.45	0.3	2.401	A
3 - Link Street	103.52	390.67	1815.85	0.057	103.25	0.1	2.312	A
4 - Mill Rd	77.02	380.76	910.08	0.085	76.61	0.1	4.749	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 - Colpe Rd East	390.61	122.51	1982.54	0.197	390.39	0.3	2.487	A
2 - Colpe Rd West	451.92	20.75	2023.23	0.223	451.66	0.3	2.519	A
3 - Link Street	123.61	467.48	1760.50	0.070	123.54	0.1	2.418	A
4 - Mill Rd	91.97	455.62	871.88	0.105	91.85	0.1	5.076	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 - Colpe Rd East	478.39	150.00	1963.17	0.244	478.06	0.4	2.666	A
2 - Colpe Rd West	553.48	25.41	2019.95	0.274	553.09	0.4	2.699	A
3 - Link Street	151.39	572.45	1684.85	0.090	151.29	0.1	2.581	A
4 - Mill Rd	112.63	557.93	819.66	0.137	112.45	0.2	5.598	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	478.39	150.18	1963.04	0.244	478.39	0.4	2.666	A
2 - Colpe Rd West	553.48	25.43	2019.93	0.274	553.48	0.4	2.699	A
3 - Link Street	151.39	572.86	1684.56	0.090	151.39	0.1	2.582	A
4 - Mill Rd	112.63	558.32	819.46	0.137	112.63	0.2	5.601	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	390.61	122.79	1982.34	0.197	390.94	0.3	2.490	A
2 - Colpe Rd West	451.92	20.79	2023.21	0.223	452.30	0.3	2.520	A
3 - Link Street	123.61	468.14	1760.02	0.070	123.71	0.1	2.421	A
4 - Mill Rd	91.97	456.26	871.55	0.106	92.14	0.1	5.083	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	327.11	102.80	1996.43	0.164	327.33	0.2	2.372	A
2 - Colpe Rd West	378.46	17.40	2025.59	0.187	378.71	0.3	2.404	A
3 - Link Street	103.52	391.97	1814.91	0.057	103.58	0.1	2.315	A
4 - Mill Rd	77.02	382.03	909.44	0.085	77.13	0.1	4.759	A



2021 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	4.35	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	2021 DS	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	493.00	100.000
2 - Colpe Rd West		✓	651.00	100.000
3 - Link Street		✓	70.00	100.000
4 - Mill Rd		✓	321.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	391.000	13.000	89.000
	2 - Colpe Rd West	333.000	0.000	73.000	245.000
	3 - Link Street	7.000	34.000	0.000	29.000
	4 - Mill Rd	65.000	224.000	32.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.33	3.23	0.5	A
2 - Colpe Rd West	0.41	3.49	0.8	A
3 - Link Street	0.06	2.77	0.1	A
4 - Mill Rd	0.45	8.17	0.9	A

Main Results for each time segment

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 - Colpe Rd East	408.27	238.73	1900.64	0.215	407.07	0.3	2.648	A
2 - Colpe Rd West	539.12	110.55	1959.98	0.275	537.46	0.4	2.782	A
3 - Link Street	57.97	550.68	1700.54	0.034	57.81	0.0	2.410	A
4 - Mill Rd	265.83	308.78	946.82	0.281	264.13	0.4	5.787	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 - Colpe Rd East	487.52	286.27	1867.13	0.261	487.17	0.4	2.869	A
2 - Colpe Rd West	643.76	132.38	1944.61	0.331	643.25	0.5	3.041	A
3 - Link Street	69.22	659.07	1622.43	0.043	69.18	0.0	2.549	A
4 - Mill Rd	317.43	369.56	915.80	0.347	316.82	0.6	6.604	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 - Colpe Rd East	597.08	350.27	1822.03	0.328	596.50	0.5	3.229	A
2 - Colpe Rd West	788.44	162.05	1923.71	0.410	787.57	0.8	3.484	A
3 - Link Street	84.78	806.94	1515.87	0.056	84.71	0.1	2.766	A
4 - Mill Rd	388.77	452.48	873.48	0.445	387.61	0.9	8.131	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 - Colpe Rd East	597.08	351.20	1821.37	0.328	597.08	0.5	3.233	A
2 - Colpe Rd West	788.44	162.29	1923.54	0.410	788.43	0.8	3.487	A
3 - Link Street	84.78	807.81	1515.25	0.056	84.78	0.1	2.767	A
4 - Mill Rd	388.77	452.95	873.24	0.445	388.74	0.9	8.172	A

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	487.52	287.72	1866.11	0.261	488.09	0.4	2.874	A
2 - Colpe Rd West	643.76	132.74	1944.35	0.331	644.62	0.5	3.048	A
3 - Link Street	69.22	660.45	1621.44	0.043	69.28	0.0	2.550	A
4 - Mill Rd	317.43	370.32	915.41	0.347	318.57	0.6	6.649	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	408.27	240.68	1899.26	0.215	408.63	0.3	2.658	A
2 - Colpe Rd West	539.12	111.11	1959.59	0.275	539.63	0.4	2.789	A
3 - Link Street	57.97	552.89	1698.95	0.034	58.01	0.0	2.414	A
4 - Mill Rd	265.83	310.01	946.19	0.281	266.46	0.4	5.832	A



2021 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	3.08	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	2021 DS	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	400.00	100.000
2 - Colpe Rd West		✓	485.00	100.000
3 - Link Street		✓	160.00	100.000
4 - Mill Rd		✓	116.00	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
1 - Colpe Rd East	0.000	377.000	6.000	17.000
2 - Colpe Rd West	394.000	0.000	29.000	62.000
3 - Link Street	13.000	75.000	0.000	72.000
4 - Mill Rd	26.000	64.000	26.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
1 - Colpe Rd East	10	10	10	10
2 - Colpe Rd West	10	10	10	10
3 - Link Street	10	10	10	10
4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.25	2.74	0.4	A
2 - Colpe Rd West	0.29	2.81	0.5	A
3 - Link Street	0.12	2.66	0.1	A
4 - Mill Rd	0.17	5.94	0.2	A

Main Results for each time segment

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 - Colpe Rd East	331.26	136.08	1972.98	0.168	330.37	0.2	2.409	A
2 - Colpe Rd West	401.65	40.41	2009.38	0.200	400.55	0.3	2.460	A
3 - Link Street	132.50	390.64	1815.87	0.073	132.16	0.1	2.352	A
4 - Mill Rd	96.06	398.08	901.24	0.107	95.54	0.1	4.911	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 - Colpe Rd East	395.55	163.01	1954.00	0.202	395.32	0.3	2.540	A
2 - Colpe Rd West	479.61	48.41	2003.75	0.239	479.32	0.3	2.597	A
3 - Link Street	158.22	467.46	1760.51	0.090	158.13	0.1	2.471	A
4 - Mill Rd	114.71	476.36	861.29	0.133	114.56	0.2	5.301	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 - Colpe Rd East	484.45	199.58	1928.23	0.251	484.09	0.4	2.742	A
2 - Colpe Rd West	587.39	59.27	1996.10	0.294	586.95	0.5	2.810	A
3 - Link Street	193.78	572.43	1684.87	0.115	193.64	0.1	2.655	A
4 - Mill Rd	140.49	583.32	806.70	0.174	140.24	0.2	5.941	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	484.45	199.83	1928.05	0.251	484.45	0.4	2.742	A
2 - Colpe Rd West	587.39	59.34	1996.05	0.294	587.39	0.5	2.810	A
3 - Link Street	193.78	572.86	1684.56	0.115	193.78	0.1	2.655	A
4 - Mill Rd	140.49	583.76	806.48	0.174	140.49	0.2	5.945	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	395.55	163.42	1953.71	0.202	395.90	0.3	2.544	A
2 - Colpe Rd West	479.61	48.53	2003.67	0.239	480.05	0.3	2.601	A
3 - Link Street	158.22	468.17	1760.00	0.090	158.36	0.1	2.474	A
4 - Mill Rd	114.71	477.07	860.93	0.133	114.95	0.2	5.311	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	331.26	136.80	1972.47	0.168	331.49	0.2	2.413	A
2 - Colpe Rd West	401.65	40.63	2009.23	0.200	401.93	0.3	2.465	A
3 - Link Street	132.50	391.99	1814.90	0.073	132.59	0.1	2.353	A
4 - Mill Rd	96.06	399.44	900.55	0.107	96.22	0.1	4.923	A



2026 DM, 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	4.72	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	2026 DM	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	550.00	100.000
2 - Colpe Rd West		✓	714.00	100.000
3 - Link Street		✓	146.00	100.000
4 - Mill Rd		✓	318.00	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
1 - Colpe Rd East	0.000	432.000	63.000	55.000
2 - Colpe Rd West	368.000	0.000	194.000	152.000
3 - Link Street	32.000	112.000	0.000	2.000
4 - Mill Rd	71.000	245.000	2.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
1 - Colpe Rd East	10	10	10	10
2 - Colpe Rd West	10	10	10	10
3 - Link Street	10	10	10	10
4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.38	3.61	0.7	A
2 - Colpe Rd West	0.45	3.70	0.9	A
3 - Link Street	0.11	2.79	0.1	A
4 - Mill Rd	0.49	9.83	1.0	A

Main Results for each time segment

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 - Colpe Rd East	455.48	295.63	1860.54	0.245	454.06	0.4	2.813	A
2 - Colpe Rd West	591.29	99.06	1968.07	0.300	589.41	0.5	2.868	A
3 - Link Street	120.91	474.67	1755.32	0.069	120.58	0.1	2.422	A
4 - Mill Rd	263.35	422.72	888.67	0.296	261.51	0.5	6.297	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 - Colpe Rd East	543.88	354.37	1819.14	0.299	543.44	0.5	3.104	A
2 - Colpe Rd West	706.06	118.56	1954.34	0.361	705.46	0.6	3.169	A
3 - Link Street	144.38	568.13	1687.97	0.086	144.29	0.1	2.564	A
4 - Mill Rd	314.46	505.91	846.21	0.372	313.73	0.6	7.425	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 - Colpe Rd East	666.12	433.49	1763.38	0.378	665.33	0.7	3.605	A
2 - Colpe Rd West	864.74	145.16	1935.61	0.447	863.69	0.9	3.691	A
3 - Link Street	176.82	695.55	1596.14	0.111	176.69	0.1	2.789	A
4 - Mill Rd	385.14	619.42	788.28	0.489	383.59	1.0	9.747	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 - Colpe Rd East	666.12	434.76	1762.49	0.378	666.11	0.7	3.611	A
2 - Colpe Rd West	864.74	145.33	1935.48	0.447	864.73	0.9	3.697	A
3 - Link Street	176.82	696.39	1595.54	0.111	176.82	0.1	2.790	A
4 - Mill Rd	385.14	620.09	787.94	0.489	385.09	1.0	9.826	A

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	543.88	356.29	1817.78	0.299	544.66	0.5	3.114	A
2 - Colpe Rd West	706.06	118.84	1954.14	0.361	707.10	0.6	3.177	A
3 - Link Street	144.38	569.44	1687.02	0.086	144.51	0.1	2.566	A
4 - Mill Rd	314.46	506.97	845.67	0.372	315.99	0.7	7.499	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	455.48	297.96	1858.89	0.245	455.93	0.4	2.825	A
2 - Colpe Rd West	591.29	99.48	1967.78	0.300	591.89	0.5	2.878	A
3 - Link Street	120.91	476.66	1753.88	0.069	120.99	0.1	2.424	A
4 - Mill Rd	263.35	424.40	887.81	0.297	264.11	0.5	6.358	A



2026 DM, 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	3.06	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	2026 DM	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	436.00	100.000
2 - Colpe Rd West		✓	507.00	100.000
3 - Link Street		✓	110.00	100.000
4 - Mill Rd		✓	97.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	417.000	11.000	8.000
	2 - Colpe Rd West	435.000	0.000	42.000	30.000
	3 - Link Street	25.000	85.000	0.000	0.000
	4 - Mill Rd	28.000	69.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.27	2.81	0.4	A
2 - Colpe Rd West	0.30	2.81	0.5	A
3 - Link Street	0.08	2.55	0.1	A
4 - Mill Rd	0.15	6.09	0.2	A

Main Results for each time segment

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 - Colpe Rd East	361.07	127.04	1979.35	0.182	360.09	0.2	2.444	A
2 - Colpe Rd West	419.87	15.69	2026.79	0.207	418.72	0.3	2.461	A
3 - Link Street	91.10	390.64	1815.87	0.050	90.86	0.1	2.295	A
4 - Mill Rd	80.33	450.12	874.69	0.092	79.89	0.1	4.980	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 - Colpe Rd East	431.15	152.15	1961.65	0.220	430.89	0.3	2.586	A
2 - Colpe Rd West	501.36	18.78	2024.62	0.248	501.06	0.4	2.599	A
3 - Link Street	108.78	467.46	1760.51	0.062	108.72	0.1	2.397	A
4 - Mill Rd	95.92	538.63	829.52	0.116	95.79	0.1	5.397	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 - Colpe Rd East	528.05	186.29	1937.59	0.273	527.64	0.4	2.808	A
2 - Colpe Rd West	614.04	22.99	2021.65	0.304	613.57	0.5	2.812	A
3 - Link Street	133.22	572.42	1684.87	0.079	133.14	0.1	2.551	A
4 - Mill Rd	117.48	659.57	767.79	0.153	117.26	0.2	6.086	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	528.05	186.51	1937.44	0.273	528.05	0.4	2.809	A
2 - Colpe Rd West	614.04	23.01	2021.64	0.304	614.03	0.5	2.812	A
3 - Link Street	133.22	572.86	1684.56	0.079	133.22	0.1	2.552	A
4 - Mill Rd	117.48	660.06	767.54	0.153	117.48	0.2	6.091	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	431.15	152.51	1961.40	0.220	431.55	0.3	2.588	A
2 - Colpe Rd West	501.36	18.81	2024.60	0.248	501.82	0.4	2.600	A
3 - Link Street	108.78	468.17	1760.00	0.062	108.86	0.1	2.399	A
4 - Mill Rd	95.92	539.42	829.11	0.116	96.13	0.1	5.403	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	361.07	127.67	1978.90	0.182	361.33	0.2	2.448	A
2 - Colpe Rd West	419.87	15.75	2026.76	0.207	420.17	0.3	2.466	A
3 - Link Street	91.10	391.99	1814.90	0.050	91.15	0.1	2.298	A
4 - Mill Rd	80.33	451.65	873.91	0.092	80.46	0.1	4.991	A



2026 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	4.92	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	2026 DS	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	553.00	100.000
2 - Colpe Rd West		✓	739.00	100.000
3 - Link Street		✓	203.00	100.000
4 - Mill Rd		✓	318.00	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
1 - Colpe Rd East	0.000	432.000	66.000	55.000
2 - Colpe Rd West	368.000	0.000	219.000	152.000
3 - Link Street	38.000	163.000	0.000	2.000
4 - Mill Rd	71.000	245.000	2.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
1 - Colpe Rd East	10	10	10	10
2 - Colpe Rd West	10	10	10	10
3 - Link Street	10	10	10	10
4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.39	3.77	0.7	A
2 - Colpe Rd West	0.46	3.81	0.9	A
3 - Link Street	0.15	2.93	0.2	A
4 - Mill Rd	0.51	10.77	1.1	B

Main Results for each time segment

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 - Colpe Rd East	457.96	337.68	1830.90	0.250	456.50	0.4	2.879	A
2 - Colpe Rd West	611.99	101.53	1966.34	0.311	610.01	0.5	2.916	A
3 - Link Street	168.11	474.64	1755.33	0.096	167.65	0.1	2.494	A
4 - Mill Rd	263.35	469.76	864.66	0.305	261.44	0.5	6.565	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 - Colpe Rd East	546.85	404.71	1783.66	0.307	546.37	0.5	3.201	A
2 - Colpe Rd West	730.78	121.52	1952.25	0.374	730.14	0.7	3.238	A
3 - Link Street	200.74	568.11	1687.98	0.119	200.61	0.1	2.662	A
4 - Mill Rd	314.46	562.23	817.47	0.385	313.66	0.7	7.847	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 - Colpe Rd East	669.75	495.01	1720.02	0.389	668.90	0.7	3.763	A
2 - Colpe Rd West	895.02	148.77	1933.06	0.463	893.87	0.9	3.807	A
3 - Link Street	245.86	695.50	1596.18	0.154	245.65	0.2	2.932	A
4 - Mill Rd	385.14	688.35	753.10	0.511	383.35	1.1	10.658	B

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 - Colpe Rd East	669.75	496.52	1718.96	0.390	669.74	0.7	3.773	A
2 - Colpe Rd West	895.02	148.97	1932.92	0.463	895.00	0.9	3.814	A
3 - Link Street	245.86	696.38	1595.54	0.154	245.86	0.2	2.933	A
4 - Mill Rd	385.14	689.12	752.71	0.512	385.08	1.1	10.768	B

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	546.85	406.97	1782.07	0.307	547.69	0.5	3.212	A
2 - Colpe Rd West	730.78	121.83	1952.04	0.374	731.91	0.7	3.247	A
3 - Link Street	200.74	569.48	1686.99	0.119	200.95	0.1	2.664	A
4 - Mill Rd	314.46	563.44	816.85	0.385	316.22	0.7	7.938	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	457.96	340.29	1829.06	0.250	458.44	0.4	2.891	A
2 - Colpe Rd West	611.99	101.97	1966.02	0.311	612.64	0.5	2.929	A
3 - Link Street	168.11	476.68	1753.86	0.096	168.24	0.1	2.499	A
4 - Mill Rd	263.35	471.66	863.69	0.305	264.19	0.5	6.616	A



2026 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	3.17	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	2026 DS	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	444.00	100.000
2 - Colpe Rd West		✓	572.00	100.000
3 - Link Street		✓	148.00	100.000
4 - Mill Rd		✓	97.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	417.000	19.000	8.000
	2 - Colpe Rd West	435.000	0.000	107.000	30.000
	3 - Link Street	29.000	119.000	0.000	0.000
	4 - Mill Rd	28.000	69.000	0.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.28	2.89	0.4	A
2 - Colpe Rd West	0.34	2.99	0.6	A
3 - Link Street	0.11	2.63	0.1	A
4 - Mill Rd	0.16	6.32	0.2	A

Main Results for each time segment

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 - Colpe Rd East	367.69	155.11	1959.56	0.188	366.68	0.3	2.485	A
2 - Colpe Rd West	473.69	22.30	2022.14	0.234	472.35	0.3	2.552	A
3 - Link Street	122.56	390.60	1815.90	0.068	122.25	0.1	2.338	A
4 - Mill Rd	80.33	481.47	858.69	0.094	79.88	0.1	5.083	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 - Colpe Rd East	439.06	185.75	1937.97	0.227	438.79	0.3	2.641	A
2 - Colpe Rd West	565.64	26.68	2019.05	0.280	565.27	0.4	2.724	A
3 - Link Street	146.35	467.44	1760.53	0.083	146.27	0.1	2.452	A
4 - Mill Rd	95.92	576.16	810.36	0.118	95.79	0.1	5.542	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 - Colpe Rd East	537.74	227.43	1908.60	0.282	537.30	0.4	2.888	A
2 - Colpe Rd West	692.76	32.67	2014.83	0.344	692.17	0.6	2.992	A
3 - Link Street	179.25	572.37	1684.91	0.106	179.12	0.1	2.629	A
4 - Mill Rd	117.48	705.51	744.34	0.158	117.25	0.2	6.313	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	537.74	227.69	1908.42	0.282	537.73	0.4	2.888	A
2 - Colpe Rd West	692.76	32.70	2014.82	0.344	692.76	0.6	2.994	A
3 - Link Street	179.25	572.86	1684.56	0.106	179.25	0.1	2.630	A
4 - Mill Rd	117.48	706.08	744.05	0.158	117.48	0.2	6.319	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	439.06	186.17	1937.68	0.227	439.49	0.3	2.643	A
2 - Colpe Rd West	565.64	26.73	2019.02	0.280	566.22	0.4	2.728	A
3 - Link Street	146.35	468.22	1759.96	0.083	146.48	0.1	2.455	A
4 - Mill Rd	95.92	577.08	809.89	0.118	96.15	0.1	5.551	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	367.69	155.85	1959.04	0.188	367.97	0.3	2.488	A
2 - Colpe Rd West	473.69	22.38	2022.09	0.234	474.06	0.3	2.560	A
3 - Link Street	122.56	392.01	1814.88	0.068	122.65	0.1	2.339	A
4 - Mill Rd	80.33	483.17	857.82	0.094	80.47	0.1	5.096	A

2036 DM, 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	4.65	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)
D9	2036 DM	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	606.00	100.000
2 - Colpe Rd West		✓	883.00	100.000
3 - Link Street		✓	145.00	100.000
4 - Mill Rd		✓	237.00	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
1 - Colpe Rd East	0.000	477.000	65.000	64.000
2 - Colpe Rd West	406.000	0.000	259.000	218.000
3 - Link Street	7.000	118.000	0.000	20.000
4 - Mill Rd	74.000	144.000	19.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
1 - Colpe Rd East	10	10	10	10
2 - Colpe Rd West	10	10	10	10
3 - Link Street	10	10	10	10
4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.40	3.61	0.7	A
2 - Colpe Rd West	0.56	4.70	1.4	A
3 - Link Street	0.12	3.00	0.1	A
4 - Mill Rd	0.37	8.09	0.6	A

Main Results for each time segment

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 - Colpe Rd East	501.85	231.57	1905.68	0.263	500.29	0.4	2.815	A
2 - Colpe Rd West	731.25	122.13	1951.82	0.375	728.62	0.7	3.230	A
3 - Link Street	120.08	567.74	1688.24	0.071	119.74	0.1	2.524	A
4 - Mill Rd	196.27	438.25	880.75	0.223	195.02	0.3	5.764	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 - Colpe Rd East	599.26	277.49	1873.32	0.320	598.77	0.5	3.105	A
2 - Colpe Rd West	873.18	146.21	1934.86	0.451	872.21	0.9	3.723	A
3 - Link Street	143.39	679.61	1607.63	0.089	143.29	0.1	2.703	A
4 - Mill Rd	234.36	524.57	836.69	0.280	233.92	0.4	6.566	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 - Colpe Rd East	733.94	339.62	1829.54	0.401	733.07	0.7	3.607	A
2 - Colpe Rd West	1069.42	178.99	1911.77	0.559	1067.49	1.4	4.680	A
3 - Link Street	175.61	831.80	1497.96	0.117	175.46	0.1	2.994	A
4 - Mill Rd	287.04	642.09	776.71	0.370	286.19	0.6	8.059	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 - Colpe Rd East	733.94	340.31	1829.05	0.401	733.93	0.7	3.615	A
2 - Colpe Rd West	1069.42	179.24	1911.60	0.559	1069.39	1.4	4.701	A
3 - Link Street	175.61	833.23	1496.93	0.117	175.61	0.1	2.996	A
4 - Mill Rd	287.04	643.09	776.20	0.370	287.02	0.6	8.095	A

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	599.26	278.57	1872.56	0.320	600.12	0.5	3.115	A
2 - Colpe Rd West	873.18	146.60	1934.59	0.451	875.09	0.9	3.746	A
3 - Link Street	143.39	681.79	1606.06	0.089	143.54	0.1	2.709	A
4 - Mill Rd	234.36	526.10	835.91	0.280	235.20	0.4	6.600	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	501.85	233.10	1904.60	0.263	502.35	0.4	2.826	A
2 - Colpe Rd West	731.25	122.71	1951.42	0.375	732.24	0.7	3.249	A
3 - Link Street	120.08	570.51	1686.25	0.071	120.17	0.1	2.528	A
4 - Mill Rd	196.27	440.28	879.71	0.223	196.73	0.3	5.803	A

2036 DM, 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	3.20	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)
D10	2036 DM	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	483.00	100.000
2 - Colpe Rd West		✓	650.00	100.000
3 - Link Street		✓	160.00	100.000
4 - Mill Rd		✓	56.00	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	461.000	13.000	9.000
	2 - Colpe Rd West	481.000	0.000	96.000	73.000
	3 - Link Street	12.000	143.000	0.000	5.000
	4 - Mill Rd	29.000	24.000	3.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.30	2.96	0.5	A
2 - Colpe Rd West	0.39	3.22	0.7	A
3 - Link Street	0.12	2.80	0.2	A
4 - Mill Rd	0.10	6.15	0.1	A

Main Results for each time segment

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 - Colpe Rd East	399.99	140.34	1969.98	0.203	398.87	0.3	2.519	A
2 - Colpe Rd West	538.29	20.64	2023.31	0.266	536.70	0.4	2.661	A
3 - Link Street	132.50	464.87	1762.38	0.075	132.15	0.1	2.429	A
4 - Mill Rd	46.38	525.17	836.38	0.055	46.12	0.1	5.010	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 - Colpe Rd East	477.63	167.99	1950.49	0.245	477.32	0.4	2.688	A
2 - Colpe Rd West	642.77	24.70	2020.45	0.318	642.32	0.5	2.873	A
3 - Link Street	158.22	556.34	1696.46	0.093	158.13	0.1	2.573	A
4 - Mill Rd	55.38	628.50	783.65	0.071	55.30	0.1	5.436	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 - Colpe Rd East	584.97	205.69	1923.92	0.304	584.48	0.5	2.956	A
2 - Colpe Rd West	787.23	30.25	2016.54	0.390	786.47	0.7	3.218	A
3 - Link Street	193.78	681.21	1606.48	0.121	193.63	0.2	2.802	A
4 - Mill Rd	67.82	769.57	711.65	0.095	67.70	0.1	6.147	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	584.97	205.89	1923.78	0.304	584.97	0.5	2.957	A
2 - Colpe Rd West	787.23	30.28	2016.52	0.390	787.22	0.7	3.220	A
3 - Link Street	193.78	681.86	1606.01	0.121	193.78	0.2	2.803	A
4 - Mill Rd	67.82	770.27	711.30	0.095	67.82	0.1	6.153	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	477.63	168.30	1950.27	0.245	478.11	0.4	2.690	A
2 - Colpe Rd West	642.77	24.75	2020.41	0.318	643.52	0.5	2.876	A
3 - Link Street	158.22	557.38	1695.71	0.093	158.37	0.1	2.575	A
4 - Mill Rd	55.38	629.62	783.07	0.071	55.50	0.1	5.445	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	399.99	140.91	1969.58	0.203	400.30	0.3	2.523	A
2 - Colpe Rd West	538.29	20.72	2023.25	0.266	538.75	0.4	2.667	A
3 - Link Street	132.50	466.64	1761.10	0.075	132.60	0.1	2.431	A
4 - Mill Rd	46.38	527.13	835.38	0.056	46.45	0.1	5.021	A

2036 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	4.79	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)
D11	2036 DS	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	609.00	100.000
2 - Colpe Rd West		✓	903.00	100.000
3 - Link Street		✓	191.00	100.000
4 - Mill Rd		✓	237.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	477.000	68.000	64.000
	2 - Colpe Rd West	406.000	0.000	279.000	218.000
	3 - Link Street	13.000	158.000	0.000	20.000
	4 - Mill Rd	74.000	144.000	19.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.41	3.74	0.8	A
2 - Colpe Rd West	0.57	4.86	1.5	A
3 - Link Street	0.15	3.13	0.2	A
4 - Mill Rd	0.38	8.59	0.7	A

Main Results for each time segment

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 - Colpe Rd East	504.34	264.57	1882.42	0.268	502.73	0.4	2.868	A
2 - Colpe Rd West	747.81	124.60	1950.09	0.383	745.09	0.7	3.280	A
3 - Link Street	158.17	567.71	1688.27	0.094	157.72	0.1	2.587	A
4 - Mill Rd	196.27	476.21	861.37	0.228	194.98	0.3	5.932	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 - Colpe Rd East	602.23	317.00	1845.48	0.326	601.71	0.5	3.181	A
2 - Colpe Rd West	892.96	149.17	1932.78	0.462	891.93	0.9	3.801	A
3 - Link Street	188.88	679.58	1607.65	0.117	188.75	0.1	2.790	A
4 - Mill Rd	234.36	570.00	813.50	0.288	233.89	0.4	6.826	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 - Colpe Rd East	737.57	387.95	1795.47	0.411	736.65	0.8	3.736	A
2 - Colpe Rd West	1093.64	182.60	1909.23	0.573	1091.57	1.5	4.830	A
3 - Link Street	231.32	831.72	1498.02	0.154	231.11	0.2	3.125	A
4 - Mill Rd	287.04	697.69	748.34	0.384	286.10	0.7	8.550	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 - Colpe Rd East	737.57	388.75	1794.91	0.411	737.56	0.8	3.744	A
2 - Colpe Rd West	1093.64	182.88	1909.04	0.573	1093.61	1.5	4.856	A
3 - Link Street	231.32	833.23	1496.93	0.155	231.32	0.2	3.128	A
4 - Mill Rd	287.04	698.80	747.77	0.384	287.01	0.7	8.594	A

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	602.23	318.24	1844.60	0.326	603.14	0.5	3.191	A
2 - Colpe Rd West	892.96	149.59	1932.48	0.462	895.01	1.0	3.823	A
3 - Link Street	188.88	681.86	1606.01	0.118	189.09	0.1	2.794	A
4 - Mill Rd	234.36	571.70	812.64	0.288	235.28	0.5	6.871	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	504.34	266.28	1881.22	0.268	504.86	0.4	2.879	A
2 - Colpe Rd West	747.81	125.20	1949.66	0.384	748.86	0.7	3.302	A
3 - Link Street	158.17	570.54	1686.23	0.094	158.31	0.1	2.593	A
4 - Mill Rd	196.27	478.43	860.24	0.228	196.76	0.3	5.974	A



2036 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	3.32	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)
D12	2036 DS	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	490.00	100.000
2 - Colpe Rd West		✓	701.00	100.000
3 - Link Street		✓	191.00	100.000
4 - Mill Rd		✓	56.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	461.000	20.000	9.000
	2 - Colpe Rd West	481.000	0.000	147.000	73.000
	3 - Link Street	16.000	170.000	0.000	5.000
	4 - Mill Rd	29.000	24.000	3.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.31	3.03	0.5	A
2 - Colpe Rd West	0.42	3.41	0.8	A
3 - Link Street	0.14	2.88	0.2	A
4 - Mill Rd	0.10	6.34	0.1	A

Main Results for each time segment

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 - Colpe Rd East	405.79	162.63	1954.27	0.208	404.64	0.3	2.554	A
2 - Colpe Rd West	580.52	26.42	2019.24	0.288	578.76	0.4	2.745	A
3 - Link Street	158.17	464.82	1762.41	0.090	157.74	0.1	2.468	A
4 - Mill Rd	46.38	550.73	823.34	0.056	46.11	0.1	5.094	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 - Colpe Rd East	484.55	194.67	1931.69	0.251	484.23	0.4	2.735	A
2 - Colpe Rd West	693.20	31.62	2015.58	0.344	692.68	0.6	2.991	A
3 - Link Street	188.88	556.32	1696.48	0.111	188.76	0.1	2.626	A
4 - Mill Rd	55.38	659.11	768.03	0.072	55.30	0.1	5.556	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 - Colpe Rd East	593.45	238.36	1900.90	0.312	592.93	0.5	3.025	A
2 - Colpe Rd West	849.00	38.72	2010.58	0.422	848.10	0.8	3.401	A
3 - Link Street	231.32	681.14	1606.53	0.144	231.14	0.2	2.878	A
4 - Mill Rd	67.82	807.02	692.54	0.098	67.69	0.1	6.335	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	593.45	238.59	1900.74	0.312	593.45	0.5	3.028	A
2 - Colpe Rd West	849.00	38.76	2010.55	0.422	848.99	0.8	3.408	A
3 - Link Street	231.32	681.85	1606.01	0.144	231.32	0.2	2.880	A
4 - Mill Rd	67.82	807.81	692.14	0.098	67.82	0.1	6.342	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	484.55	195.04	1931.43	0.251	485.06	0.4	2.740	A
2 - Colpe Rd West	693.20	31.68	2015.53	0.344	694.09	0.6	3.000	A
3 - Link Street	188.88	557.45	1695.66	0.111	189.06	0.1	2.630	A
4 - Mill Rd	55.38	660.37	767.38	0.072	55.51	0.1	5.563	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	405.79	163.29	1953.80	0.208	406.11	0.3	2.560	A
2 - Colpe Rd West	580.52	26.52	2019.17	0.288	581.06	0.4	2.754	A
3 - Link Street	158.17	466.67	1761.08	0.090	158.29	0.1	2.472	A
4 - Mill Rd	46.38	552.85	822.26	0.056	46.46	0.1	5.104	A



Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2019
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Filename: Colpe Rd Mill Rd -SHD Option B.j9

Path: G:\2017\p170092\SHD - HOUSING\calcs\arcady\SHD

Report generation date: 02/10/2019 12:55:00

-
- »2021 DM, AM
 - »2021 DM, PM
 - »2021 DS, AM
 - »2021 DS, PM
 - »2026 DM, AM
 - »2026 DM, PM
 - »2026 DS, AM
 - »2026 DS, PM
 - »2036 DM, AM
 - »2036 DM, PM
 - »2036 DS, AM
 - »2036 DS, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2021 DM								
1 - Colpe Rd East	0.6	3.38	0.34	A	0.4	2.68	0.24	A
2 - Colpe Rd West	0.9	3.75	0.44	A	0.4	2.71	0.28	A
3 - Link Street	0.1	2.79	0.06	A	0.1	2.62	0.10	A
4 - Mill Rd	1.1	9.25	0.51	A	0.2	5.66	0.14	A
2021 DS								
1 - Colpe Rd East	0.6	3.49	0.35	A	0.4	2.76	0.25	A
2 - Colpe Rd West	0.9	3.89	0.46	A	0.5	2.82	0.30	A
3 - Link Street	0.1	2.92	0.11	A	0.2	2.69	0.13	A
4 - Mill Rd	1.3	10.11	0.54	B	0.2	6.01	0.18	A
2026 DM								
1 - Colpe Rd East	0.6	3.41	0.36	A	0.4	2.76	0.26	A
2 - Colpe Rd West	0.9	3.80	0.46	A	0.5	2.79	0.30	A
3 - Link Street	0.1	2.88	0.07	A	0.1	2.67	0.10	A
4 - Mill Rd	0.9	8.70	0.46	A	0.2	5.86	0.15	A
2026 DS								
1 - Colpe Rd East	0.7	3.66	0.38	A	0.4	2.97	0.29	A
2 - Colpe Rd West	1.0	4.04	0.48	A	0.6	3.14	0.35	A
3 - Link Street	0.2	2.96	0.15	A	0.2	2.86	0.16	A
4 - Mill Rd	1.2	10.36	0.53	B	0.4	6.91	0.25	A
2036 DM								
1 - Colpe Rd East	0.8	3.84	0.41	A	0.4	2.86	0.29	A
2 - Colpe Rd West	1.2	4.36	0.51	A	0.5	2.91	0.33	A
3 - Link Street	0.1	3.02	0.07	A	0.1	2.75	0.11	A
4 - Mill Rd	1.7	12.08	0.60	B	0.2	6.19	0.17	A
2036 DS								
1 - Colpe Rd East	0.8	4.15	0.43	A	0.5	3.09	0.31	A
2 - Colpe Rd West	1.3	4.65	0.54	A	0.8	3.48	0.42	A
3 - Link Street	0.2	3.39	0.17	A	0.2	2.95	0.17	A
4 - Mill Rd	2.2	15.23	0.67	C	0.4	7.38	0.27	A

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

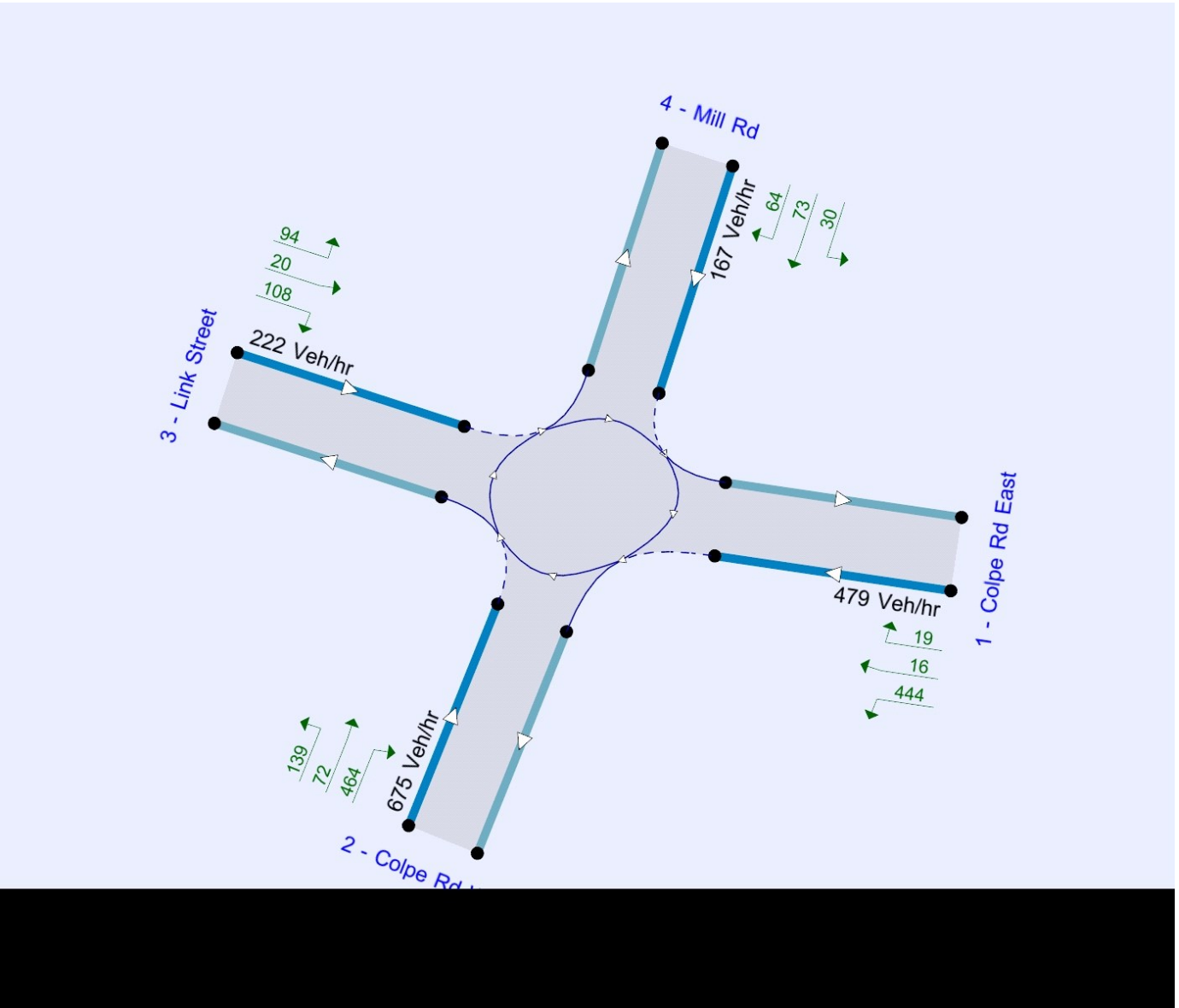
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	16/01/2018
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	Veh	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)
2021 DM	AM	ONE HOUR	08:30	10:00	15
2021 DM	PM	ONE HOUR	17:45	19:15	15
2021 DS	AM	ONE HOUR	08:30	10:00	15
2021 DS	PM	ONE HOUR	17:45	19:15	15
2026 DM	AM	ONE HOUR	08:30	10:00	15
2026 DM	PM	ONE HOUR	17:45	19:15	15
2026 DS	AM	ONE HOUR	08:30	10:00	15
2026 DS	PM	ONE HOUR	17:45	19:15	15
2036 DM	AM	ONE HOUR	08:30	10:00	15
2036 DM	PM	ONE HOUR	17:45	19:15	15
2036 DS	AM	ONE HOUR	08:30	10:00	15
2036 DS	PM	ONE HOUR	17:45	19:15	15

2021 DM, 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	4.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Colpe Rd East	
2	Colpe Rd West	
3	Link Street	
4	Mill Rd	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1 - Colpe Rd East	0.00	99999.00
2 - Colpe Rd West	0.00	99999.00
3 - Link Street	0.00	99999.00
4 - Mill Rd	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Colpe Rd East	6.63	7.27	16.1	15.0	38.0	40.1	
2 - Colpe Rd West	6.90	6.95	9.8	17.1	38.0	36.9	
3 - Link Street	7.00	7.05	9.2	15.0	38.0	30.5	
4 - Mill Rd	3.80	3.85	9.1	17.1	38.0	42.9	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Colpe Rd East	0.705	2068.881
2 - Colpe Rd West	0.704	2037.848
3 - Link Street	0.721	2097.371
4 - Mill Rd	0.510	1104.409

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	2021 DM	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	499.00	100.000
2 - Colpe Rd West		✓	685.00	100.000
3 - Link Street		✓	81.00	100.000
4 - Mill Rd		✓	361.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	391.000	19.000	89.000
	2 - Colpe Rd West	333.000	0.000	107.000	245.000
	3 - Link Street	7.000	47.000	0.000	27.000
	4 - Mill Rd	65.000	224.000	72.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.34	3.38	0.6	A
2 - Colpe Rd West	0.44	3.75	0.9	A
3 - Link Street	0.06	2.79	0.1	A
4 - Mill Rd	0.51	9.25	1.1	A

Main Results for each time segment

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 - Colpe Rd East	413.24	282.28	1869.94	0.221	412.00	0.3	2.713	A
2 - Colpe Rd West	567.27	148.39	1933.33	0.293	565.46	0.5	2.891	A
3 - Link Street	67.08	550.61	1700.59	0.039	66.90	0.0	2.423	A
4 - Mill Rd	298.96	319.48	941.36	0.318	296.93	0.5	6.127	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 - Colpe Rd East	493.45	338.52	1830.31	0.270	493.08	0.4	2.961	A
2 - Colpe Rd West	677.38	177.76	1912.64	0.354	676.80	0.6	3.202	A
3 - Link Street	80.10	659.02	1622.46	0.049	80.05	0.1	2.566	A
4 - Mill Rd	356.98	382.38	909.26	0.393	356.20	0.7	7.149	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 - Colpe Rd East	604.35	414.06	1777.07	0.340	603.71	0.6	3.373	A
2 - Colpe Rd West	829.62	217.55	1884.62	0.440	828.58	0.9	3.746	A
3 - Link Street	98.10	806.83	1515.95	0.065	98.03	0.1	2.792	A
4 - Mill Rd	437.22	468.15	865.48	0.505	435.62	1.1	9.177	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 - Colpe Rd East	604.35	415.38	1776.14	0.340	604.34	0.6	3.378	A
2 - Colpe Rd West	829.62	217.99	1884.31	0.440	829.61	0.9	3.753	A
3 - Link Street	98.10	807.81	1515.25	0.065	98.10	0.1	2.793	A
4 - Mill Rd	437.22	468.70	865.20	0.505	437.17	1.1	9.248	A

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	493.45	340.51	1828.90	0.270	494.08	0.4	2.967	A
2 - Colpe Rd West	677.38	178.45	1912.16	0.354	678.40	0.6	3.211	A
3 - Link Street	80.10	660.56	1621.36	0.049	80.17	0.1	2.569	A
4 - Mill Rd	356.98	383.24	908.82	0.393	358.55	0.7	7.218	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	413.24	284.75	1868.21	0.221	413.62	0.3	2.724	A
2 - Colpe Rd West	567.27	149.31	1932.68	0.294	567.86	0.5	2.902	A
3 - Link Street	67.08	552.93	1698.92	0.039	67.13	0.0	2.428	A
4 - Mill Rd	298.96	320.81	940.68	0.318	299.77	0.5	6.188	A

2021 DM, 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	2.94	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)
D2	2021 DM	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	395.00	100.000
2 - Colpe Rd West		✓	462.00	100.000
3 - Link Street		✓	142.00	100.000
4 - Mill Rd		✓	93.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	377.000	1.000	17.000
	2 - Colpe Rd West	394.000	0.000	6.000	62.000
	3 - Link Street	12.000	67.000	0.000	63.000
	4 - Mill Rd	26.000	64.000	3.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.24	2.68	0.4	A
2 - Colpe Rd West	0.28	2.71	0.4	A
3 - Link Street	0.10	2.62	0.1	A
4 - Mill Rd	0.14	5.66	0.2	A

Main Results for each time segment

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 - Colpe Rd East	327.11	110.53	1990.98	0.164	326.25	0.2	2.377	A
2 - Colpe Rd West	382.60	17.34	2025.64	0.189	381.58	0.3	2.407	A
3 - Link Street	117.60	390.66	1815.85	0.065	117.29	0.1	2.331	A
4 - Mill Rd	77.02	390.67	905.03	0.085	76.61	0.1	4.778	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 - Colpe Rd East	390.61	132.39	1975.58	0.198	390.39	0.3	2.497	A
2 - Colpe Rd West	456.86	20.75	2023.23	0.226	456.60	0.3	2.527	A
3 - Link Street	140.42	467.48	1760.50	0.080	140.34	0.1	2.443	A
4 - Mill Rd	91.97	467.48	865.83	0.106	91.85	0.1	5.116	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 - Colpe Rd East	478.39	162.10	1954.64	0.245	478.05	0.4	2.681	A
2 - Colpe Rd West	559.54	25.41	2019.95	0.277	559.14	0.4	2.711	A
3 - Link Street	171.98	572.45	1684.85	0.102	171.86	0.1	2.617	A
4 - Mill Rd	112.63	572.45	812.25	0.139	112.45	0.2	5.657	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	478.39	162.29	1954.51	0.245	478.39	0.4	2.682	A
2 - Colpe Rd West	559.54	25.43	2019.93	0.277	559.54	0.4	2.711	A
3 - Link Street	171.98	572.86	1684.56	0.102	171.98	0.1	2.617	A
4 - Mill Rd	112.63	572.86	812.05	0.139	112.63	0.2	5.661	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	390.61	132.69	1975.36	0.198	390.94	0.3	2.501	A
2 - Colpe Rd West	456.86	20.79	2023.21	0.226	457.26	0.3	2.528	A
3 - Link Street	140.42	468.14	1760.02	0.080	140.54	0.1	2.444	A
4 - Mill Rd	91.97	468.14	865.49	0.106	92.15	0.1	5.123	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	327.11	111.09	1990.59	0.164	327.33	0.2	2.380	A
2 - Colpe Rd West	382.60	17.40	2025.59	0.189	382.86	0.3	2.412	A
3 - Link Street	117.60	391.98	1814.91	0.065	117.67	0.1	2.334	A
4 - Mill Rd	77.02	391.97	904.36	0.085	77.13	0.1	4.789	A

2021 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	5.06	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	2021 DS	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	502.00	100.000
2 - Colpe Rd West		✓	703.00	100.000
3 - Link Street		✓	132.00	100.000
4 - Mill Rd		✓	376.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	391.000	22.000	89.000
	2 - Colpe Rd West	333.000	0.000	125.000	245.000
	3 - Link Street	12.000	72.000	0.000	48.000
	4 - Mill Rd	65.000	224.000	87.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.35	3.49	0.6	A
2 - Colpe Rd West	0.46	3.89	0.9	A
3 - Link Street	0.11	2.92	0.1	A
4 - Mill Rd	0.54	10.11	1.3	B

Main Results for each time segment

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 - Colpe Rd East	415.73	315.20	1846.75	0.225	414.45	0.3	2.762	A
2 - Colpe Rd West	582.18	163.18	1922.91	0.303	580.28	0.5	2.946	A
3 - Link Street	109.31	550.58	1700.61	0.064	109.01	0.1	2.488	A
4 - Mill Rd	311.38	344.24	928.72	0.335	309.18	0.5	6.371	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 - Colpe Rd East	496.42	377.96	1802.52	0.275	496.02	0.4	3.031	A
2 - Colpe Rd West	695.18	195.50	1900.14	0.366	694.56	0.6	3.283	A
3 - Link Street	130.53	659.00	1622.48	0.080	130.45	0.1	2.653	A
4 - Mill Rd	371.82	412.01	894.13	0.416	370.92	0.8	7.556	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 - Colpe Rd East	607.98	462.21	1743.14	0.349	607.31	0.6	3.484	A
2 - Colpe Rd West	851.42	239.21	1869.36	0.455	850.29	0.9	3.882	A
3 - Link Street	159.87	806.77	1515.99	0.105	159.74	0.1	2.919	A
4 - Mill Rd	455.38	504.42	846.97	0.538	453.47	1.3	10.013	B

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 - Colpe Rd East	607.98	463.81	1742.01	0.349	607.97	0.6	3.491	A
2 - Colpe Rd West	851.42	239.79	1868.95	0.456	851.40	0.9	3.891	A
3 - Link Street	159.87	807.80	1515.25	0.106	159.87	0.1	2.921	A
4 - Mill Rd	455.38	505.03	846.66	0.538	455.32	1.3	10.114	B

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	496.42	380.37	1800.82	0.276	497.09	0.4	3.038	A
2 - Colpe Rd West	695.18	196.38	1899.53	0.366	696.29	0.6	3.295	A
3 - Link Street	130.53	660.61	1621.32	0.081	130.66	0.1	2.658	A
4 - Mill Rd	371.82	412.97	893.64	0.416	373.70	0.8	7.642	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	415.73	317.99	1844.77	0.225	416.12	0.3	2.774	A
2 - Colpe Rd West	582.18	164.28	1922.14	0.303	582.81	0.5	2.959	A
3 - Link Street	109.31	552.96	1698.90	0.064	109.40	0.1	2.491	A
4 - Mill Rd	311.38	345.69	927.98	0.336	312.31	0.6	6.441	A

2021 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	3.09	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	2021 DS	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	400.00	100.000
2 - Colpe Rd West		✓	490.00	100.000
3 - Link Street		✓	176.00	100.000
4 - Mill Rd		✓	116.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	377.000	6.000	17.000
	2 - Colpe Rd West	394.000	0.000	34.000	62.000
	3 - Link Street	15.000	84.000	0.000	77.000
	4 - Mill Rd	26.000	64.000	26.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.25	2.76	0.4	A
2 - Colpe Rd West	0.30	2.82	0.5	A
3 - Link Street	0.13	2.69	0.2	A
4 - Mill Rd	0.18	6.01	0.2	A

Main Results for each time segment

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 - Colpe Rd East	331.26	143.51	1967.74	0.168	330.37	0.2	2.417	A
2 - Colpe Rd West	405.79	40.41	2009.38	0.202	404.68	0.3	2.467	A
3 - Link Street	145.75	390.64	1815.87	0.080	145.37	0.1	2.370	A
4 - Mill Rd	96.06	407.16	896.61	0.107	95.54	0.1	4.940	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 - Colpe Rd East	395.55	171.90	1947.73	0.203	395.32	0.3	2.550	A
2 - Colpe Rd West	484.55	48.41	2003.75	0.242	484.26	0.3	2.606	A
3 - Link Street	174.04	467.46	1760.51	0.099	173.94	0.1	2.495	A
4 - Mill Rd	114.71	487.23	855.75	0.134	114.56	0.2	5.341	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 - Colpe Rd East	484.45	210.47	1920.56	0.252	484.09	0.4	2.756	A
2 - Colpe Rd West	593.45	59.27	1996.10	0.297	592.99	0.5	2.822	A
3 - Link Street	213.16	572.42	1684.87	0.127	213.00	0.2	2.690	A
4 - Mill Rd	140.49	596.63	799.91	0.176	140.24	0.2	6.003	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	484.45	210.73	1920.37	0.252	484.45	0.4	2.757	A
2 - Colpe Rd West	593.45	59.34	1996.05	0.297	593.45	0.5	2.822	A
3 - Link Street	213.16	572.86	1684.56	0.127	213.16	0.2	2.690	A
4 - Mill Rd	140.49	597.08	799.68	0.176	140.49	0.2	6.006	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	395.55	172.33	1947.43	0.203	395.91	0.3	2.552	A
2 - Colpe Rd West	484.55	48.53	2003.66	0.242	485.00	0.4	2.609	A
3 - Link Street	174.04	468.17	1760.00	0.099	174.19	0.1	2.496	A
4 - Mill Rd	114.71	487.96	855.37	0.134	114.96	0.2	5.349	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	331.26	144.26	1967.21	0.168	331.49	0.2	2.420	A
2 - Colpe Rd West	405.79	40.63	2009.23	0.202	406.08	0.3	2.472	A
3 - Link Street	145.75	391.99	1814.89	0.080	145.85	0.1	2.372	A
4 - Mill Rd	96.06	408.56	895.90	0.107	96.22	0.1	4.954	A

2026 DM, 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	4.58	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	2026 DM	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	536.00	100.000
2 - Colpe Rd West		✓	730.00	100.000
3 - Link Street		✓	83.00	100.000
4 - Mill Rd		✓	325.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	421.000	20.000	95.000
	2 - Colpe Rd West	358.000	0.000	110.000	262.000
	3 - Link Street	7.000	49.000	0.000	27.000
	4 - Mill Rd	69.000	239.000	17.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.36	3.41	0.6	A
2 - Colpe Rd West	0.46	3.80	0.9	A
3 - Link Street	0.07	2.88	0.1	A
4 - Mill Rd	0.46	8.70	0.9	A

Main Results for each time segment

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 - Colpe Rd East	443.88	251.07	1891.94	0.235	442.54	0.3	2.729	A
2 - Colpe Rd West	604.54	108.93	1961.12	0.308	602.59	0.5	2.911	A
3 - Link Street	68.74	590.22	1672.04	0.041	68.55	0.0	2.469	A
4 - Mill Rd	269.14	341.76	929.99	0.289	267.37	0.4	5.961	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 - Colpe Rd East	530.04	301.06	1856.71	0.285	529.63	0.4	2.984	A
2 - Colpe Rd West	721.88	130.41	1945.99	0.371	721.25	0.6	3.231	A
3 - Link Street	82.08	706.44	1588.29	0.052	82.03	0.1	2.628	A
4 - Mill Rd	321.39	409.05	895.65	0.359	320.73	0.6	6.882	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 - Colpe Rd East	649.16	368.32	1809.31	0.359	648.46	0.6	3.409	A
2 - Colpe Rd West	884.12	159.65	1925.40	0.459	882.99	0.9	3.796	A
3 - Link Street	100.52	864.87	1474.13	0.068	100.44	0.1	2.882	A
4 - Mill Rd	393.61	500.80	848.82	0.464	392.31	0.9	8.649	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 - Colpe Rd East	649.16	369.37	1808.57	0.359	649.15	0.6	3.414	A
2 - Colpe Rd West	884.12	159.86	1925.25	0.459	884.11	0.9	3.802	A
3 - Link Street	100.52	865.94	1473.36	0.068	100.52	0.1	2.883	A
4 - Mill Rd	393.61	501.40	848.52	0.464	393.58	0.9	8.703	A

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	530.04	302.66	1855.58	0.286	530.73	0.4	2.989	A
2 - Colpe Rd West	721.88	130.75	1945.76	0.371	722.99	0.7	3.243	A
3 - Link Street	82.08	708.11	1587.09	0.052	82.16	0.1	2.633	A
4 - Mill Rd	321.39	410.00	895.16	0.359	322.66	0.6	6.934	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	443.88	253.15	1890.47	0.235	444.29	0.3	2.738	A
2 - Colpe Rd West	604.54	109.44	1960.76	0.308	605.18	0.5	2.922	A
3 - Link Street	68.74	592.73	1670.23	0.041	68.79	0.0	2.474	A
4 - Mill Rd	269.14	343.20	929.26	0.290	269.83	0.5	6.010	A

2026 DM, 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	3.02	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	2026 DM	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	425.00	100.000
2 - Colpe Rd West		✓	497.00	100.000
3 - Link Street		✓	143.00	100.000
4 - Mill Rd		✓	97.00	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	406.000	1.000	18.000
	2 - Colpe Rd West	424.000	0.000	7.000	66.000
	3 - Link Street	12.000	68.000	0.000	63.000
	4 - Mill Rd	27.000	67.000	3.000	0.000

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.26	2.76	0.4	A
2 - Colpe Rd West	0.30	2.79	0.5	A
3 - Link Street	0.10	2.67	0.1	A
4 - Mill Rd	0.15	5.86	0.2	A

Main Results for each time segment

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 - Colpe Rd East	351.96	113.82	1988.66	0.177	351.02	0.2	2.417	A
2 - Colpe Rd West	411.58	18.16	2025.05	0.203	410.47	0.3	2.451	A
3 - Link Street	118.42	419.55	1795.03	0.066	118.11	0.1	2.361	A
4 - Mill Rd	80.33	416.25	891.97	0.090	79.90	0.1	4.874	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 - Colpe Rd East	420.27	136.34	1972.80	0.213	420.03	0.3	2.550	A
2 - Colpe Rd West	491.47	21.74	2022.53	0.243	491.18	0.4	2.585	A
3 - Link Street	141.41	502.05	1735.58	0.081	141.33	0.1	2.483	A
4 - Mill Rd	95.92	498.10	850.20	0.113	95.80	0.1	5.249	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 - Colpe Rd East	514.73	166.93	1951.24	0.264	514.34	0.4	2.756	A
2 - Colpe Rd West	601.93	26.62	2019.10	0.298	601.47	0.5	2.793	A
3 - Link Street	173.19	614.79	1654.34	0.105	173.07	0.1	2.673	A
4 - Mill Rd	117.48	609.95	793.12	0.148	117.28	0.2	5.858	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	514.73	167.13	1951.09	0.264	514.72	0.4	2.756	A
2 - Colpe Rd West	601.93	26.64	2019.08	0.298	601.92	0.5	2.793	A
3 - Link Street	173.19	615.25	1654.01	0.105	173.19	0.1	2.673	A
4 - Mill Rd	117.48	610.40	792.88	0.148	117.48	0.2	5.862	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	420.27	136.67	1972.57	0.213	420.65	0.3	2.551	A
2 - Colpe Rd West	491.47	21.78	2022.51	0.243	491.92	0.4	2.587	A
3 - Link Street	141.41	502.81	1735.04	0.082	141.53	0.1	2.486	A
4 - Mill Rd	95.92	498.84	849.82	0.113	96.12	0.1	5.254	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	351.96	114.41	1988.25	0.177	352.20	0.2	2.422	A
2 - Colpe Rd West	411.58	18.23	2025.00	0.203	411.88	0.3	2.454	A
3 - Link Street	118.42	420.99	1794.00	0.066	118.50	0.1	2.363	A
4 - Mill Rd	80.33	417.67	891.24	0.090	80.45	0.1	4.886	A

2026 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	5.00	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	2026 DS	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	542.00	100.000
2 - Colpe Rd West		✓	759.00	100.000
3 - Link Street		✓	202.00	100.000
4 - Mill Rd		✓	349.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	421.000	26.000	95.000
	2 - Colpe Rd West	358.000	0.000	262.000	139.000
	3 - Link Street	19.000	108.000	0.000	75.000
	4 - Mill Rd	69.000	239.000	41.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.38	3.66	0.7	A
2 - Colpe Rd West	0.48	4.04	1.0	A
3 - Link Street	0.15	2.96	0.2	A
4 - Mill Rd	0.53	10.36	1.2	B

Main Results for each time segment

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 - Colpe Rd East	448.85	319.42	1843.77	0.243	447.44	0.4	2.833	A
2 - Colpe Rd West	628.56	133.60	1943.75	0.323	626.46	0.5	3.000	A
3 - Link Street	167.28	488.64	1745.25	0.096	166.82	0.1	2.509	A
4 - Mill Rd	289.02	400.37	900.08	0.321	286.96	0.5	6.439	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 - Colpe Rd East	535.97	382.93	1799.01	0.298	535.52	0.5	3.134	A
2 - Colpe Rd West	750.56	160.00	1925.15	0.390	749.86	0.7	3.367	A
3 - Link Street	199.75	584.88	1675.90	0.119	199.62	0.1	2.682	A
4 - Mill Rd	345.12	479.19	859.85	0.401	344.27	0.7	7.667	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 - Colpe Rd East	656.43	468.32	1738.83	0.378	655.64	0.7	3.654	A
2 - Colpe Rd West	919.24	195.81	1899.93	0.484	917.95	1.0	4.028	A
3 - Link Street	244.65	716.00	1581.41	0.155	244.44	0.2	2.961	A
4 - Mill Rd	422.68	586.65	805.01	0.525	420.84	1.2	10.258	B

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 - Colpe Rd East	656.43	469.87	1737.74	0.378	656.42	0.7	3.661	A
2 - Colpe Rd West	919.24	196.19	1899.66	0.484	919.22	1.0	4.038	A
3 - Link Street	244.65	716.97	1580.71	0.155	244.64	0.2	2.963	A
4 - Mill Rd	422.68	587.38	804.63	0.525	422.62	1.2	10.363	B

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	535.97	385.25	1797.37	0.298	536.75	0.5	3.142	A
2 - Colpe Rd West	750.56	160.59	1924.74	0.390	751.84	0.7	3.379	A
3 - Link Street	199.75	586.39	1674.81	0.119	199.96	0.1	2.686	A
4 - Mill Rd	345.12	480.34	859.26	0.402	346.93	0.7	7.757	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	448.85	322.10	1841.88	0.244	449.31	0.4	2.843	A
2 - Colpe Rd West	628.56	134.36	1943.21	0.323	629.27	0.5	3.017	A
3 - Link Street	167.28	490.81	1743.69	0.096	167.41	0.1	2.511	A
4 - Mill Rd	289.02	402.07	899.21	0.321	289.91	0.5	6.510	A



2026 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	3.46	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	2026 DS	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	440.00	100.000
2 - Colpe Rd West		✓	572.00	100.000
3 - Link Street		✓	222.00	100.000
4 - Mill Rd		✓	157.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	406.000	16.000	18.000
	2 - Colpe Rd West	424.000	0.000	82.000	66.000
	3 - Link Street	20.000	108.000	0.000	94.000
	4 - Mill Rd	27.000	67.000	63.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.29	2.97	0.4	A
2 - Colpe Rd West	0.35	3.14	0.6	A
3 - Link Street	0.16	2.86	0.2	A
4 - Mill Rd	0.25	6.91	0.4	A

Main Results for each time segment

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 - Colpe Rd East	364.38	196.22	1930.60	0.189	363.36	0.3	2.525	A
2 - Colpe Rd West	473.69	79.94	1981.54	0.239	472.32	0.3	2.621	A
3 - Link Street	183.85	419.47	1795.09	0.102	183.35	0.1	2.457	A
4 - Mill Rd	130.02	455.82	871.78	0.149	129.25	0.2	5.327	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 - Colpe Rd East	435.11	235.08	1903.20	0.229	434.83	0.3	2.696	A
2 - Colpe Rd West	565.64	95.80	1970.37	0.287	565.25	0.4	2.818	A
3 - Link Street	219.53	502.01	1735.61	0.126	219.40	0.2	2.611	A
4 - Mill Rd	155.25	545.50	826.01	0.188	155.01	0.3	5.900	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 - Colpe Rd East	532.89	287.78	1866.07	0.286	532.44	0.4	2.969	A
2 - Colpe Rd West	692.76	117.27	1955.25	0.354	692.12	0.6	3.133	A
3 - Link Street	268.87	614.69	1654.42	0.163	268.65	0.2	2.857	A
4 - Mill Rd	190.15	667.94	763.52	0.249	189.71	0.4	6.897	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	532.89	288.24	1865.74	0.286	532.89	0.4	2.970	A
2 - Colpe Rd West	692.76	117.48	1955.10	0.354	692.76	0.6	3.136	A
3 - Link Street	268.87	615.24	1654.01	0.163	268.87	0.2	2.858	A
4 - Mill Rd	190.15	668.53	763.22	0.249	190.14	0.4	6.909	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	435.11	235.81	1902.69	0.229	435.55	0.3	2.699	A
2 - Colpe Rd West	565.64	96.13	1970.14	0.287	566.27	0.4	2.823	A
3 - Link Street	219.53	502.91	1734.97	0.127	219.74	0.2	2.615	A
4 - Mill Rd	155.25	546.45	825.52	0.188	155.68	0.3	5.914	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	364.38	197.37	1929.78	0.189	364.66	0.3	2.530	A
2 - Colpe Rd West	473.69	80.45	1981.18	0.239	474.09	0.3	2.629	A
3 - Link Street	183.85	421.04	1793.96	0.102	183.98	0.1	2.461	A
4 - Mill Rd	130.02	457.50	870.92	0.149	130.27	0.2	5.347	A

2036 DM, 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	5.84	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)
D9	2036 DM	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	586.00	100.000
2 - Colpe Rd West		✓	791.00	100.000
3 - Link Street		✓	83.00	100.000
4 - Mill Rd		✓	413.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	461.000	20.000	105.000
	2 - Colpe Rd West	392.000	0.000	110.000	289.000
	3 - Link Street	7.000	49.000	0.000	27.000
	4 - Mill Rd	76.000	261.000	76.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.41	3.84	0.8	A
2 - Colpe Rd West	0.51	4.36	1.2	A
3 - Link Street	0.07	3.02	0.1	A
4 - Mill Rd	0.60	12.08	1.7	B

Main Results for each time segment

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 - Colpe Rd East	485.29	317.43	1845.17	0.263	483.73	0.4	2.906	A
2 - Colpe Rd West	655.06	165.65	1921.18	0.341	652.79	0.6	3.117	A
3 - Link Street	68.74	648.69	1629.91	0.042	68.54	0.0	2.536	A
4 - Mill Rd	342.02	369.75	915.70	0.374	339.43	0.6	6.842	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 - Colpe Rd East	579.48	380.72	1800.57	0.322	578.97	0.5	3.239	A
2 - Colpe Rd West	782.20	198.44	1898.08	0.412	781.40	0.8	3.545	A
3 - Link Street	82.08	776.48	1537.83	0.053	82.02	0.1	2.719	A
4 - Mill Rd	408.41	442.58	878.53	0.465	407.24	0.9	8.381	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 - Colpe Rd East	709.72	465.20	1741.03	0.408	708.79	0.8	3.832	A
2 - Colpe Rd West	958.00	242.73	1866.88	0.513	956.47	1.1	4.343	A
3 - Link Street	100.52	950.46	1412.45	0.071	100.43	0.1	3.017	A
4 - Mill Rd	500.19	541.77	827.91	0.604	497.45	1.6	11.882	B

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 - Colpe Rd East	709.72	467.41	1739.48	0.408	709.70	0.8	3.845	A
2 - Colpe Rd West	958.00	243.41	1866.40	0.513	957.97	1.2	4.358	A
3 - Link Street	100.52	951.92	1411.40	0.071	100.52	0.1	3.020	A
4 - Mill Rd	500.19	542.57	827.50	0.604	500.09	1.7	12.083	B

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	579.48	383.98	1798.27	0.322	580.40	0.5	3.253	A
2 - Colpe Rd West	782.20	199.46	1897.36	0.412	783.71	0.8	3.559	A
3 - Link Street	82.08	778.72	1536.21	0.053	82.16	0.1	2.725	A
4 - Mill Rd	408.41	443.82	877.90	0.465	411.13	1.0	8.532	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	485.29	320.70	1842.87	0.263	485.81	0.4	2.920	A
2 - Colpe Rd West	655.06	166.79	1920.37	0.341	655.87	0.6	3.135	A
3 - Link Street	68.74	651.71	1627.73	0.042	68.79	0.0	2.539	A
4 - Mill Rd	342.02	371.45	914.84	0.374	343.25	0.7	6.942	A

2036 DM, 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	3.15	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)
D10	2036 DM	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	464.00	100.000
2 - Colpe Rd West		✓	543.00	100.000
3 - Link Street		✓	143.00	100.000
4 - Mill Rd		✓	106.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	444.000	1.000	19.000
	2 - Colpe Rd West	464.000	0.000	7.000	72.000
	3 - Link Street	12.000	68.000	0.000	63.000
	4 - Mill Rd	30.000	73.000	3.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.29	2.86	0.4	A
2 - Colpe Rd West	0.33	2.91	0.5	A
3 - Link Street	0.11	2.75	0.1	A
4 - Mill Rd	0.17	6.19	0.2	A

Main Results for each time segment

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 - Colpe Rd East	384.26	118.75	1985.19	0.194	383.20	0.3	2.471	A
2 - Colpe Rd West	449.68	18.99	2024.47	0.222	448.43	0.3	2.510	A
3 - Link Street	118.42	458.34	1767.08	0.067	118.11	0.1	2.401	A
4 - Mill Rd	87.78	449.26	875.12	0.100	87.30	0.1	5.023	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 - Colpe Rd East	458.84	142.26	1968.63	0.233	458.56	0.3	2.622	A
2 - Colpe Rd West	536.96	22.73	2021.84	0.266	536.63	0.4	2.666	A
3 - Link Street	141.41	548.49	1702.12	0.083	141.33	0.1	2.536	A
4 - Mill Rd	104.82	537.62	830.03	0.126	104.68	0.2	5.457	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 - Colpe Rd East	561.96	174.17	1946.14	0.289	561.51	0.4	2.860	A
2 - Colpe Rd West	657.64	27.83	2018.25	0.326	657.11	0.5	2.907	A
3 - Link Street	173.19	671.63	1613.38	0.107	173.06	0.1	2.749	A
4 - Mill Rd	128.38	658.32	768.43	0.167	128.14	0.2	6.185	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	561.96	174.40	1945.97	0.289	561.96	0.4	2.860	A
2 - Colpe Rd West	657.64	27.86	2018.23	0.326	657.63	0.5	2.909	A
3 - Link Street	173.19	672.17	1612.99	0.107	173.19	0.1	2.749	A
4 - Mill Rd	128.38	658.85	768.16	0.167	128.38	0.2	6.188	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	458.84	142.63	1968.36	0.233	459.28	0.3	2.624	A
2 - Colpe Rd West	536.96	22.77	2021.81	0.266	537.48	0.4	2.668	A
3 - Link Street	141.41	549.36	1701.49	0.083	141.54	0.1	2.538	A
4 - Mill Rd	104.82	538.47	829.60	0.126	105.06	0.2	5.466	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	384.26	119.40	1984.74	0.194	384.54	0.3	2.474	A
2 - Colpe Rd West	449.68	19.06	2024.42	0.222	450.02	0.3	2.517	A
3 - Link Street	118.42	459.96	1765.91	0.067	118.51	0.1	2.403	A
4 - Mill Rd	87.78	450.84	874.32	0.100	87.93	0.1	5.036	A

2036 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	6.62	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)
D11	2036 DS	AM	ONE HOUR	08:30	10:00	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	592.00	100.000
2 - Colpe Rd West		✓	820.00	100.000
3 - Link Street		✓	202.00	100.000
4 - Mill Rd		✓	433.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	0.000	461.000	26.000	105.000
	2 - Colpe Rd West	392.000	0.000	139.000	289.000
	3 - Link Street	19.000	108.000	0.000	75.000
	4 - Mill Rd	76.000	261.000	96.000	0.000

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
From	1 - Colpe Rd East	10	10	10	10
	2 - Colpe Rd West	10	10	10	10
	3 - Link Street	10	10	10	10
	4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.43	4.15	0.8	A
2 - Colpe Rd West	0.54	4.65	1.3	A
3 - Link Street	0.17	3.39	0.2	A
4 - Mill Rd	0.67	15.23	2.2	C

Main Results for each time segment

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 - Colpe Rd East	490.26	382.38	1799.40	0.272	488.62	0.4	3.017	A
2 - Colpe Rd West	679.07	186.97	1906.16	0.356	676.65	0.6	3.213	A
3 - Link Street	167.28	648.61	1629.97	0.103	166.78	0.1	2.706	A
4 - Mill Rd	358.58	428.33	885.81	0.405	355.63	0.7	7.435	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 - Colpe Rd East	585.42	458.51	1745.75	0.335	584.85	0.6	3.409	A
2 - Colpe Rd West	810.88	224.02	1880.06	0.431	809.99	0.8	3.697	A
3 - Link Street	199.75	776.42	1537.87	0.130	199.60	0.2	2.958	A
4 - Mill Rd	428.18	512.70	842.75	0.508	426.68	1.1	9.482	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 - Colpe Rd East	716.98	559.71	1674.42	0.428	715.92	0.8	4.127	A
2 - Colpe Rd West	993.12	273.80	1845.00	0.538	991.36	1.3	4.629	A
3 - Link Street	244.65	950.29	1412.57	0.173	244.38	0.2	3.389	A
4 - Mill Rd	524.42	627.57	784.12	0.669	520.39	2.1	14.788	B

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 - Colpe Rd East	716.98	563.00	1672.11	0.429	716.97	0.8	4.145	A
2 - Colpe Rd West	993.12	274.88	1844.24	0.539	993.09	1.3	4.652	A
3 - Link Street	244.65	951.91	1411.40	0.173	244.64	0.2	3.393	A
4 - Mill Rd	524.42	628.56	783.62	0.669	524.21	2.2	15.231	C

Main results: (09:30-09:45)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	585.42	463.29	1742.38	0.336	586.46	0.6	3.428	A
2 - Colpe Rd West	810.88	225.60	1878.94	0.432	812.62	0.8	3.718	A
3 - Link Street	199.75	778.89	1536.09	0.130	200.01	0.2	2.963	A
4 - Mill Rd	428.18	514.22	841.97	0.509	432.22	1.2	9.758	A

Main results: (09:45-10:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	490.26	386.49	1796.50	0.273	490.84	0.4	3.035	A
2 - Colpe Rd West	679.07	188.47	1905.10	0.356	679.99	0.6	3.234	A
3 - Link Street	167.28	651.78	1627.69	0.103	167.44	0.1	2.711	A
4 - Mill Rd	358.58	430.34	884.78	0.405	360.19	0.8	7.573	A

2036 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	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Standard Roundabout	3.71	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)
D12	2036 DS	PM	ONE HOUR	17:45	19:15	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 (Veh/hr)	Scaling Factor (%)
1 - Colpe Rd East		✓	479.00	100.000
2 - Colpe Rd West		✓	675.00	100.000
3 - Link Street		✓	222.00	100.000
4 - Mill Rd		✓	167.00	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
1 - Colpe Rd East	0.000	444.000	16.000	19.000
2 - Colpe Rd West	464.000	0.000	139.000	72.000
3 - Link Street	20.000	108.000	0.000	94.000
4 - Mill Rd	30.000	73.000	64.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To			
	1 - Colpe Rd East	2 - Colpe Rd West	3 - Link Street	4 - Mill Rd
1 - Colpe Rd East	10	10	10	10
2 - Colpe Rd West	10	10	10	10
3 - Link Street	10	10	10	10
4 - Mill Rd	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Colpe Rd East	0.31	3.09	0.5	A
2 - Colpe Rd West	0.42	3.48	0.8	A
3 - Link Street	0.17	2.95	0.2	A
4 - Mill Rd	0.27	7.38	0.4	A

Main Results for each time segment

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 - Colpe Rd East	396.68	201.95	1926.55	0.206	395.54	0.3	2.585	A
2 - Colpe Rd West	558.99	81.58	1980.39	0.282	557.27	0.4	2.778	A
3 - Link Street	183.85	458.20	1767.18	0.104	183.34	0.1	2.500	A
4 - Mill Rd	138.30	488.78	854.96	0.162	137.46	0.2	5.515	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 - Colpe Rd East	473.67	241.98	1898.35	0.250	473.35	0.4	2.778	A
2 - Colpe Rd West	667.49	97.77	1968.98	0.339	666.97	0.6	3.039	A
3 - Link Street	219.53	548.40	1702.18	0.129	219.39	0.2	2.670	A
4 - Mill Rd	165.14	584.98	805.86	0.205	164.86	0.3	6.175	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 - Colpe Rd East	580.13	296.19	1860.14	0.312	579.60	0.5	3.090	A
2 - Colpe Rd West	817.51	119.66	1953.56	0.418	816.61	0.8	3.479	A
3 - Link Street	268.87	671.44	1613.52	0.167	268.64	0.2	2.944	A
4 - Mill Rd	202.26	716.23	738.87	0.274	201.74	0.4	7.367	A

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

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	580.13	296.72	1859.77	0.312	580.12	0.5	3.093	A
2 - Colpe Rd West	817.51	119.90	1953.40	0.419	817.50	0.8	3.485	A
3 - Link Street	268.87	672.16	1613.00	0.167	268.87	0.2	2.945	A
4 - Mill Rd	202.26	716.98	738.49	0.274	202.25	0.4	7.383	A

Main results: (18:45-19:00)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	473.67	242.80	1897.77	0.250	474.19	0.4	2.784	A
2 - Colpe Rd West	667.49	98.13	1968.73	0.339	668.38	0.6	3.046	A
3 - Link Street	219.53	549.55	1701.35	0.129	219.76	0.2	2.674	A
4 - Mill Rd	165.14	586.15	805.26	0.205	165.65	0.3	6.197	A

Main results: (19:00-19:15)

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Colpe Rd East	396.68	203.20	1925.68	0.206	397.00	0.3	2.590	A
2 - Colpe Rd West	558.99	82.12	1980.01	0.282	559.52	0.4	2.790	A
3 - Link Street	183.85	460.05	1765.85	0.104	183.99	0.1	2.505	A
4 - Mill Rd	138.30	490.70	853.97	0.162	138.59	0.2	5.539	A

APPENDIX E

PICADY Output Files

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2019
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Filename: Do-Minimum.j9
Path: G:\2017\p170092\SHD - HOUSING\calcs\picady
Report generation date: 04/10/2019 09:23:13

- »Do-Minimum - 2021, AM
- »Do-Minimum - 2021, PM
- »Do-Minimum - 2026, AM
- »Do-Minimum - 2026, PM
- »Do-Minimum - 2036, AM
- »Do-Minimum - 2036, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Minimum - 2021								
Stream B-AC	1.0	12.89	0.50	B	0.3	7.99	0.24	A
Stream C-AB	0.8	8.61	0.40	A	0.2	5.30	0.12	A
Stream C-A								
Stream A-B								
Stream A-C								
Do-Minimum - 2026								
Stream B-AC	1.0	13.25	0.51	B	0.2	7.33	0.15	A
Stream C-AB	0.5	7.43	0.31	A	0.2	5.28	0.13	A
Stream C-A								
Stream A-B								
Stream A-C								
Do-Minimum - 2036								
Stream B-AC	1.3	15.26	0.57	C	0.2	7.54	0.16	A
Stream C-AB	0.7	7.82	0.35	A	0.3	5.29	0.14	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.

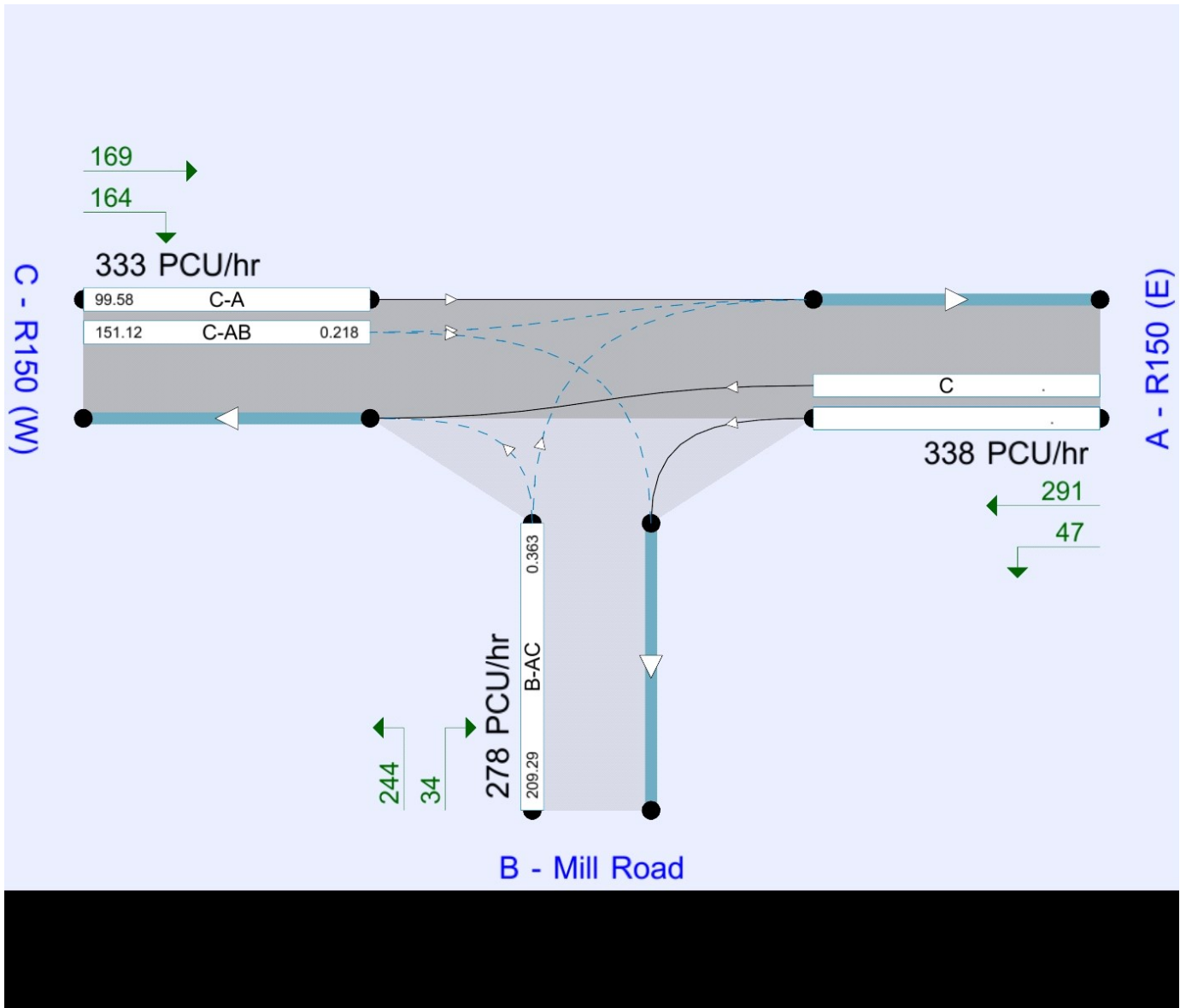
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	03/10/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HEADOFFICE"GARVEYD
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)
2021	AM	ONE HOUR	08:00	09:30	15
2021	PM	ONE HOUR	17:00	18:30	15
2026	AM	ONE HOUR	08:00	09:30	15
2026	PM	ONE HOUR	17:00	18:30	15
2036	AM	ONE HOUR	08:00	09:30	15
2036	PM	ONE HOUR	17:00	18:30	15

Do-Minimum - 2021, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Minimum	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	6.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R150 (E)		Major
B	Mill Road		Minor
C	R150 (W)		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 - R150 (W)	7.00			172.0	✓	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 - Mill Road	One lane	2.20	50	160

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	527.373	0.092	0.232	0.146	0.332
1	B-C	666.621	0.098	0.247	-	-
1	C-B	673.570	0.250	0.250	-	-

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	2021	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	287.00	100.000
B - Mill Road		✓	250.00	100.000
C - R150 (W)		✓	342.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0.000	40.000	247.000
B - Mill Road	29.000	0.000	221.000
C - R150 (W)	144.000	198.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0	0	0
B - Mill Road	0	0	0
C - R150 (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.50	12.89	1.0	B
C-AB	0.40	8.61	0.8	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	188.21	584.87	0.322	186.34	0.5	8.992	A
C-AB	176.77	690.71	0.256	175.22	0.4	6.968	A
C-A	80.70			80.70			
A-B	30.11			30.11			
A-C	185.95			185.95			

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	224.74	572.18	0.393	224.07	0.6	10.320	B
C-AB	218.97	694.94	0.315	218.42	0.5	7.556	A
C-A	88.48			88.48			
A-B	35.96			35.96			
A-C	222.05			222.05			

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	275.26	554.32	0.497	273.95	1.0	12.778	B
C-AB	282.03	701.05	0.402	281.00	0.8	8.569	A
C-A	94.52			94.52			
A-B	44.04			44.04			
A-C	271.95			271.95			

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	275.26	554.24	0.497	275.20	1.0	12.895	B
C-AB	282.25	701.27	0.402	282.22	0.8	8.610	A
C-A	94.30			94.30			
A-B	44.04			44.04			
A-C	271.95			271.95			

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	224.74	572.07	0.393	226.00	0.7	10.442	B
C-AB	219.24	695.26	0.315	220.23	0.5	7.606	A
C-A	88.21			88.21			
A-B	35.96			35.96			
A-C	222.05			222.05			

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	188.21	584.72	0.322	188.92	0.5	9.111	A
C-AB	177.11	690.98	0.256	177.69	0.4	7.028	A
C-A	80.37			80.37			
A-B	30.11			30.11			
A-C	185.95			185.95			

Do-Minimum - 2021, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Minimum	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	2.52	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	2021	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	186.00	100.000
B - Mill Road		✓	132.00	100.000
C - R150 (W)		✓	275.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0.000	14.000	172.000
B - Mill Road	11.000	0.000	121.000
C - R150 (W)	214.000	61.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0	0	0
B - Mill Road	0	0	0
C - R150 (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-A-C	0.24	7.99	0.3	A
C-A-B	0.12	5.30	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	99.38	613.92	0.162	98.61	0.2	6.976	A
C-AB	58.12	741.81	0.078	57.67	0.1	5.260	A
C-A	148.92			148.92			
A-B	10.54			10.54			
A-C	129.49			129.49			

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	118.67	606.32	0.196	118.47	0.2	7.375	A
C-AB	72.69	755.47	0.096	72.56	0.1	5.272	A
C-A	174.53			174.53			
A-B	12.59			12.59			
A-C	154.62			154.62			

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	145.33	595.76	0.244	145.02	0.3	7.981	A
C-AB	96.35	776.38	0.124	96.13	0.2	5.293	A
C-A	206.43			206.43			
A-B	15.41			15.41			
A-C	189.38			189.38			

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	145.33	595.76	0.244	145.33	0.3	7.992	A
C-AB	96.41	776.45	0.124	96.40	0.2	5.296	A
C-A	206.37			206.37			
A-B	15.41			15.41			
A-C	189.38			189.38			

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	118.67	606.31	0.196	118.97	0.2	7.393	A
C-AB	72.75	755.56	0.096	72.97	0.1	5.277	A
C-A	174.47			174.47			
A-B	12.59			12.59			
A-C	154.62			154.62			

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	99.38	613.89	0.162	99.58	0.2	7.001	A
C-AB	58.24	741.90	0.079	58.37	0.1	5.269	A
C-A	148.80			148.80			
A-B	10.54			10.54			
A-C	129.49			129.49			

Do-Minimum - 2026, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Minimum	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	5.50	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	2026	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	309.00	100.000
B - Mill Road		✓	254.00	100.000
C - R150 (W)		✓	305.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0.000	43.000	266.000
B - Mill Road	31.000	0.000	223.000
C - R150 (W)	155.000	150.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0	0	0
B - Mill Road	0	0	0
C - R150 (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.51	13.25	1.0	B
C-AB	0.31	7.43	0.5	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	191.22	582.01	0.329	189.30	0.5	9.123	A
C-AB	135.78	692.27	0.196	134.65	0.3	6.448	A
C-A	93.84			93.84			
A-B	32.37			32.37			
A-C	200.26			200.26			

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	228.34	569.13	0.401	227.64	0.7	10.519	B
C-AB	168.70	696.88	0.242	168.33	0.4	6.812	A
C-A	105.48			105.48			
A-B	38.66			38.66			
A-C	239.13			239.13			

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	279.66	551.10	0.507	278.28	1.0	13.127	B
C-AB	218.23	703.61	0.310	217.57	0.5	7.410	A
C-A	117.58			117.58			
A-B	47.34			47.34			
A-C	292.87			292.87			

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	279.66	551.05	0.508	279.60	1.0	13.253	B
C-AB	218.38	703.76	0.310	218.36	0.5	7.429	A
C-A	117.44			117.44			
A-B	47.34			47.34			
A-C	292.87			292.87			

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	228.34	569.06	0.401	229.67	0.7	10.648	B
C-AB	168.89	697.11	0.242	169.53	0.4	6.840	A
C-A	105.30			105.30			
A-B	38.66			38.66			
A-C	239.13			239.13			

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	191.22	581.90	0.329	191.97	0.5	9.249	A
C-AB	136.04	692.48	0.196	136.43	0.3	6.484	A
C-A	93.58			93.58			
A-B	32.37			32.37			
A-C	200.26			200.26			

Do-Minimum - 2026, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Minimum	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	1.80	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	2026	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	200.00	100.000
B - Mill Road		✓	77.00	100.000
C - R150 (W)		✓	293.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0.000	15.000	185.000
B - Mill Road	11.000	0.000	66.000
C - R150 (W)	230.000	63.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0	0	0
B - Mill Road	0	0	0
C - R150 (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.15	7.33	0.2	A
C-AB	0.13	5.28	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	57.97	597.54	0.097	57.54	0.1	6.656	A
C-AB	61.07	747.02	0.082	60.59	0.1	5.243	A
C-A	159.52			159.52			
A-B	11.29			11.29			
A-C	139.28			139.28			

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	69.22	588.57	0.118	69.12	0.1	6.928	A
C-AB	77.68	763.13	0.102	77.53	0.2	5.251	A
C-A	185.72			185.72			
A-B	13.48			13.48			
A-C	166.31			166.31			

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	84.78	576.07	0.147	84.62	0.2	7.323	A
C-AB	102.29	784.52	0.130	102.05	0.2	5.278	A
C-A	220.31			220.31			
A-B	16.52			16.52			
A-C	203.69			203.69			

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	84.78	576.05	0.147	84.78	0.2	7.326	A
C-AB	102.35	784.59	0.130	102.35	0.2	5.280	A
C-A	220.24			220.24			
A-B	16.52			16.52			
A-C	203.69			203.69			

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	69.22	588.55	0.118	69.37	0.1	6.937	A
C-AB	77.77	763.24	0.102	77.99	0.2	5.257	A
C-A	185.64			185.64			
A-B	13.48			13.48			
A-C	166.31			166.31			

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	57.97	597.49	0.097	58.07	0.1	6.674	A
C-AB	61.21	747.13	0.082	61.36	0.1	5.254	A
C-A	159.38			159.38			
A-B	11.29			11.29			
A-C	139.28			139.28			

Do-Minimum - 2036, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Minimum	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	6.22	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	2036	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	338.00	100.000
B - Mill Road		✓	278.00	100.000
C - R150 (W)		✓	333.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0.000	47.000	291.000
B - Mill Road	34.000	0.000	244.000
C - R150 (W)	169.000	164.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0	0	0
B - Mill Road	0	0	0
C - R150 (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.57	15.26	1.3	C
C-AB	0.35	7.82	0.7	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	209.29	575.79	0.363	207.05	0.6	9.707	A
C-AB	151.12	694.13	0.218	149.81	0.3	6.602	A
C-A	99.58			99.58			
A-B	35.38			35.38			
A-C	219.08			219.08			

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	249.92	561.59	0.445	249.02	0.8	11.481	B
C-AB	188.53	699.30	0.270	188.08	0.4	7.044	A
C-A	110.83			110.83			
A-B	42.25			42.25			
A-C	261.60			261.60			

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	306.08	541.67	0.565	304.21	1.3	15.038	C
C-AB	245.29	706.85	0.347	244.46	0.6	7.788	A
C-A	121.35			121.35			
A-B	51.75			51.75			
A-C	320.40			320.40			

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	306.08	541.60	0.565	306.00	1.3	15.263	C
C-AB	245.49	707.06	0.347	245.47	0.7	7.816	A
C-A	121.15			121.15			
A-B	51.75			51.75			
A-C	320.40			320.40			

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	249.92	561.50	0.445	251.74	0.8	11.691	B
C-AB	188.78	699.60	0.270	189.59	0.5	7.077	A
C-A	110.58			110.58			
A-B	42.25			42.25			
A-C	261.60			261.60			

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	209.29	575.66	0.364	210.25	0.6	9.879	A
C-AB	151.44	694.40	0.218	151.92	0.3	6.646	A
C-A	99.26			99.26			
A-B	35.38			35.38			
A-C	219.08			219.08			

Do-Minimum - 2036, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Minimum	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	1.85	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	2036	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	219.00	100.000
B - Mill Road		✓	84.00	100.000
C - R150 (W)		✓	319.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - R150 (E)	B - Mill Road	C - R150 (W)	
A - R150 (E)	0.000	16.000	203.000	
B - Mill Road	12.000	0.000	72.000	
C - R150 (W)	251.000	68.000	0.000	

Vehicle Mix

Heavy Vehicle proportion

From	To			
	A - R150 (E)	B - Mill Road	C - R150 (W)	
A - R150 (E)	0	0	0	
B - Mill Road	0	0	0	
C - R150 (W)	0	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.16	7.54	0.2	A
C-AB	0.14	5.29	0.3	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	63.24	593.21	0.107	62.77	0.1	6.781	A
C-AB	67.42	753.78	0.089	66.88	0.1	5.240	A
C-A	172.74			172.74			
A-B	12.05			12.05			
A-C	152.83			152.83			

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	75.51	583.36	0.129	75.40	0.1	7.085	A
C-AB	86.36	771.62	0.112	86.18	0.2	5.253	A
C-A	200.42			200.42			
A-B	14.38			14.38			
A-C	182.49			182.49			

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	92.49	569.59	0.162	92.31	0.2	7.541	A
C-AB	114.50	795.14	0.144	114.22	0.2	5.291	A
C-A	236.73			236.73			
A-B	17.62			17.62			
A-C	223.51			223.51			

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	92.49	569.57	0.162	92.48	0.2	7.544	A
C-AB	114.57	795.23	0.144	114.57	0.3	5.293	A
C-A	236.65			236.65			
A-B	17.62			17.62			
A-C	223.51			223.51			

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	75.51	583.33	0.129	75.69	0.2	7.093	A
C-AB	86.46	771.76	0.112	86.73	0.2	5.262	A
C-A	200.31			200.31			
A-B	14.38			14.38			
A-C	182.49			182.49			

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	63.24	593.16	0.107	63.36	0.1	6.795	A
C-AB	67.59	753.91	0.090	67.77	0.1	5.249	A
C-A	172.57			172.57			
A-B	12.05			12.05			
A-C	152.83			152.83			

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2019
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Filename: Do-Something.j9
Path: G:\2017\p170092\SHD - HOUSING\calcs\picady
Report generation date: 04/10/2019 09:30:18

- »Do-Something - 2021, AM
- »Do-Something - 2021, PM
- »Do-Something - 2026, AM
- »Do-Something - 2026, PM
- »Do-Something - 2036, AM
- »Do-Something - 2036, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something - 2021								
Stream B-AC	1.1	13.91	0.53	B	0.4	8.26	0.27	A
Stream C-AB	0.9	9.04	0.43	A	0.3	5.60	0.17	A
Stream C-A								
Stream A-B								
Stream A-C								
Do-Something - 2026								
Stream B-AC	1.5	16.10	0.60	C	0.3	7.79	0.21	A
Stream C-AB	0.7	8.01	0.36	A	0.5	6.17	0.25	A
Stream C-A								
Stream A-B								
Stream A-C								
Do-Something - 2036								
Stream B-AC	1.9	19.16	0.66	C	0.3	8.05	0.22	A
Stream C-AB	0.8	8.48	0.40	A	0.5	6.24	0.27	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.

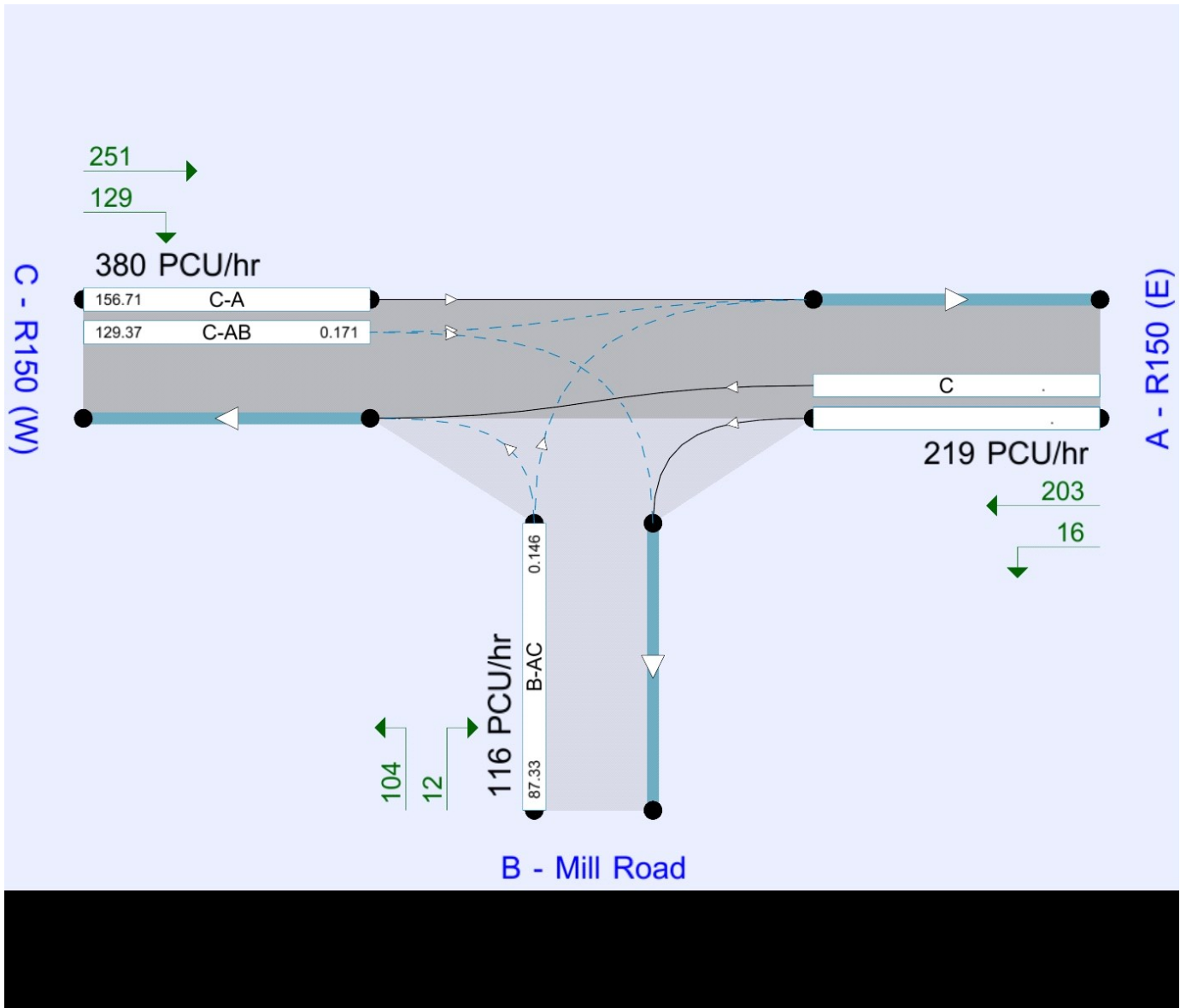
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	03/10/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HEADOFFICE"GARVEYD
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)
2021	AM	ONE HOUR	08:00	09:30	15
2021	PM	ONE HOUR	17:00	18:30	15
2026	AM	ONE HOUR	08:00	09:30	15
2026	PM	ONE HOUR	17:00	18:30	15
2036	AM	ONE HOUR	08:00	09:30	15
2036	PM	ONE HOUR	17:00	18:30	15

Do-Something - 2021, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Something	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	6.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R150 (E)		Major
B	Mill Road		Minor
C	R150 (W)		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 - R150 (W)	7.00			172.0	✓	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 - Mill Road	One lane	2.20	50	160

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	527.373	0.092	0.232	0.146	0.332
1	B-C	666.621	0.098	0.247	-	-
1	C-B	673.570	0.250	0.250	-	-

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	2021	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	287.00	100.000
B - Mill Road		✓	270.00	100.000
C - R150 (W)		✓	356.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0.000	40.000	247.000
B - Mill Road	29.000	0.000	241.000
C - R150 (W)	144.000	212.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0	0	0
B - Mill Road	0	0	0
C - R150 (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.53	13.91	1.1	B
C-AB	0.43	9.04	0.9	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	203.27	586.43	0.347	201.18	0.5	9.296	A
C-AB	189.27	690.71	0.274	187.57	0.4	7.139	A
C-A	78.74			78.74			
A-B	30.11			30.11			
A-C	185.95			185.95			

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	242.72	573.73	0.423	241.94	0.7	10.824	B
C-AB	234.46	694.96	0.337	233.84	0.6	7.806	A
C-A	85.58			85.58			
A-B	35.96			35.96			
A-C	222.05			222.05			

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	297.28	555.83	0.535	295.69	1.1	13.751	B
C-AB	301.99	701.08	0.431	300.81	0.9	8.990	A
C-A	89.97			89.97			
A-B	44.04			44.04			
A-C	271.95			271.95			

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	297.28	555.75	0.535	297.21	1.1	13.913	B
C-AB	302.24	701.32	0.431	302.20	0.9	9.042	A
C-A	89.72			89.72			
A-B	44.04			44.04			
A-C	271.95			271.95			

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	242.72	573.61	0.423	244.26	0.7	10.980	B
C-AB	234.77	695.31	0.338	235.91	0.6	7.868	A
C-A	85.27			85.27			
A-B	35.96			35.96			
A-C	222.05			222.05			

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	203.27	586.28	0.347	204.11	0.5	9.440	A
C-AB	189.64	691.01	0.274	190.29	0.4	7.204	A
C-A	78.37			78.37			
A-B	30.11			30.11			
A-C	185.95			185.95			

Do-Something - 2021, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Something	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	2.93	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	2021	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	186.00	100.000
B - Mill Road		✓	146.00	100.000
C - R150 (W)		✓	298.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - R150 (E)	B - Mill Road	C - R150 (W)	
A - R150 (E)	0.000	14.000	172.000	
B - Mill Road	11.000	0.000	135.000	
C - R150 (W)	214.000	84.000	0.000	

Vehicle Mix

Heavy Vehicle proportion

From	To			
	A - R150 (E)	B - Mill Road	C - R150 (W)	
A - R150 (E)	0	0	0	
B - Mill Road	0	0	0	
C - R150 (W)	0	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.27	8.26	0.4	A
C-AB	0.17	5.60	0.3	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	109.92	614.96	0.179	109.05	0.2	7.104	A
C-AB	80.03	741.81	0.108	79.41	0.2	5.432	A
C-A	144.32			144.32			
A-B	10.54			10.54			
A-C	129.49			129.49			

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	131.25	607.27	0.216	131.02	0.3	7.555	A
C-AB	101.29	756.63	0.134	101.09	0.2	5.492	A
C-A	166.61			166.61			
A-B	12.59			12.59			
A-C	154.62			154.62			

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	160.75	596.57	0.269	160.38	0.4	8.247	A
C-AB	132.69	776.42	0.171	132.38	0.3	5.591	A
C-A	195.42			195.42			
A-B	15.41			15.41			
A-C	189.38			189.38			

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	160.75	596.56	0.269	160.74	0.4	8.260	A
C-AB	132.77	776.51	0.171	132.76	0.3	5.599	A
C-A	195.34			195.34			
A-B	15.41			15.41			
A-C	189.38			189.38			

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	131.25	607.25	0.216	131.60	0.3	7.573	A
C-AB	101.39	756.77	0.134	101.69	0.2	5.503	A
C-A	166.51			166.51			
A-B	12.59			12.59			
A-C	154.62			154.62			

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	109.92	614.93	0.179	110.15	0.2	7.134	A
C-AB	80.20	741.94	0.108	80.40	0.2	5.447	A
C-A	144.15			144.15			
A-B	10.54			10.54			
A-C	129.49			129.49			

Do-Something - 2026, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Something	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	7.04	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	2026	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	309.00	100.000
B - Mill Road		✓	301.00	100.000
C - R150 (W)		✓	329.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - R150 (E)	B - Mill Road	C - R150 (W)	
A - R150 (E)	0.000	43.000	266.000	
B - Mill Road	31.000	0.000	270.000	
C - R150 (W)	155.000	174.000	0.000	

Vehicle Mix

Heavy Vehicle proportion

From	To			
	A - R150 (E)	B - Mill Road	C - R150 (W)	
A - R150 (E)	0	0	0	
B - Mill Road	0	0	0	
C - R150 (W)	0	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.60	16.10	1.5	C
C-AB	0.36	8.01	0.7	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	226.61	585.58	0.387	224.13	0.6	9.895	A
C-AB	157.51	692.27	0.228	156.15	0.3	6.702	A
C-A	90.18			90.18			
A-B	32.37			32.37			
A-C	200.26			200.26			

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	270.59	572.74	0.472	269.57	0.9	11.832	B
C-AB	195.71	696.91	0.281	195.24	0.5	7.176	A
C-A	100.06			100.06			
A-B	38.66			38.66			
A-C	239.13			239.13			

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	331.41	554.73	0.597	329.21	1.4	15.803	C
C-AB	253.17	703.65	0.360	252.31	0.7	7.977	A
C-A	109.07			109.07			
A-B	47.34			47.34			
A-C	292.87			292.87			

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	331.41	554.67	0.597	331.29	1.5	16.096	C
C-AB	253.36	703.84	0.360	253.34	0.7	8.006	A
C-A	108.88			108.88			
A-B	47.34			47.34			
A-C	292.87			292.87			

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	270.59	572.66	0.473	272.74	0.9	12.089	B
C-AB	195.95	697.19	0.281	196.77	0.5	7.213	A
C-A	99.82			99.82			
A-B	38.66			38.66			
A-C	239.13			239.13			

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	226.61	585.47	0.387	227.71	0.6	10.093	B
C-AB	157.82	692.52	0.228	158.30	0.3	6.751	A
C-A	89.87			89.87			
A-B	32.37			32.37			
A-C	200.26			200.26			

Do-Something - 2026, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Something	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	2.88	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	2026	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	200.00	100.000
B - Mill Road		✓	109.00	100.000
C - R150 (W)		✓	353.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - R150 (E)	B - Mill Road	C - R150 (W)	
A - R150 (E)	0.000	15.000	185.000	
B - Mill Road	11.000	0.000	98.000	
C - R150 (W)	230.000	123.000	0.000	

Vehicle Mix

Heavy Vehicle proportion

From	To			
	A - R150 (E)	B - Mill Road	C - R150 (W)	
A - R150 (E)	0	0	0	
B - Mill Road	0	0	0	
C - R150 (W)	0	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.21	7.79	0.3	A
C-AB	0.25	6.17	0.5	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	82.06	604.22	0.136	81.44	0.2	6.876	A
C-AB	120.37	747.87	0.161	119.40	0.2	5.723	A
C-A	145.38			145.38			
A-B	11.29			11.29			
A-C	139.28			139.28			

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	97.99	595.09	0.165	97.83	0.2	7.238	A
C-AB	151.68	763.20	0.199	151.36	0.3	5.886	A
C-A	165.66			165.66			
A-B	13.48			13.48			
A-C	166.31			166.31			

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	120.01	582.30	0.206	119.76	0.3	7.779	A
C-AB	199.74	784.64	0.255	199.20	0.5	6.154	A
C-A	188.92			188.92			
A-B	16.52			16.52			
A-C	203.69			203.69			

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	120.01	582.27	0.206	120.01	0.3	7.787	A
C-AB	199.89	784.79	0.255	199.87	0.5	6.166	A
C-A	188.77			188.77			
A-B	16.52			16.52			
A-C	203.69			203.69			

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	97.99	595.04	0.165	98.23	0.2	7.248	A
C-AB	151.87	763.44	0.199	152.39	0.3	5.904	A
C-A	165.47			165.47			
A-B	13.48			13.48			
A-C	166.31			166.31			

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	82.06	604.15	0.136	82.22	0.2	6.898	A
C-AB	120.67	748.10	0.161	120.99	0.2	5.746	A
C-A	145.09			145.09			
A-B	11.29			11.29			
A-C	139.28			139.28			

Do-Something - 2036, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Something	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	8.13	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	2036	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	338.00	100.000
B - Mill Road		✓	325.00	100.000
C - R150 (W)		✓	357.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0.000	47.000	291.000
B - Mill Road	34.000	0.000	291.000
C - R150 (W)	169.000	188.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0	0	0
B - Mill Road	0	0	0
C - R150 (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.66	19.16	1.9	C
C-AB	0.40	8.48	0.8	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	244.68	579.12	0.423	241.81	0.7	10.586	B
C-AB	173.23	694.13	0.250	171.69	0.4	6.877	A
C-A	95.54			95.54			
A-B	35.38			35.38			
A-C	219.08			219.08			

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	292.17	564.95	0.517	290.87	1.0	13.070	B
C-AB	216.14	699.33	0.309	215.57	0.5	7.443	A
C-A	104.80			104.80			
A-B	42.25			42.25			
A-C	261.60			261.60			

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	357.83	545.02	0.657	354.76	1.8	18.615	C
C-AB	281.21	706.91	0.398	280.14	0.8	8.436	A
C-A	111.85			111.85			
A-B	51.75			51.75			
A-C	320.40			320.40			

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	357.83	544.95	0.657	357.64	1.9	19.163	C
C-AB	281.48	707.16	0.398	281.44	0.8	8.479	A
C-A	111.59			111.59			
A-B	51.75			51.75			
A-C	320.40			320.40			

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	292.17	564.85	0.517	295.19	1.1	13.496	B
C-AB	216.46	699.71	0.309	217.49	0.5	7.494	A
C-A	104.48			104.48			
A-B	42.25			42.25			
A-C	261.60			261.60			

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	244.68	578.99	0.423	246.10	0.7	10.860	B
C-AB	173.62	694.45	0.250	174.21	0.4	6.933	A
C-A	95.15			95.15			
A-B	35.38			35.38			
A-C	219.08			219.08			

Do-Something - 2036, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do-Something	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	2.92	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	2036	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R150 (E)		✓	219.00	100.000
B - Mill Road		✓	116.00	100.000
C - R150 (W)		✓	380.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0.000	16.000	203.000
B - Mill Road	12.000	0.000	104.000
C - R150 (W)	251.000	129.000	0.000

Vehicle Mix

Heavy Vehicle proportion

From	To		
	A - R150 (E)	B - Mill Road	C - R150 (W)
A - R150 (E)	0	0	0
B - Mill Road	0	0	0
C - R150 (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.22	8.05	0.3	A
C-AB	0.27	6.24	0.5	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	87.33	599.38	0.146	86.65	0.2	7.013	A
C-AB	129.37	754.86	0.171	128.31	0.3	5.741	A
C-A	156.71			156.71			
A-B	12.05			12.05			
A-C	152.83			152.83			

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	104.28	589.32	0.177	104.11	0.2	7.418	A
C-AB	163.84	771.71	0.212	163.48	0.4	5.921	A
C-A	177.77			177.77			
A-B	14.38			14.38			
A-C	182.49			182.49			

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	127.72	575.19	0.222	127.44	0.3	8.035	A
C-AB	217.24	795.28	0.273	216.61	0.5	6.227	A
C-A	201.15			201.15			
A-B	17.62			17.62			
A-C	223.51			223.51			

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	127.72	575.16	0.222	127.71	0.3	8.045	A
C-AB	217.42	795.47	0.273	217.41	0.5	6.238	A
C-A	200.96			200.96			
A-B	17.62			17.62			
A-C	223.51			223.51			

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	104.28	589.27	0.177	104.55	0.2	7.433	A
C-AB	164.08	772.00	0.213	164.68	0.4	5.942	A
C-A	177.54			177.54			
A-B	14.38			14.38			
A-C	182.49			182.49			

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	87.33	599.30	0.146	87.51	0.2	7.038	A
C-AB	129.72	755.14	0.172	130.09	0.3	5.769	A
C-A	156.36			156.36			
A-B	12.05			12.05			
A-C	152.83			152.83			

APPENDIX F

TRANSYT Output Files – Option A

TRANSYT 15
Version: 15.5.2.7994 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trisoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: 170092- Transyt school link.t15
Path: G:\2017\p170092\SHD - HOUSING\calcs\transyt
Report generation date: 03/10/2019 19:29:17

- »A1 - 2021 DM AM : D1 - 2021 DM AM* :
- »A2 - 2021 DM PM : D2 - 2021 DM PM* :
- »A3 - 2021 DS AM : D3 - 2021 DS AM* :
- »A4 - 2021 DS PM : D4 - 2021 DS PM* :
- »A5 - 2026 DM AM : D5 - 2026 DM AM* :
- »A6 - 2026 DM PM : D6 - 2026 DM PM* :
- »A7 - 2026 DS AM : D7 - 2026 DS AM* :
- »A8 - 2026 DS PM : D8 - 2026 DS PM* :
- »A9 - 2036 DM AM : D9 - 2036 DM AM* :
- »A10 - 2036 DM PM : D10 - 2036 DM PM* :
- »A11 - 2036 DS AM : D11 - 2036 DS AM* :
- »A12 - 2036 DS PM : D12 - 2036 DS PM* :

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	22/08/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HEADOFFICE\mcgeoughp
Description	

Model and Results

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

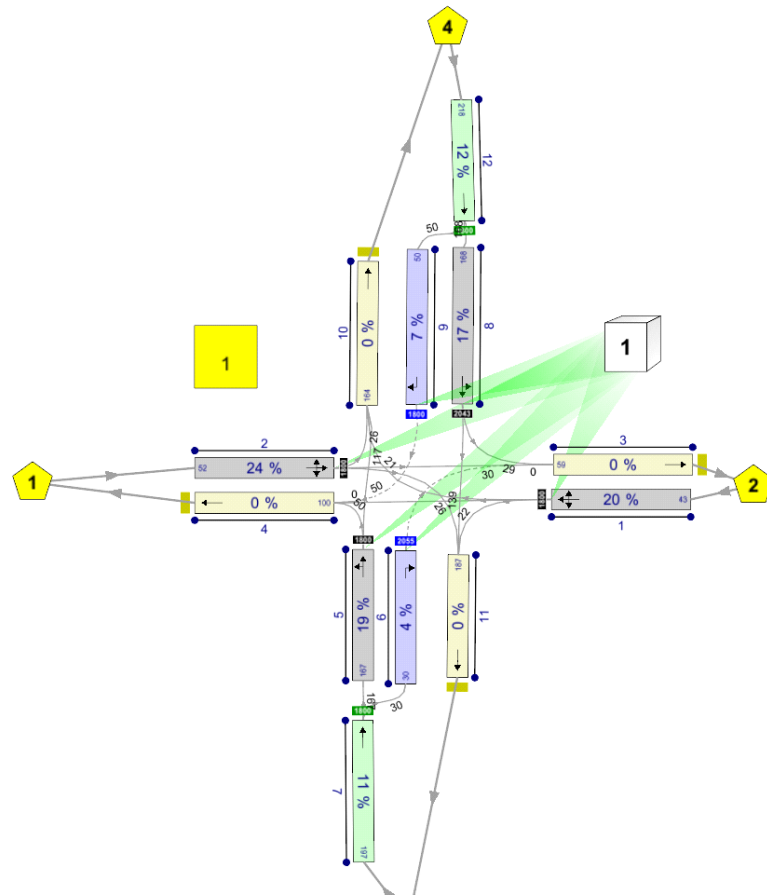
Units

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

Sorting

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

Network Diagrams



A1 - 2021 DM AM

D1 - 2021 DM AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	03/10/2019 19:28:40	03/10/2019 19:28:41	08:00	90	13.96	0.90	14.76	1/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2021 DM AM		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2021 DM AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	62	62
2	1	0	0
3	1	79	79
4	1	0	0
5	1	0	0
6	1	79	79
7	1	79	79
8	1	0	0
9	1	0	0
10	1	0	0
11	1	62	62
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	62	0
	3	0	79	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	79
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	62
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 37, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	37	32	7	7
	4	✓	6	E,F	42	62	20	7	7
	5	✓	7	G	73	80	7	1	7

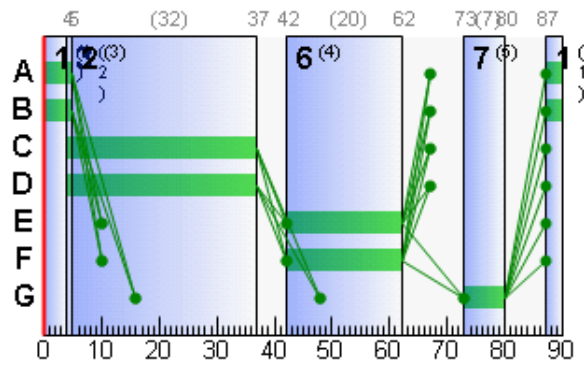
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	37	33
	D	1	✓	4	37	33
	E	1	✓	42	62	20
	F	1	✓	42	62	20
	G	1	✓	73	80	7

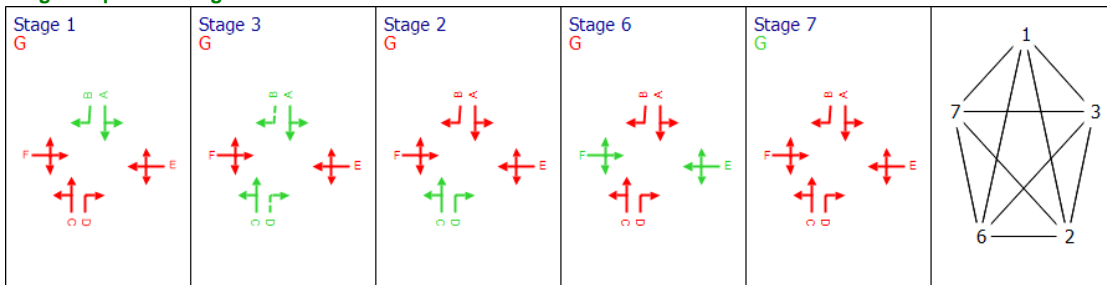
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	42	62	20
2	1		1	F	42	62	20
5	1		1	C	4	37	33
6	1		1	D	4	37	33
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	62	1800	20	420	15	510	28.17	1.24	7.10	40.17
	2	1	Western Residential Link	F	0	1800	20	420	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		79	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	33	680	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	79	2019	33	763	10	769	18.68	1.28	24.51	22.28
	7	1	(untitled)		79	1800	90	1800	4	1951	0.05	0.00	0.01	8.45
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		62	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	37	32	7	7
	4	✓	6	E,F	42	62	20	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	15	510	62	1800	20	28.17	1.24	7.10	6.89	0.61	7.50
	2	1	0	Unrestricted	0	1800	20	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	79	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	Unrestricted	0	1800	33	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	10	769	79	2019	33	18.68	1.28	24.51	5.82	0.63	6.45
	7	1	4	1951	79	1800	90	0.05	0.00	0.01	0.01	0.00	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	62	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	62	62	0		1800	420	15		510	0.00	20
	2	1	0	0	0		1800	420	0		Unrestricted	0.00	20
	3	1	79	79	0		Unrestricted	Unrestricted	0		Unrestricted	1.17	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	680	0		Unrestricted	0.00	33
	6	1	79	79	0		2019	763	10		769	0.00	33
	7	1	79	79	0		1800	1800	4		1951	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	62	62	0		Unrestricted	Unrestricted	0		Unrestricted	1.32	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	28.17	0.49	6.89	78.40	48.61	0.61
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	18.68	0.41	5.82	63.43	50.11	0.63
	7	1	8.40	0.05	0.00	0.01	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	1.24	17.39	7.10	0.00	0.00	
	2	1	0.00	0.00	17.39	0.00	0.00	21.00	
	3	1	0.00	0.00	17.39	0.00	0.00	55.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	34.00	
	6	1	0.00	1.28	5.22	24.51	0.00	0.00	
	7	1	0.00	0.00	12.17	0.01	0.00	0.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	66.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	1.24	0.01	1.20	1.00	0.00	7.50
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	1.28	0.01	1.23	1.00	0.00	6.45
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.01
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	03/10/2019 19:28:40	03/10/2019 19:28:41	08:00	90	13.96	0.90	14.76	1/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	15	-100	361	662	8.94	12.72	1.24	13.96

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	361	361	0		15		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	11.36	8.94	0.90	12.72	27.35	98.72	1.24

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	24.51	0.00	464.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	13.96

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	63.8	0.0
3	0.0	42.7	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	79	42.72	79	42.72
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	62	63.76	62	63.76
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	62	1800	20	0.00	15	510	40.17	28.17	78.40	1.24
2	1	Western Residential Link		1	F	0	1800	20	21.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				79	Unrestricted	90	55.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	33	34.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	79	2019	33	0.00	10	769	22.28	18.68	63.43	1.28
7	1	(untitled)				79	1800	90	0.00	4	1951	8.45	0.05	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				62	Unrestricted	90	66.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	34.19	2.04	16.79	0.90	12.72	1.24	0.00	13.96
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	34.19	2.04	16.79	0.90	12.72	1.24	0.00	13.96

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

A2 - 2021 DM PM

D2 - 2021 DM PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
2	03/10/2019 19:28:41	03/10/2019 19:28:41	08:00	90	2.06	0.13	4.17	6/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2021 DM PM		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2021 DM PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	16	16
2	1	0	0
3	1	8	8
4	1	0	0
5	1	0	0
6	1	8	8
7	1	8	8
8	1	0	0
9	1	0	0
10	1	0	0
11	1	16	16
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	16	0
	3	0	8	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	8
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	16
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 12, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	12	7	7	7
	4	✓	6	E,F	17	62	45	7	7
	5	✓	7	G	73	80	7	1	7

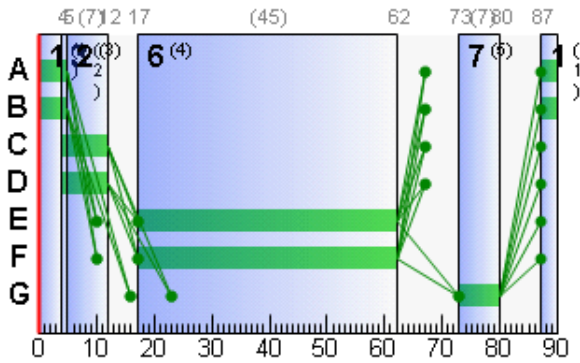
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	12	8
	D	1	✓	4	12	8
	E	1	✓	17	62	45
	F	1	✓	17	62	45
	G	1	✓	73	80	7

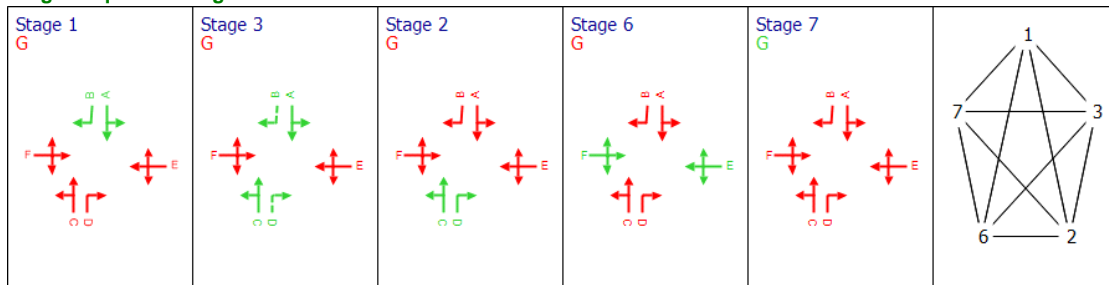
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	17	62	45
2	1		1	F	17	62	45
5	1		1	C	4	12	8
6	1		1	D	4	12	8
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	16	1800	45	920	2	5075	11.03	0.20	1.13	23.03
	2	1	Western Residential Link	F	0	1800	45	920	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		8	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	8	180	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	8	1918	8	192	4	2058	37.31	0.18	3.47	40.91
	7	1	(untitled)		8	1800	90	1800	0	20150	0.00	0.00	0.00	8.40
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		16	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	12	7	7	7
	4	✓	6	E,F	17	62	45	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	2	5075	16	1800	45	11.03	0.20	1.13	0.70	0.10	0.79
	2	1	0	Unrestricted	0	1800	45	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	8	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	Unrestricted	0	1800	8	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	4	2058	8	1918	8	37.31	0.18	3.47	1.18	0.09	1.27
	7	1	0	20150	8	1800	90	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	16	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	16	16	0		1800	920	2		5075	0.00	45
	2	1	0	0	0		1800	920	0		Unrestricted	0.00	45
	3	1	8	8	0		Unrestricted	Unrestricted	0		Unrestricted	1.63	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	180	0		Unrestricted	0.00	8
	6	1	8	8	0		1918	192	4		2058	0.00	8
	7	1	8	8	0		1800	1800	0		20150	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	16	16	0		Unrestricted	Unrestricted	0		Unrestricted	0.83	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	11.03	0.05	0.70	47.61	7.62	0.10
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	37.31	0.08	1.18	89.14	7.13	0.09
	7	1	8.40	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	0.20	17.39	1.13	0.00	45.00	
	2	1	0.00	0.00	17.39	0.00	0.00	46.00	
	3	1	0.00	0.00	17.39	0.00	0.00	86.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	9.00	
	6	1	0.00	0.18	5.22	3.47	0.00	8.00	
	7	1	0.00	0.00	12.17	0.00	0.00	90.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	85.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.20	0.00	0.20	1.00	0.00	0.79
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	0.18	0.00	0.18	1.00	0.00	1.27
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
2	03/10/2019 19:28:41	03/10/2019 19:28:41	08:00	90	2.06	0.13	4.17	6/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	4	-100	56	662	8.48	1.87	0.18	2.06

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	56	56	0		4		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	13.60	8.48	0.13	1.87	26.34	14.75	0.18

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))
08:00-09:00	3.47	0.00	657.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	2.06

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	46.6	0.0
3	0.0	61.3	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	8	61.31	8	61.31
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	16	46.62	16	46.62
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	16	1800	45	45.00	2	5075	23.03	11.03	47.61	0.20
2	1	Western Residential Link		1	F	0	1800	45	46.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				8	Unrestricted	90	86.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	8	1918	8	8.00	4	2058	40.91	37.31	89.14	0.18
7	1	(untitled)				8	1800	90	90.00	0	20150	8.40	0.00	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				16	Unrestricted	90	85.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	6.34	0.34	18.47	0.13	1.87	0.18	0.00	2.06
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	6.34	0.34	18.47	0.13	1.87	0.18	0.00	2.06

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

A3 - 2021 DS AM D3 - 2021 DS AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
3	03/10/2019 19:28:40	03/10/2019 19:28:40	08:00	90	20.66	1.33	17.59	1/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2021 DS AM		D3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2021 DS AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	102	102
2	1	0	0
3	1	99	99
4	1	0	0
5	1	0	0
6	1	99	99
7	1	99	99
8	1	0	0
9	1	0	0
10	1	0	0
11	1	102	102
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	102	0
	3	0	99	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	99
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	102
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 29, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	29	24	7	7
	4	✓	6	E,F	34	62	28	7	7
	5	✓	7	G	73	80	7	1	7

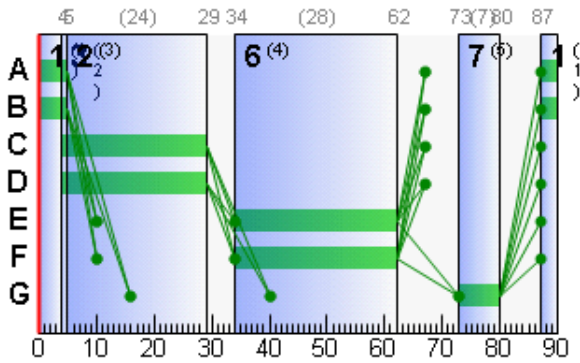
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	29	25
	D	1	✓	4	29	25
	E	1	✓	34	62	28
	F	1	✓	34	62	28
	G	1	✓	73	80	7

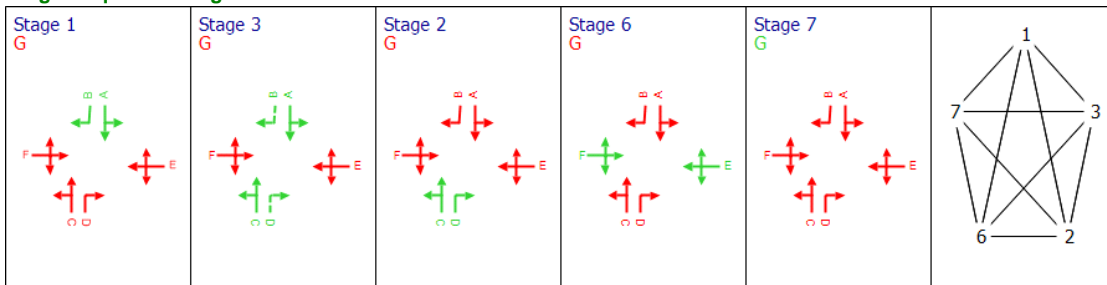
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	34	62	28
2	1		1	F	34	62	28
5	1		1	C	4	29	25
6	1		1	D	4	29	25
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	102	1800	28	580	18	412	22.60	1.83	10.53	34.60
	2	1	Western Residential Link	F	0	1800	28	580	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		99	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	25	520	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	99	2008	25	580	17	427	24.91	1.86	35.65	28.51
	7	1	(untitled)		99	1800	90	1800	6	1536	0.06	0.00	0.01	8.46
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		102	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	29	24	7	7
	4	✓	6	E,F	34	62	28	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	
1	A	A	7	300	0	0	Unknown	
	B	B	7	300	0	0	Unknown	
	III							
	D	D	7	300	0	0	Unknown	
	E	E	7	300	0	0	Unknown	
	F	F	7	300	0	0	Unknown	
	G	G	7	300	0	0	Unknown	

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	18	412	102	1800	28	22.60	1.83	10.53	9.09	0.90	9.99
	2	1	0	Unrestricted	0	1800	28	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	99	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	Unrestricted	0	1800	25	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	17	427	99	2008	25	24.91	1.86	35.65	9.73	0.92	10.64
	7	1	6	1536	99	1800	90	0.06	0.00	0.01	0.02	0.00	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	102	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	102	102	0		1800	580	18		412	0.00	28
	2	1	0	0	0		1800	580	0		Unrestricted	0.00	28
	3	1	99	99	0		Unrestricted	Unrestricted	0		Unrestricted	1.35	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	520	0		Unrestricted	0.00	25
	6	1	99	99	0		2008	580	17		427	0.00	25
	7	1	99	99	0		1800	1800	6		1536	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	102	102	0		Unrestricted	Unrestricted	0		Unrestricted	1.18	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	22.60	0.64	9.09	70.53	71.94	0.90
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	24.91	0.69	9.73	73.84	73.10	0.92
	7	1	8.40	0.06	0.00	0.02	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	1.83	17.39	10.53	0.00	0.00	
	2	1	0.00	0.00	17.39	0.00	0.00	29.00	
	3	1	0.00	0.00	17.39	0.00	0.00	62.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	26.00	
	6	1	0.00	1.86	5.22	35.65	0.00	0.00	
	7	1	0.00	0.00	12.17	0.01	0.00	0.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	57.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	1.83	0.02	1.75	1.00	0.00	9.99
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	1.86	0.02	1.78	1.00	0.00	10.64
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.02
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
3	03/10/2019 19:28:40	03/10/2019 19:28:40	08:00	90	20.66	1.33	17.59	1/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	18	-100	501	662	9.53	18.84	1.82	20.66

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	501	501	0		18		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	11.99	9.53	1.33	18.84	28.95	145.04	1.82

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	35.65	0.00	462.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	20.66

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	58.2	0.0
3	0.0	49.0	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	99	48.97	99	48.97
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	102	58.18	102	58.18
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	102	1800	28	0.00	18	412	34.60	22.60	70.53	1.83
2	1	Western Residential Link		1	F	0	1800	28	29.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				99	Unrestricted	90	62.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	25	26.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	99	2008	25	0.00	17	427	28.51	24.91	73.84	1.86
7	1	(untitled)				99	1800	90	0.00	6	1536	8.46	0.06	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				102	Unrestricted	90	57.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	50.05	3.00	16.71	1.33	18.84	1.82	0.00	20.66
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	50.05	3.00	16.71	1.33	18.84	1.82	0.00	20.66

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

A4 - 2021 DS PM

D4 - 2021 DS PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
4	03/10/2019 19:28:40	03/10/2019 19:28:40	08:00	90	9.84	0.63	11.32	1/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2021 DS PM		D4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2021 DS PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	43	43
2	1	0	0
3	1	59	59
4	1	0	0
5	1	0	0
6	1	59	59
7	1	59	59
8	1	0	0
9	1	0	0
10	1	0	0
11	1	43	43
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	43	0
	3	0	59	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	59
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	43
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 39, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	39	34	7	7
	4	✓	6	E,F	44	62	18	7	7
	5	✓	7	G	73	80	7	1	7

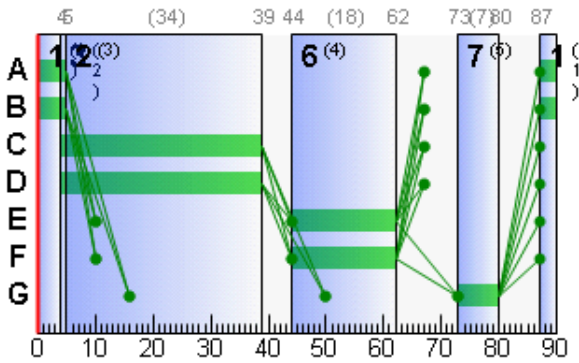
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	39	35
	D	1	✓	4	39	35
	E	1	✓	44	62	18
	F	1	✓	44	62	18
	G	1	✓	73	80	7

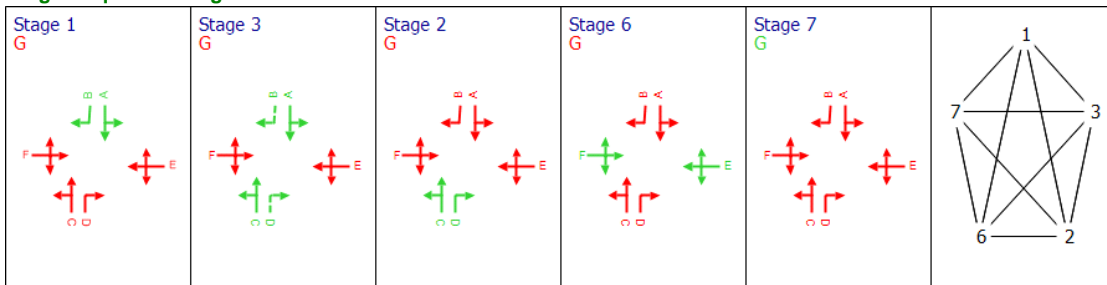
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	44	62	18
2	1		1	F	44	62	18
5	1		1	C	4	39	35
6	1		1	D	4	39	35
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	43	1800	18	380	11	695	29.34	0.87	4.99	41.34
	2	1	Western Residential Link	F	0	1800	18	380	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		59	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	35	720	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	59	2021	35	808	7	1133	17.10	0.92	17.65	20.70
	7	1	(untitled)		59	1800	90	1800	3	2646	0.03	0.00	0.00	8.43
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		43	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	39	34	7	7
	4	✓	6	E,F	44	62	18	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	11	695	43	1800	18	29.34	0.87	4.99	4.98	0.43	5.40
	2	1	0	Unrestricted	0	1800	18	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	59	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	Unrestricted	0	1800	35	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	7	1133	59	2021	35	17.10	0.92	17.65	3.98	0.45	4.43
	7	1	3	2646	59	1800	90	0.03	0.00	0.00	0.01	0.00	0.01
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	43	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s per cycle)
08:00-09:00	1	1	43	43	0		1800	380	11		695	0.00	18
	2	1	0	0	0		1800	380	0		Unrestricted	0.00	18
	3	1	59	59	0		Unrestricted	Unrestricted	0		Unrestricted	1.13	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	720	0		Unrestricted	0.00	35
	6	1	59	59	0		2021	808	7		1133	0.00	35
	7	1	59	59	0		1800	1800	3		2646	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	43	43	0		Unrestricted	Unrestricted	0		Unrestricted	1.35	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	29.34	0.35	4.98	79.36	34.12	0.43
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	17.10	0.28	3.98	61.09	36.04	0.45
	7	1	8.40	0.03	0.00	0.01	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)	Estimated blocking
08:00-09:00	1	1	0.00	0.87	17.39	4.99	0.00	17.00	
	2	1	0.00	0.00	17.39	0.00	0.00	19.00	
	3	1	0.00	0.00	17.39	0.00	0.00	64.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	36.00	
	6	1	0.00	0.92	5.22	17.65	0.00	33.00	
	7	1	0.00	0.00	12.17	0.00	0.00	90.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	70.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.87	0.01	0.86	1.00	0.00	5.40
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	0.92	0.00	0.89	1.00	0.00	4.43
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.01
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
4	03/10/2019 19:28:40	03/10/2019 19:28:40	08:00	90	9.84	0.63	11.32	1/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	11	-100	263	662	8.64	8.96	0.88	9.84

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	263	263	0		11		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	11.20	8.64	0.63	8.96	26.68	70.16	0.88

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	17.65	0.00	617.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	9.84

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	64.9	0.0
3	0.0	41.1	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	59	41.13	59	41.13
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	43	64.92	43	64.92
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	43	1800	18	17.00	11	695	41.34	29.34	79.36	0.87
2	1	Western Residential Link		1	F	0	1800	18	19.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				59	Unrestricted	90	64.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	35	36.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	59	2021	35	33.00	7	1133	20.70	17.10	61.09	0.92
7	1	(untitled)				59	1800	90	90.00	3	2646	8.43	0.03	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				43	Unrestricted	90	70.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	24.55	1.45	16.94	0.63	8.96	0.88	0.00	9.84
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	24.55	1.45	16.94	0.63	8.96	0.88	0.00	9.84

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

A5 - 2026 DM AM

D5 - 2026 DM AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
5	03/10/2019 19:28:41	03/10/2019 19:28:42	08:00	90	37.14	2.36	32.92	1/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2026 DM AM		D5	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2026 DM AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2041	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	19	43.09		2041
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	79	79
2	1	0	0
3	1	62	62
4	1	0	0
5	1	193	193
6	1	31	31
7	1	224	224
8	1	161	161
9	1	0	0
10	1	232	232
11	1	170	170
12	1	161	161

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

From	To			
	1	2	3	4
1	0	0	0	0
2	0	0	40	39
3	0	31	0	193
4	0	31	130	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	31
	6		4	2	12/1, 8/1, 3/1	Normal	31
	7		4	3	12/1, 8/1, 11/1	Normal	130
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	193
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	40
	13		2	4	1/1, 10/1	Normal	39

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 39, 46, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	39	35	1	1
	3	✓	2	C,D	39	46	7	7	7
	4	✓	6	E,F	51	62	11	7	7
	5	✓	7	G	73	80	7	1	7

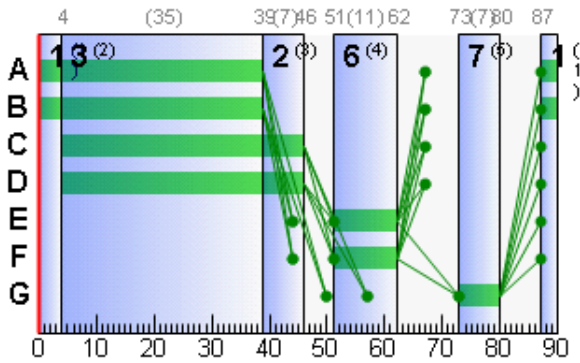
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	39	42
	B	1	✓	87	39	42
	C	1	✓	4	46	42
	D	1	✓	4	46	42
	E	1	✓	51	62	11
	F	1	✓	51	62	11
	G	1	✓	73	80	7

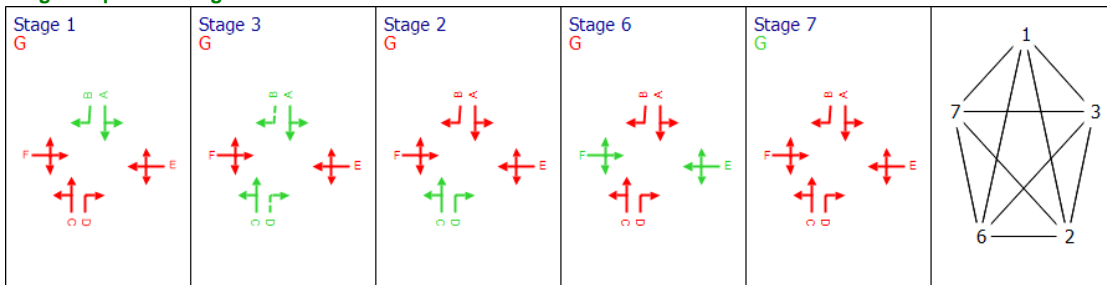
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	51	62	11
2	1		1	F	51	62	11
5	1		1	C	4	46	42
6	1		1	D	4	46	42
8	1		1	A	87	39	42
9	1		1	B	87	39	42

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	79	1800	11	240	33	173	39.04	1.86	10.68	51.04
	2	1	Western Residential Link	F	0	1800	11	240	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		62	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	193	1800	42	860	22	301	14.36	2.82	54.05	17.96
	6	1	Link Road South RTL	D	31	1539	42	735	4	2035	12.66	0.41	7.94	16.26
	7	1	(untitled)		224	1800	90	1800	12	623	0.14	0.01	0.07	8.54
	8	1	Link Road North	A	161	2041	42	975	17	445	13.69	2.30	44.03	17.29
	9	1	Link Road South RTL	B	0	0	42	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		232	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	25.87
	11	1	(untitled)		170	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		161	1800	90	1800	9	906	0.10	0.00	0.04	8.50

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	39	35	1	1
	3	✓	2	C,D	39	46	7	7	7
	4	✓	6	E,F	51	62	11	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2041	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	33	173	79	1800	11	39.04	1.86	10.68	12.17	0.92	13.08
	2	1	0	Unrestricted	0	1800	11	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	62	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	22	301	193	1800	42	14.36	2.82	54.05	10.93	1.38	12.31
	6	1	4	2035	31	1539	42	12.66	0.41	7.94	1.55	0.20	1.75
	7	1	12	623	224	1800	90	0.14	0.01	0.07	0.13	0.00	0.13
	8	1	17	445	161	2041	42	13.69	2.30	44.03	8.69	1.11	9.80
	9	1	0	-100	0	0	42	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	232	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	170	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	9	906	161	1800	90	0.10	0.00	0.04	0.06	0.00	0.06

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s per cycle)
08:00-09:00	1	1	79	79	0		1800	240	33		173	0.00	11
	2	1	0	0	0		1800	240	0		Unrestricted	0.00	11
	3	1	62	62	0		Unrestricted	Unrestricted	0		Unrestricted	0.89	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	193	193	0		1800	860	22		301	0.00	42
	6	1	31	31	0		1539	735	4		2035	0.00	42
	7	1	224	224	0		1800	1800	12		623	0.00	90
	8	1	161	161	0		2041	975	17		445	0.00	42
	9	1	0	0	0		0	0	0		-100	0.00	42
	10	1	232	232	0		Unrestricted	Unrestricted	0		Unrestricted	0.66	90
	11	1	170	170	0		Unrestricted	Unrestricted	0		Unrestricted	0.65	90
	12	1	161	161	0		1800	1800	9		906	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	39.04	0.86	12.17	92.71	73.24	0.92
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	14.36	0.77	10.93	57.07	110.14	1.38
	6	1	3.60	12.66	0.11	1.55	51.74	16.04	0.20
	7	1	8.40	0.14	0.01	0.13	0.00	0.00	0.00
	8	1	3.60	13.69	0.61	8.69	54.82	88.27	1.11
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	25.87	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	8.40	0.10	0.00	0.06	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)	Estimated blocking
08:00-09:00	1	1	0.00	1.86	17.39	10.68	0.00	0.00	
	2	1	0.00	0.00	17.39	0.00	0.00	12.00	
	3	1	0.00	0.00	17.39	0.00	0.00	47.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	2.82	5.22	54.05	0.00	0.00	
	6	1	0.00	0.41	5.22	7.94	0.00	41.00	
	7	1	0.00	0.01	12.17	0.07	0.00	0.00	
	8	1	0.00	2.30	5.22	44.03	0.00	0.00	
	9	1	0.00	0.00	5.22	0.00	0.00	43.00	
	10	1	0.00	0.00	37.49	0.00	0.00	24.00	
	11	1	0.00	0.00	34.18	0.00	0.00	24.00	
	12	1	0.00	0.00	12.17	0.04	0.00	0.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	1.86	0.08	1.79	1.00	0.00	13.08
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	2.82	0.03	2.55	1.00	0.00	12.31
	6	1	0.00	0.00	✓	0.41	0.00	0.41	1.00	0.00	1.75
	7	1	0.00	0.00	✓	0.01			1.00	0.00	0.13
	8	1	0.00	0.00	✓	2.30	0.02	2.12	1.00	0.00	9.80
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.06

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
5	03/10/2019 19:28:41	03/10/2019 19:28:42	08:00	90	37.14	2.36	32.92	1/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	33	-100	1313	730	6.47	33.53	3.61	37.14

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	1313	1313	0		33		-100	730

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	12.43	6.47	2.36	33.53	21.91	287.69	3.61

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	54.05	0.00	281.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	37.14

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	74.6	76.9
3	0.0	36.8	0.0	52.4
4	0.0	37.8	49.4	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	31	36.80	31	36.80
6	4	2	31	37.79	31	37.79
7	4	3	130	49.37	130	49.37
8	4	1	0	0.00	0	0.00
9	3	4	193	52.37	193	52.37
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	40	74.63	40	74.63
13	2	4	39	76.91	39	76.91

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	79	1800	11	0.00	33	173	51.04	39.04	92.71	1.86
2	1	Western Residential Link		1	F	0	1800	11	12.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				62	Unrestricted	90	47.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	193	1800	42	0.00	22	301	17.96	14.36	57.07	2.82
6	1	Link Road South RTL		1	D	31	1539	42	41.00	4	2035	16.26	12.66	51.74	0.41
7	1	(untitled)				224	1800	90	0.00	12	623	8.54	0.14	0.00	0.01
8	1	Link Road North		1	A	161	2041	42	0.00	17	445	17.29	13.69	54.82	2.30
9	1	Link Road South RTL		1	B	0	0	42	43.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				232	Unrestricted	90	24.00	0	Unrestricted	25.87	0.00	0.00	0.00
11	1	(untitled)				170	Unrestricted	90	24.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				161	1800	90	0.00	9	906	8.50	0.10	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	136.02	6.90	19.73	2.36	33.53	3.61	0.00	37.14
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	136.02	6.90	19.73	2.36	33.53	3.61	0.00	37.14

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

A6 - 2026 DM PM

D6 - 2026 DM PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
6	03/10/2019 19:28:42	03/10/2019 19:28:42	08:00	90	7.75	0.49	10.00	1/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2026 DM PM		D6	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2026 DM PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2049	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	8	43.09		2049
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	16	16
2	1	0	0
3	1	8	8
4	1	0	0
5	1	49	49
6	1	4	4
7	1	53	53
8	1	53	53
9	1	0	0
10	1	57	57
11	1	57	57
12	1	53	53

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	8	8
	3	0	4	0	49
	4	0	4	49	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	4
	6		4	2	12/1, 8/1, 3/1	Normal	4
	7		4	3	12/1, 8/1, 11/1	Normal	49
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	49
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	8
	13		2	4	1/1, 10/1	Normal	8

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 43, 50, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	43	39	1	1
	3	✓	2	C,D	43	50	7	7	7
	4	✓	6	E,F	55	62	7	7	7
	5	✓	7	G	73	80	7	1	7

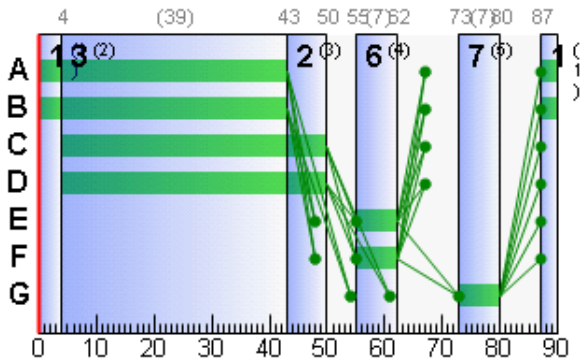
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	43	46
	B	1	✓	87	43	46
	C	1	✓	4	50	46
	D	1	✓	4	50	46
	E	1	✓	55	62	7
	F	1	✓	55	62	7
	G	1	✓	73	80	7

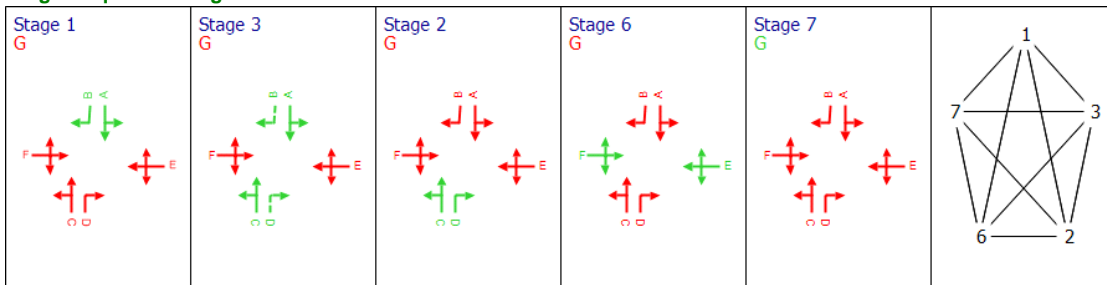
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	55	62	7
2	1		1	F	55	62	7
5	1		1	C	4	50	46
6	1		1	D	4	50	46
8	1		1	A	87	43	46
9	1		1	B	87	43	46

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	16	1800	7	160	10	800	39.06	0.37	2.13	51.06
	2	1	Western Residential Link	F	0	1800	7	160	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		8	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	49	1800	46	940	5	1627	10.70	0.60	11.51	14.30
	6	1	Link Road South RTL	D	4	1531	46	799	1	17886	10.52	0.05	0.92	14.12
	7	1	(untitled)		53	1800	90	1800	3	2957	0.03	0.00	0.00	8.43
	8	1	Link Road North	A	53	2049	46	1070	5	1717	10.66	0.65	12.44	14.26
	9	1	Link Road South RTL	B	0	0	46	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		57	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	25.87
	11	1	(untitled)		57	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		53	1800	90	1800	3	2957	0.03	0.00	0.00	8.43

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	43	39	1	1
	3	✓	2	C,D	43	50	7	7	7
	4	✓	6	E,F	55	62	7	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2049	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	10	800	16	1800	7	39.06	0.37	2.13	2.47	0.18	2.65
	2	1	0	Unrestricted	0	1800	7	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	8	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	5	1627	49	1800	46	10.70	0.60	11.51	2.07	0.29	2.36
	6	1	1	17886	4	1531	46	10.52	0.05	0.92	0.17	0.02	0.19
	7	1	3	2957	53	1800	90	0.03	0.00	0.00	0.01	0.00	0.01
	8	1	5	1717	53	2049	46	10.66	0.65	12.44	2.23	0.32	2.54
	9	1	0	-100	0	0	46	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	57	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	57	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	3	2957	53	1800	90	0.03	0.00	0.00	0.01	0.00	0.01

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	16	16	0		1800	160	10		800	0.00	7
	2	1	0	0	0		1800	160	0		Unrestricted	0.00	7
	3	1	8	8	0		Unrestricted	Unrestricted	0		Unrestricted	0.80	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	49	49	0		1800	940	5		1627	0.00	46
	6	1	4	4	0		1531	799	1		17886	0.00	46
	7	1	53	53	0		1800	1800	3		2957	0.00	90
	8	1	53	53	0		2049	1070	5		1717	0.00	46
	9	1	0	0	0		0	0	0		-100	0.00	46
	10	1	57	57	0		Unrestricted	Unrestricted	0		Unrestricted	0.64	90
	11	1	57	57	0		Unrestricted	Unrestricted	0		Unrestricted	0.64	90
	12	1	53	53	0		1800	1800	3		2957	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	39.06	0.17	2.47	91.18	14.59	0.18
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	10.70	0.15	2.07	47.68	23.36	0.29
	6	1	3.60	10.52	0.01	0.17	46.48	1.86	0.02
	7	1	8.40	0.03	0.00	0.01	0.00	0.00	0.00
	8	1	3.60	10.66	0.16	2.23	47.60	25.23	0.32
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	25.87	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	8.40	0.03	0.00	0.01	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	0.37	17.39	2.13	0.00	7.00	
	2	1	0.00	0.00	17.39	0.00	0.00	8.00	
	3	1	0.00	0.00	17.39	0.00	0.00	90.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.60	5.22	11.51	0.00	45.00	
	6	1	0.00	0.05	5.22	0.92	0.00	46.00	
	7	1	0.00	0.00	12.17	0.00	0.00	90.00	
	8	1	0.00	0.65	5.22	12.44	0.00	45.00	
	9	1	0.00	0.00	5.22	0.00	0.00	47.00	
	10	1	0.00	0.00	37.49	0.00	0.00	61.00	
	11	1	0.00	0.00	34.18	0.00	0.00	64.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.37	0.01	0.37	1.00	0.00	2.65
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.60	0.00	0.59	1.00	0.00	2.36
	6	1	0.00	0.00	✓	0.05	0.00	0.05	1.00	0.00	0.19
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.01
	8	1	0.00	0.00	✓	0.65	0.00	0.63	1.00	0.00	2.54
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.01

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
6	03/10/2019 19:28:42	03/10/2019 19:28:42	08:00	90	7.75	0.49	10.00	1/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	10	-100	350	738	5.03	6.94	0.82	7.75

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	350	350	0		10		-100	738

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	12.51	5.03	0.49	6.94	18.58	65.04	0.82

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))
08:00-09:00	12.44	0.00	683.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	7.75

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	74.6	76.9
3	0.0	34.6	0.0	48.6
4	0.0	34.7	46.3	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	4	34.55	4	34.55
6	4	2	4	34.69	4	34.69
7	4	3	49	46.27	49	46.27
8	4	1	0	0.00	0	0.00
9	3	4	49	48.60	49	48.60
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	8	74.64	8	74.64
13	2	4	8	76.93	8	76.93

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	16	1800	7	7.00	10	800	51.06	39.06	91.18	0.37
2	1	Western Residential Link		1	F	0	1800	7	8.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				8	Unrestricted	90	90.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	49	1800	46	45.00	5	1627	14.30	10.70	47.68	0.60
6	1	Link Road South RTL		1	D	4	1531	46	46.00	1	17886	14.12	10.52	46.48	0.05
7	1	(untitled)				53	1800	90	90.00	3	2957	8.43	0.03	0.00	0.00
8	1	Link Road North		1	A	53	2049	46	45.00	5	1717	14.26	10.66	47.60	0.65
9	1	Link Road South RTL		1	B	0	0	46	47.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				57	Unrestricted	90	61.00	0	Unrestricted	25.87	0.00	0.00	0.00
11	1	(untitled)				57	Unrestricted	90	64.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				53	1800	90	90.00	3	2957	8.43	0.03	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	36.49	1.71	21.40	0.49	6.94	0.82	0.00	7.75
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	36.49	1.71	21.40	0.49	6.94	0.82	0.00	7.75

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

A7 - 2026 DS AM

D7 - 2026 DS AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
7	03/10/2019 19:28:42	03/10/2019 19:28:43	08:00	90	60.00	3.84	34.00	1/1	0	0	1/1	7/1	1/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2026 DS AM		D7	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2026 DS AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2036	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	27	43.09		2036
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	102	102
2	1	78	78
3	1	99	99
4	1	39	39
5	1	213	213
6	1	50	50
7	1	263	263
8	1	179	179
9	1	19	19
10	1	283	283
11	1	220	220
12	1	198	198

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	39	39
	2	0	0	51	51
	3	20	50	0	193
	4	19	49	130	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	20
	4		3	2	7/1, 6/1, 3/1	Normal	50
	6		4	2	12/1, 8/1, 3/1	Normal	49
	7		4	3	12/1, 8/1, 11/1	Normal	130
	8		4	1	12/1, 9/1, 4/1	Normal	19
	9		3	4	7/1, 5/1, 10/1	Normal	193
	10		1	4	2/1, 10/1	Normal	39
	11		1	3	2/1, 11/1	Normal	39
	12		2	3	1/1, 11/1	Normal	51
	13		2	4	1/1, 10/1	Normal	51

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 36, 43, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	36	32	1	1
	3	✓	2	C,D	36	43	7	7	7
	4	✓	6	E,F	48	62	14	7	7
	5	✓	7	G	73	80	7	1	7

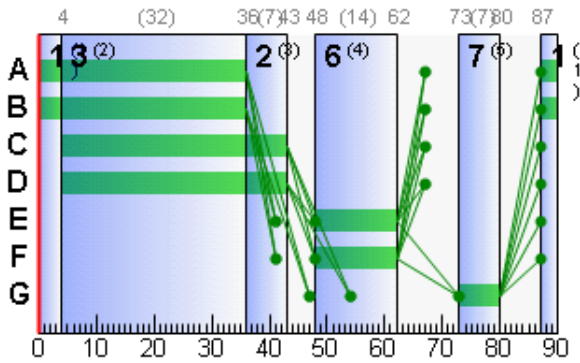
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	36	39
	B	1	✓	87	36	39
	C	1	✓	4	43	39
	D	1	✓	4	43	39
	E	1	✓	48	62	14
	F	1	✓	48	62	14
	G	1	✓	73	80	7

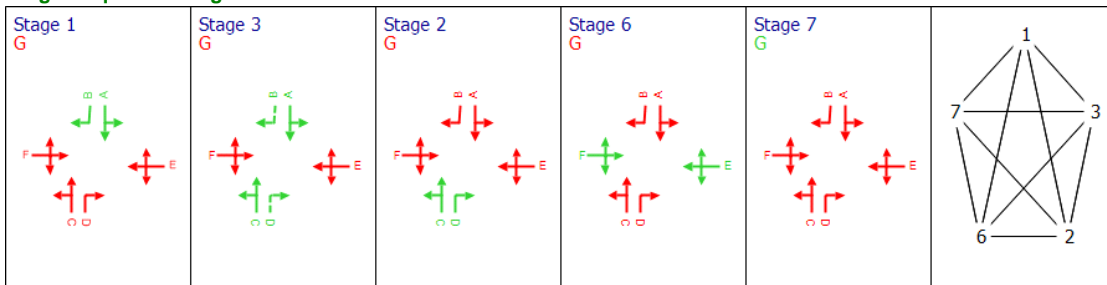
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	48	62	14
2	1		1	F	48	62	14
5	1		1	C	4	43	39
6	1		1	D	4	43	39
8	1		1	A	87	36	39
9	1		1	B	87	36	39

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	102	1800	14	300	34	165	36.23	2.33	13.37	48.23
	2	1	Western Residential Link	F	78	1800	14	300	26	246	34.80	1.74	9.98	46.80
	3	1	(untitled)		99	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		39	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	5	1	Link Road South	C	213	1800	39	800	27	238	16.58	3.36	64.43	20.18
	6	1	Link Road South RTL	D	50	1547	39	687	7	1137	14.62	0.71	13.63	18.22
	7	1	(untitled)		263	1800	90	1800	15	516	0.17	0.01	0.10	8.57
	8	1	Link Road North	A	179	2036	39	905	20	355	15.73	2.71	51.93	19.33
	9	1	Link Road South RTL	B	19	1502	39	668	3	3062	14.25	0.26	5.07	17.85
	10	1	(untitled)		283	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	25.87
	11	1	(untitled)		220	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		198	1800	90	1800	11	718	0.12	0.01	0.06	8.52

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	36	32	1	1
	3	✓	2	C,D	36	43	7	7	7
	4	✓	6	E,F	48	62	14	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2036	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	34	165	102	1800	14	36.23	2.33	13.37	14.58	1.15	15.72
	2	1	26	246	78	1800	14	34.80	1.74	9.98	10.71	0.86	11.56
	3	1	0	Unrestricted	99	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	39	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	27	238	213	1800	39	16.58	3.36	64.43	13.93	1.65	15.58
	6	1	7	1137	50	1547	39	14.62	0.71	13.63	2.88	0.35	3.23
	7	1	15	516	263	1800	90	0.17	0.01	0.10	0.18	0.00	0.18
	8	1	20	355	179	2036	39	15.73	2.71	51.93	11.10	1.33	12.43
	9	1	3	3062	19	1502	39	14.25	0.26	5.07	1.07	0.13	1.20
	10	1	0	Unrestricted	283	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	220	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	11	718	198	1800	90	0.12	0.01	0.06	0.10	0.00	0.10

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	102	102	0		1800	300	34		165	0.00	14
	2	1	78	78	0		1800	300	26		246	0.00	14
	3	1	99	99	0		Unrestricted	Unrestricted	0		Unrestricted	0.96	90
	4	1	39	39	0		Unrestricted	Unrestricted	0		Unrestricted	0.96	90
	5	1	213	213	0		1800	800	27		238	0.00	39
	6	1	50	50	0		1547	687	7		1137	0.00	39
	7	1	263	263	0		1800	1800	15		516	0.00	90
	8	1	179	179	0		2036	905	20		355	0.00	39
	9	1	19	19	0		1502	668	3		3062	0.00	39
	10	1	283	283	0		Unrestricted	Unrestricted	0		Unrestricted	0.67	90
	11	1	220	220	0		Unrestricted	Unrestricted	0		Unrestricted	0.70	90
	12	1	198	198	0		1800	1800	11		718	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	36.23	1.03	14.58	89.85	91.65	1.15
	2	1	12.00	34.80	0.75	10.71	87.67	68.39	0.86
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	16.58	0.98	13.93	61.74	131.51	1.65
	6	1	3.60	14.62	0.20	2.88	55.58	27.79	0.35
	7	1	8.40	0.17	0.01	0.18	0.00	0.00	0.00
	8	1	3.60	15.73	0.78	11.10	59.23	106.02	1.33
	9	1	3.60	14.25	0.08	1.07	54.33	10.32	0.13
	10	1	25.87	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	8.40	0.12	0.01	0.10	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	2.33	17.39	13.37	0.00	0.00	
	2	1	0.00	1.74	17.39	9.98	0.00	0.00	
	3	1	0.00	0.00	17.39	0.00	0.00	44.00	
	4	1	0.00	0.00	17.39	0.00	0.00	70.00	
	5	1	0.00	3.36	5.22	64.43	0.00	0.00	
	6	1	0.00	0.71	5.22	13.63	0.00	38.00	
	7	1	0.00	0.01	12.17	0.10	0.00	0.00	
	8	1	0.00	2.71	5.22	51.93	0.00	0.00	
	9	1	0.00	0.26	5.22	5.07	0.00	39.00	
	10	1	0.00	0.00	37.49	0.00	0.00	20.00	
	11	1	0.00	0.00	34.18	0.00	0.00	21.00	
	12	1	0.00	0.01	12.17	0.06	0.00	0.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	2.33	0.09	2.21	1.00	0.00	15.72
	2	1	0.00	0.00	✓	1.74	0.05	1.67	1.00	0.00	11.56
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	3.36	0.05	3.01	1.00	0.00	15.58
	6	1	0.00	0.00	✓	0.71	0.00	0.70	1.00	0.00	3.23
	7	1	0.00	0.00	✓	0.01			1.00	0.00	0.18
	8	1	0.00	0.00	✓	2.71	0.02	2.51	1.00	0.00	12.43
	9	1	0.00	0.00	✓	0.26	0.00	0.26	1.00	0.00	1.20
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.01			1.00	0.00	0.10

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
7	03/10/2019 19:28:42	03/10/2019 19:28:43	08:00	90	60.00	3.84	34.00	1/1	0	0	1/1	7/1	1/1

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	34	165	1743	724	7.93	54.54	5.46	60.00

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	1743	1743	0		34		165	724

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	12.54	7.93	3.84	54.54	25.00	435.67	5.46

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	64.43	0.00	232.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	60.00

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
	1	2	3	4	
From	1	0.0	0.0	70.4	72.7
	2	0.0	0.0	71.8	74.1
	3	40.7	38.8	0.0	54.6
	4	38.4	39.8	51.4	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	20	40.75	20	40.75
4	3	2	50	38.79	50	38.79
6	4	2	49	39.85	49	39.85
7	4	3	130	51.44	130	51.44
8	4	1	19	38.37	19	38.37
9	3	4	193	54.62	193	54.62
10	1	4	39	72.67	39	72.67
11	1	3	39	70.38	39	70.38
12	2	3	51	71.81	51	71.81
13	2	4	51	74.10	51	74.10

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	102	1800	14	0.00	34	165	48.23	36.23	89.85	2.33
2	1	Western Residential Link		1	F	78	1800	14	0.00	26	246	46.80	34.80	87.67	1.74
3	1	(untitled)				99	Unrestricted	90	44.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				39	Unrestricted	90	70.00	0	Unrestricted	12.00	0.00	0.00	0.00
5	1	Link Road South		1	C	213	1800	39	0.00	27	238	20.18	16.58	61.74	3.36
6	1	Link Road South RTL		1	D	50	1547	39	38.00	7	1137	18.22	14.62	55.58	0.71
7	1	(untitled)				263	1800	90	0.00	15	516	8.57	0.17	0.00	0.01
8	1	Link Road North		1	A	179	2036	39	0.00	20	355	19.33	15.73	59.23	2.71
9	1	Link Road South RTL		1	B	19	1502	39	39.00	3	3062	17.85	14.25	54.33	0.26
10	1	(untitled)				283	Unrestricted	90	20.00	0	Unrestricted	25.87	0.00	0.00	0.00
11	1	(untitled)				220	Unrestricted	90	21.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				198	1800	90	0.00	11	718	8.52	0.12	0.00	0.01

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	182.14	9.91	18.38	3.84	54.54	5.46	0.00	60.00
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	182.14	9.91	18.38	3.84	54.54	5.46	0.00	60.00

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

A8 - 2026 DS PM

D8 - 2026 DS PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
8	03/10/2019 19:28:43	03/10/2019 19:28:43	08:00	90	30.30	1.94	17.33	2/1	0	0	2/1	7/1	2/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2026 DS PM		D8	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2026 DS PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2029	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	37	43.09		2029
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	43	43
2	1	52	52
3	1	59	59
4	1	100	100
5	1	99	99
6	1	30	30
7	1	129	129
8	1	78	78
9	1	50	50
10	1	96	96
11	1	97	97
12	1	128	128

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	26	26
	2	0	0	22	21
	3	50	30	0	49
	4	50	29	49	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	50
	4		3	2	7/1, 6/1, 3/1	Normal	30
	6		4	2	12/1, 8/1, 3/1	Normal	29
	7		4	3	12/1, 8/1, 11/1	Normal	49
	8		4	1	12/1, 9/1, 4/1	Normal	50
	9		3	4	7/1, 5/1, 10/1	Normal	49
	10		1	4	2/1, 10/1	Normal	26
	11		1	3	2/1, 11/1	Normal	26
	12		2	3	1/1, 11/1	Normal	22
	13		2	4	1/1, 10/1	Normal	21

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 36, 43, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	36	32	1	1
	3	✓	2	C,D	36	43	7	7	7
	4	✓	6	E,F	48	62	14	7	7
	5	✓	7	G	73	80	7	1	7

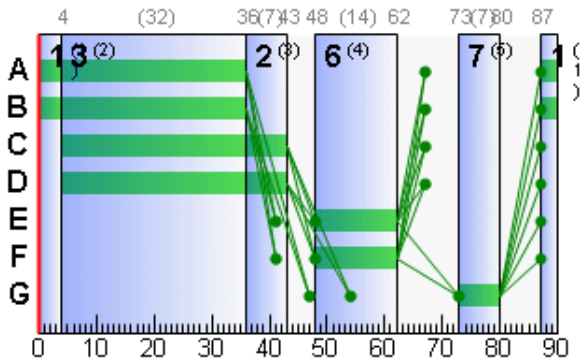
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	36	39
	B	1	✓	87	36	39
	C	1	✓	4	43	39
	D	1	✓	4	43	39
	E	1	✓	48	62	14
	F	1	✓	48	62	14
	G	1	✓	73	80	7

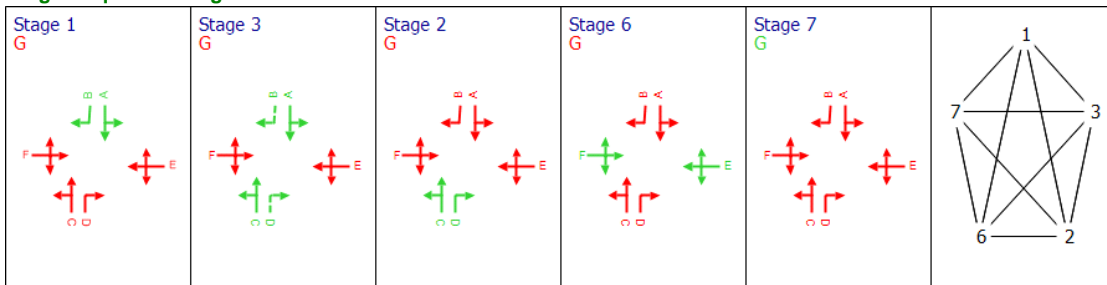
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	48	62	14
2	1		1	F	48	62	14
5	1		1	C	4	43	39
6	1		1	D	4	43	39
8	1		1	A	87	36	39
9	1		1	B	87	36	39

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	43	1800	14	300	14	528	33.05	0.92	5.29	45.05
	2	1	Western Residential Link	F	52	1800	14	300	17	419	33.47	1.13	6.50	45.47
	3	1	(untitled)		59	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		100	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	5	1	Link Road South	C	99	1800	39	800	12	627	15.02	1.44	27.58	18.62
	6	1	Link Road South RTL	D	30	1547	39	687	4	1962	14.32	0.43	8.16	17.92
	7	1	(untitled)		129	1800	90	1800	7	1156	0.08	0.00	0.02	8.48
	8	1	Link Road North	A	78	2029	39	902	9	941	14.63	1.11	21.26	18.23
	9	1	Link Road South RTL	B	50	1502	39	668	7	1102	14.55	0.71	13.63	18.15
	10	1	(untitled)		96	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	25.87
	11	1	(untitled)		97	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		128	1800	90	1800	7	1166	0.08	0.00	0.02	8.48

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	36	32	1	1
	3	✓	2	C,D	36	43	7	7	7
	4	✓	6	E,F	48	62	14	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2029	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)	
08:00-09:00	1	1	14	528	43	1800	14	33.05	0.92	5.29	5.61	0.45	6.06	
	2	1	17	419	52	1800	14	33.47	1.13	6.50	6.86	0.56	7.42	
	3	1	0	Unrestricted	59	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00	
	4	1	0	Unrestricted	100	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00	
	5	1	12	627	99	1800	39	15.02	1.44	27.58	5.87	0.71	6.57	
	6	1	4	1962	30	1547	39	14.32	0.43	8.16	1.69	0.21	1.90	
	7	1	7	1156	129	1800	90	0.08	0.00	0.02	0.04	0.00	0.04	
	8	1	9	941	78	2029	39	14.63	1.11	21.26	4.50	0.54	5.05	
	9	1	7	1102	50	1502	39	14.55	0.71	13.63	2.87	0.35	3.22	
	10	1	0	Unrestricted	96	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	97	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	7	1166	128	1800	90	0.08	0.00	0.02	0.04	0.00	0.00	0.04

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	43	43	0		1800	300	14		528	0.00	14
	2	1	52	52	0		1800	300	17		419	0.00	14
	3	1	59	59	0		Unrestricted	Unrestricted	0		Unrestricted	0.96	90
	4	1	100	100	0		Unrestricted	Unrestricted	0		Unrestricted	0.96	90
	5	1	99	99	0		1800	800	12		627	0.00	39
	6	1	30	30	0		1547	687	4		1962	0.00	39
	7	1	129	129	0		1800	1800	7		1156	0.00	90
	8	1	78	78	0		2029	902	9		941	0.00	39
	9	1	50	50	0		1502	668	7		1102	0.00	39
	10	1	96	96	0		Unrestricted	Unrestricted	0		Unrestricted	0.74	90
	11	1	97	97	0		Unrestricted	Unrestricted	0		Unrestricted	0.76	90
	12	1	128	128	0		1800	1800	7		1166	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	33.05	0.39	5.61	84.24	36.22	0.45
	2	1	12.00	33.47	0.48	6.86	85.62	44.52	0.56
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	15.02	0.41	5.87	56.82	56.25	0.71
	6	1	3.60	14.32	0.12	1.69	55.28	16.58	0.21
	7	1	8.40	0.08	0.00	0.04	0.00	0.00	0.00
	8	1	3.60	14.63	0.32	4.50	55.56	43.34	0.54
	9	1	3.60	14.55	0.20	2.87	55.59	27.80	0.35
	10	1	25.87	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	8.40	0.08	0.00	0.04	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	0.92	17.39	5.29	0.00	13.00	
	2	1	0.00	1.13	17.39	6.50	0.00	12.00	
	3	1	0.00	0.00	17.39	0.00	0.00	60.00	
	4	1	0.00	0.00	17.39	0.00	0.00	44.00	
	5	1	0.00	1.44	5.22	27.58	0.00	0.00	
	6	1	0.00	0.43	5.22	8.16	0.00	38.00	
	7	1	0.00	0.00	12.17	0.02	0.00	0.00	
	8	1	0.00	1.11	5.22	21.26	0.00	0.00	
	9	1	0.00	0.71	5.22	13.63	0.00	38.00	
	10	1	0.00	0.00	37.49	0.00	0.00	44.00	
	11	1	0.00	0.00	34.18	0.00	0.00	47.00	
	12	1	0.00	0.00	12.17	0.02	0.00	0.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.92	0.01	0.91	1.00	0.00	6.06
	2	1	0.00	0.00	✓	1.13	0.02	1.10	1.00	0.00	7.42
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	1.44	0.01	1.38	1.00	0.00	6.57
	6	1	0.00	0.00	✓	0.43	0.00	0.42	1.00	0.00	1.90
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.04
	8	1	0.00	0.00	✓	1.11	0.00	1.09	1.00	0.00	5.05
	9	1	0.00	0.00	✓	0.71	0.00	0.70	1.00	0.00	3.22
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.04

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
8	03/10/2019 19:28:43	03/10/2019 19:28:43	08:00	90	30.30	1.94	17.33	2/1	0	0	2/1	7/1	2/1

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	17	419	961	724	7.25	27.48	2.82	30.30

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	961	961	0		17		419	724

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	11.35	7.25	1.94	27.48	23.38	224.72	2.82

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	27.58	0.00	296.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	30.30

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To			
		1	2	3	4
From	1	0.0	0.0	69.1	71.3
	2	0.0	0.0	68.6	70.9
	3	39.1	38.4	0.0	53.0
	4	38.6	38.7	50.3	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	50	39.10	50	39.10
4	3	2	30	38.40	30	38.40
6	4	2	29	38.71	29	38.71
7	4	3	49	50.29	49	50.29
8	4	1	50	38.63	50	38.63
9	3	4	49	52.97	49	52.97
10	1	4	26	71.34	26	71.34
11	1	3	26	69.05	26	69.05
12	2	3	22	68.63	22	68.63
13	2	4	21	70.92	21	70.92

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	43	1800	14	13.00	14	528	45.05	33.05	84.24	0.92
2	1	Western Residential Link		1	F	52	1800	14	12.00	17	419	45.47	33.47	85.62	1.13
3	1	(untitled)				59	Unrestricted	90	60.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				100	Unrestricted	90	44.00	0	Unrestricted	12.00	0.00	0.00	0.00
5	1	Link Road South		1	C	99	1800	39	0.00	12	627	18.62	15.02	56.82	1.44
6	1	Link Road South RTL		1	D	30	1547	39	38.00	4	1962	17.92	14.32	55.28	0.43
7	1	(untitled)				129	1800	90	0.00	7	1156	8.48	0.08	0.00	0.00
8	1	Link Road North		1	A	78	2029	39	0.00	9	941	18.23	14.63	55.56	1.11
9	1	Link Road South RTL		1	B	50	1502	39	38.00	7	1102	18.15	14.55	55.59	0.71
10	1	(untitled)				96	Unrestricted	90	44.00	0	Unrestricted	25.87	0.00	0.00	0.00
11	1	(untitled)				97	Unrestricted	90	47.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				128	1800	90	0.00	7	1166	8.48	0.08	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	90.86	4.96	18.30	1.94	27.48	2.82	0.00	30.30
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	90.86	4.96	18.30	1.94	27.48	2.82	0.00	30.30

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

A9 - 2036 DM AM

D9 - 2036 DM AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
9	03/10/2019 19:28:43	03/10/2019 19:28:44	08:00	90	38.97	2.46	38.75	1/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2036 DM AM		D9	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2036 DM AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2039	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	23	43.09		2039
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	62	62
2	1	0	0
3	1	79	79
4	1	0	0
5	1	277	277
6	1	40	40
7	1	317	317
8	1	168	168
9	1	0	0
10	1	308	308
11	1	160	160
12	1	168	168

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	31	31
	3	0	40	0	277
	4	0	39	129	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	40
	6		4	2	12/1, 8/1, 3/1	Normal	39
	7		4	3	12/1, 8/1, 11/1	Normal	129
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	277
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	31
	13		2	4	1/1, 10/1	Normal	31

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 43, 50, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	43	39	1	1
	3	✓	2	C,D	43	50	7	7	7
	4	✓	6	E,F	55	62	7	7	7
	5	✓	7	G	73	80	7	1	7

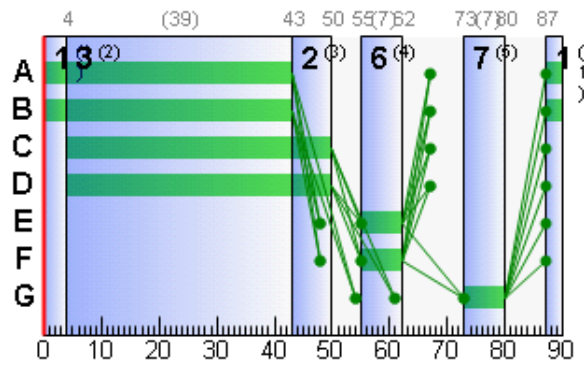
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	43	46
	B	1	✓	87	43	46
	C	1	✓	4	50	46
	D	1	✓	4	50	46
	E	1	✓	55	62	7
	F	1	✓	55	62	7
	G	1	✓	73	80	7

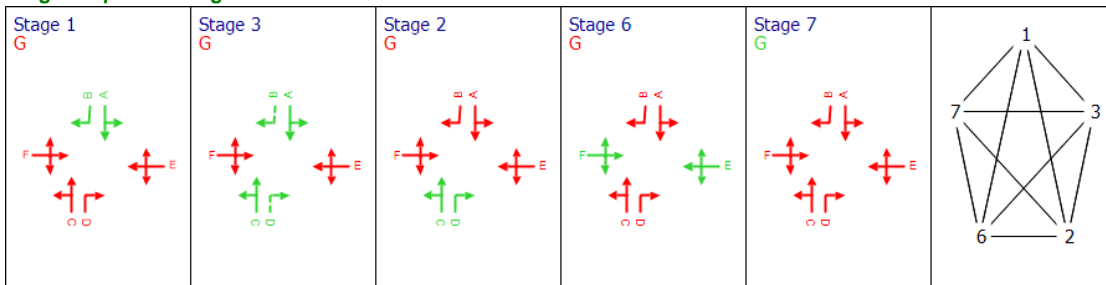
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	55	62	7
2	1		1	F	55	62	7
5	1		1	C	4	50	46
6	1		1	D	4	50	46
8	1		1	A	87	43	46
9	1		1	B	87	43	46

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	62	1800	7	160	39	132	45.74	1.57	9.02	57.74
	2	1	Western Residential Link	F	0	1800	7	160	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		79	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	277	1800	46	940	29	205	12.94	3.91	74.92	16.54
	6	1	Link Road South RTL	D	40	1531	46	799	5	1699	10.72	0.49	9.40	14.32
	7	1	(untitled)		317	1800	90	1800	18	411	0.21	0.02	0.15	8.61
	8	1	Link Road North	A	168	2039	46	1065	16	470	11.52	2.16	41.43	15.12
	9	1	Link Road South RTL	B	0	0	46	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		308	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	25.87
	11	1	(untitled)		160	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		168	1800	90	1800	9	864	0.10	0.00	0.04	8.50

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	43	39	1	1
	3	✓	2	C,D	43	50	7	7	7
	4	✓	6	E,F	55	62	7	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2039	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	39	132	62	1800	7	45.74	1.57	9.02	11.19	0.78	11.96
	2	1	0	Unrestricted	0	1800	7	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	79	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	29	205	277	1800	46	12.94	3.91	74.92	14.14	1.91	16.05
	6	1	5	1699	40	1531	46	10.72	0.49	9.40	1.69	0.24	1.93
	7	1	18	411	317	1800	90	0.21	0.02	0.15	0.27	0.00	0.27
	8	1	16	470	168	2039	46	11.52	2.16	41.43	7.63	1.06	8.69
	9	1	0	-100	0	0	46	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	308	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	160	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	9	864	168	1800	90	0.10	0.00	0.04	0.07	0.00	0.07

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s per cycle)
08:00-09:00	1	1	62	62	0		1800	160	39		132	0.00	7
	2	1	0	0	0		1800	160	0		Unrestricted	0.00	7
	3	1	79	79	0		Unrestricted	Unrestricted	0		Unrestricted	0.80	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	277	277	0		1800	940	29		205	0.00	46
	6	1	40	40	0		1531	799	5		1699	0.00	46
	7	1	317	317	0		1800	1800	18		411	0.00	90
	8	1	168	168	0		2039	1065	16		470	0.00	46
	9	1	0	0	0		0	0	0		-100	0.00	46
	10	1	308	308	0		Unrestricted	Unrestricted	0		Unrestricted	0.64	90
	11	1	160	160	0		Unrestricted	Unrestricted	0		Unrestricted	0.60	90
	12	1	168	168	0		1800	1800	9		864	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	45.74	0.79	11.19	99.70	61.81	0.78
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	12.94	1.00	14.14	55.02	152.41	1.91
	6	1	3.60	10.72	0.12	1.69	47.70	19.08	0.24
	7	1	8.40	0.21	0.02	0.27	0.00	0.00	0.00
	8	1	3.60	11.52	0.54	7.63	50.15	84.25	1.06
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	25.87	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	8.40	0.10	0.00	0.07	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)	Estimated blocking
08:00-09:00	1	1	0.00	1.57	17.39	9.02	0.00	0.00	
	2	1	0.00	0.00	17.39	0.00	0.00	8.00	
	3	1	0.00	0.00	17.39	0.00	0.00	41.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	3.91	5.22	74.92	0.00	0.00	
	6	1	0.00	0.49	5.22	9.40	0.00	45.00	
	7	1	0.00	0.02	12.17	0.15	0.00	0.00	
	8	1	0.00	2.16	5.22	41.43	0.00	0.00	
	9	1	0.00	0.00	5.22	0.00	0.00	47.00	
	10	1	0.00	0.00	37.49	0.00	0.00	21.00	
	11	1	0.00	0.00	34.18	0.00	0.00	23.00	
	12	1	0.00	0.00	12.17	0.04	0.00	0.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	1.57	0.12	1.53	1.00	0.00	11.96
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	3.91	0.06	3.37	1.00	0.00	16.05
	6	1	0.00	0.00	✓	0.49	0.00	0.48	1.00	0.00	1.93
	7	1	0.00	0.00	✓	0.02			1.00	0.00	0.27
	8	1	0.00	0.00	✓	2.16	0.01	2.02	1.00	0.00	8.69
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.07

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
9	03/10/2019 19:28:43	03/10/2019 19:28:44	08:00	90	38.97	2.46	38.75	1/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	39	-100	1579	738	5.62	34.99	3.98	38.97

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	1579	1579	0		39		-100	738

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	12.19	5.62	2.46	34.99	20.11	317.55	3.98

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	74.92	0.00	275.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	38.97

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	81.3	83.6
3	0.0	34.9	0.0	51.0
4	0.0	35.6	47.2	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	40	34.93	40	34.93
6	4	2	39	35.62	39	35.62
7	4	3	129	47.21	129	47.21
8	4	1	0	0.00	0	0.00
9	3	4	277	51.03	277	51.03
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	31	81.33	31	81.33
13	2	4	31	83.61	31	83.61

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	62	1800	7	0.00	39	132	57.74	45.74	99.70	1.57
2	1	Western Residential Link		1	F	0	1800	7	8.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				79	Unrestricted	90	41.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	277	1800	46	0.00	29	205	16.54	12.94	55.02	3.91
6	1	Link Road South RTL		1	D	40	1531	46	45.00	5	1699	14.32	10.72	47.70	0.49
7	1	(untitled)				317	1800	90	0.00	18	411	8.61	0.21	0.00	0.02
8	1	Link Road North		1	A	168	2039	46	0.00	16	470	15.12	11.52	50.15	2.16
9	1	Link Road South RTL		1	B	0	0	46	47.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				308	Unrestricted	90	21.00	0	Unrestricted	25.87	0.00	0.00	0.00
11	1	(untitled)				160	Unrestricted	90	23.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				168	1800	90	0.00	9	864	8.50	0.10	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	160.44	7.81	20.54	2.46	34.99	3.98	0.00	38.97
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	160.44	7.81	20.54	2.46	34.99	3.98	0.00	38.97

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

A10 - 2036 DM PM

D10 - 2036 DM PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
10	03/10/2019 19:28:44	03/10/2019 19:28:44	08:00	90	13.37	0.84	11.06	5/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2036 DM PM		D10	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2036 DM PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2052	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	4	43.09		2052
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	16	16
2	1	0	0
3	1	8	8
4	1	0	0
5	1	104	104
6	1	4	4
7	1	108	108
8	1	106	106
9	1	0	0
10	1	112	112
11	1	110	110
12	1	106	106

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	8	8
	3	0	4	0	104
	4	0	4	102	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	4
	6		4	2	12/1, 8/1, 3/1	Normal	4
	7		4	3	12/1, 8/1, 11/1	Normal	102
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	104
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	8
	13		2	4	1/1, 10/1	Normal	8

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 43, 50, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	43	39	1	1
	3	✓	2	C,D	43	50	7	7	7
	4	✓	6	E,F	55	62	7	7	7
	5	✓	7	G	73	80	7	1	7

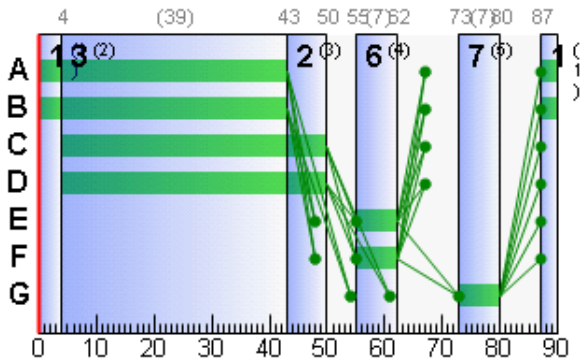
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	43	46
	B	1	✓	87	43	46
	C	1	✓	4	50	46
	D	1	✓	4	50	46
	E	1	✓	55	62	7
	F	1	✓	55	62	7
	G	1	✓	73	80	7

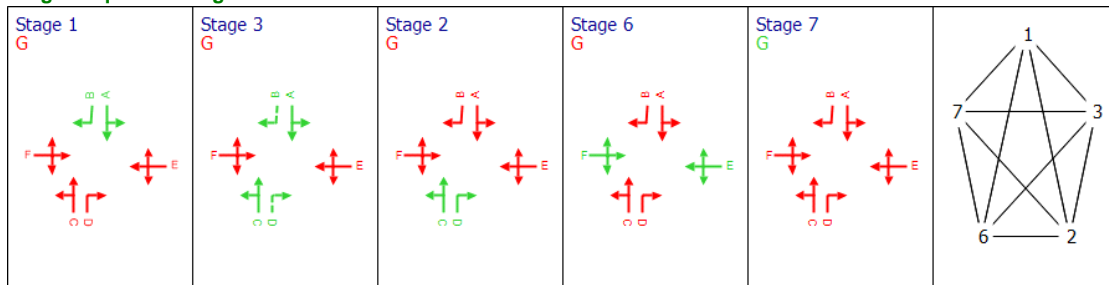
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	55	62	7
2	1		1	F	55	62	7
5	1		1	C	4	50	46
6	1		1	D	4	50	46
8	1		1	A	87	43	46
9	1		1	B	87	43	46

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	16	1800	7	160	10	800	39.06	0.37	2.13	51.06
	2	1	Western Residential Link	F	0	1800	7	160	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		8	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	104	1800	46	940	11	713	11.16	1.31	25.05	14.76
	6	1	Link Road South RTL	D	4	1531	46	799	1	17886	10.52	0.05	0.92	14.12
	7	1	(untitled)		108	1800	90	1800	6	1400	0.06	0.00	0.02	8.46
	8	1	Link Road North	A	106	2052	46	1072	10	810	11.04	1.33	25.50	14.64
	9	1	Link Road South RTL	B	0	0	46	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		112	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	25.87
	11	1	(untitled)		110	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		106	1800	90	1800	6	1428	0.06	0.00	0.02	8.46

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	43	39	1	1
	3	✓	2	C,D	43	50	7	7	7
	4	✓	6	E,F	55	62	7	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2052	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	10	800	16	1800	7	39.06	0.37	2.13	2.47	0.18	2.65
	2	1	0	Unrestricted	0	1800	7	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	8	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	11	713	104	1800	46	11.16	1.31	25.05	4.58	0.64	5.22
	6	1	1	17886	4	1531	46	10.52	0.05	0.92	0.17	0.02	0.19
	7	1	6	1400	108	1800	90	0.06	0.00	0.02	0.03	0.00	0.03
	8	1	10	810	106	2052	46	11.04	1.33	25.50	4.62	0.65	5.26
	9	1	0	-100	0	0	46	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	112	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	110	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	6	1428	106	1800	90	0.06	0.00	0.02	0.03	0.00	0.03

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	16	16	0		1800	160	10		800	0.00	7
	2	1	0	0	0		1800	160	0		Unrestricted	0.00	7
	3	1	8	8	0		Unrestricted	Unrestricted	0		Unrestricted	0.80	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	104	104	0		1800	940	11		713	0.00	46
	6	1	4	4	0		1531	799	1		17886	0.00	46
	7	1	108	108	0		1800	1800	6		1400	0.00	90
	8	1	106	106	0		2052	1072	10		810	0.00	46
	9	1	0	0	0		0	0	0		-100	0.00	46
	10	1	112	112	0		Unrestricted	Unrestricted	0		Unrestricted	0.68	90
	11	1	110	110	0		Unrestricted	Unrestricted	0		Unrestricted	0.69	90
	12	1	106	106	0		1800	1800	6		1428	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	39.06	0.17	2.47	91.18	14.59	0.18
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	11.16	0.32	4.58	48.95	50.91	0.64
	6	1	3.60	10.52	0.01	0.17	46.48	1.86	0.02
	7	1	8.40	0.06	0.00	0.03	0.00	0.00	0.00
	8	1	3.60	11.04	0.33	4.62	48.85	51.78	0.65
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	25.87	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	8.40	0.06	0.00	0.03	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	0.37	17.39	2.13	0.00	7.00	
	2	1	0.00	0.00	17.39	0.00	0.00	8.00	
	3	1	0.00	0.00	17.39	0.00	0.00	90.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	1.31	5.22	25.05	0.00	0.00	
	6	1	0.00	0.05	5.22	0.92	0.00	46.00	
	7	1	0.00	0.00	12.17	0.02	0.00	0.00	
	8	1	0.00	1.33	5.22	25.50	0.00	0.00	
	9	1	0.00	0.00	5.22	0.00	0.00	47.00	
	10	1	0.00	0.00	37.49	0.00	0.00	32.00	
	11	1	0.00	0.00	34.18	0.00	0.00	35.00	
	12	1	0.00	0.00	12.17	0.02	0.00	0.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.37	0.01	0.37	1.00	0.00	2.65
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	1.31	0.01	1.25	1.00	0.00	5.22
	6	1	0.00	0.00	✓	0.05	0.00	0.05	1.00	0.00	0.19
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.03
	8	1	0.00	0.00	✓	1.33	0.01	1.27	1.00	0.00	5.26
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.03

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
10	03/10/2019 19:28:44	03/10/2019 19:28:44	08:00	90	13.37	0.84	11.06	5/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	11	-100	674	738	4.47	11.88	1.49	13.37

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	674	674	0		11		-100	738

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	12.39	4.47	0.84	11.88	17.68	119.14	1.49

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	25.50	0.00	355.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	13.37

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
	1	2	3	4	
From	1	0.0	0.0	0.0	0.0
	2	0.0	0.0	74.6	76.9
	3	0.0	34.6	0.0	49.1
	4	0.0	35.1	46.7	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	4	34.59	4	34.59
6	4	2	4	35.10	4	35.10
7	4	3	102	46.69	102	46.69
8	4	1	0	0.00	0	0.00
9	3	4	104	49.09	104	49.09
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	8	74.64	8	74.64
13	2	4	8	76.93	8	76.93

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	16	1800	7	7.00	10	800	51.06	39.06	91.18	0.37
2	1	Western Residential Link		1	F	0	1800	7	8.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				8	Unrestricted	90	90.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	104	1800	46	0.00	11	713	14.76	11.16	48.95	1.31
6	1	Link Road South RTL		1	D	4	1531	46	46.00	1	17886	14.12	10.52	46.48	0.05
7	1	(untitled)				108	1800	90	0.00	6	1400	8.46	0.06	0.00	0.00
8	1	Link Road North		1	A	106	2052	46	0.00	10	810	14.64	11.04	48.85	1.33
9	1	Link Road South RTL		1	B	0	0	46	47.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				112	Unrestricted	90	32.00	0	Unrestricted	25.87	0.00	0.00	0.00
11	1	(untitled)				110	Unrestricted	90	35.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				106	1800	90	0.00	6	1428	8.46	0.06	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	69.56	3.16	22.05	0.84	11.88	1.49	0.00	13.37
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	69.56	3.16	22.05	0.84	11.88	1.49	0.00	13.37

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

A11 - 2036 DS AM

D11 - 2036 DS AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
11	03/10/2019 19:28:44	03/10/2019 19:28:45	08:00	90	70.23	4.49	40.00	5/1	0	0	5/1	7/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2036 DS AM		D11	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2036 DS AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2034	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	29	43.09		2034
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	102	102
2	1	78	78
3	1	99	99
4	1	39	39
5	1	336	336
6	1	50	50
7	1	386	386
8	1	168	168
9	1	19	19
10	1	406	406
11	1	209	209
12	1	187	187

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	39	39
	2	0	0	51	51
	3	20	50	0	316
	4	19	49	119	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	20
	4		3	2	7/1, 6/1, 3/1	Normal	50
	6		4	2	12/1, 8/1, 3/1	Normal	49
	7		4	3	12/1, 8/1, 11/1	Normal	119
	8		4	1	12/1, 9/1, 4/1	Normal	19
	9		3	4	7/1, 5/1, 10/1	Normal	316
	10		1	4	2/1, 10/1	Normal	39
	11		1	3	2/1, 11/1	Normal	39
	12		2	3	1/1, 11/1	Normal	51
	13		2	4	1/1, 10/1	Normal	51

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 38, 45, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	38	34	1	1
	3	✓	2	C,D	38	45	7	7	7
	4	✓	6	E,F	50	62	12	7	7
	5	✓	7	G	73	80	7	1	7

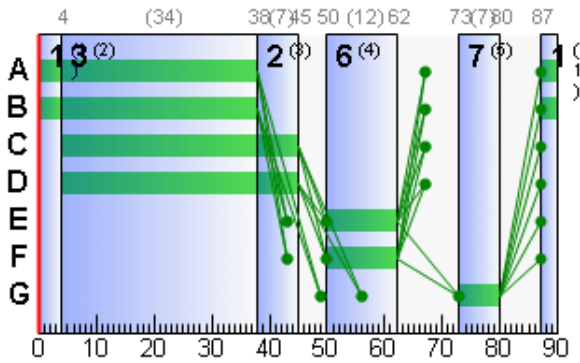
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	38	41
	B	1	✓	87	38	41
	C	1	✓	4	45	41
	D	1	✓	4	45	41
	E	1	✓	50	62	12
	F	1	✓	50	62	12
	G	1	✓	73	80	7

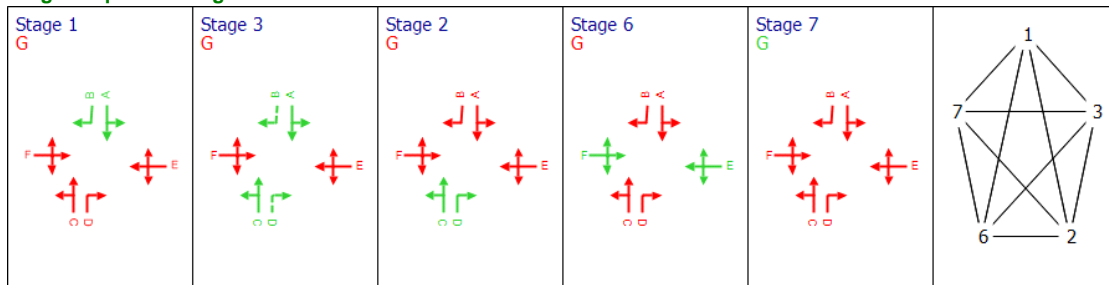
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	50	62	12
2	1		1	F	50	62	12
5	1		1	C	4	45	41
6	1		1	D	4	45	41
8	1		1	A	87	38	41
9	1		1	B	87	38	41

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	102	1800	12	260	39	129	39.38	2.42	13.92	51.38
	2	1	Western Residential Link	F	78	1800	12	260	30	200	37.42	1.80	10.33	49.42
	3	1	(untitled)		99	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		39	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	5	1	Link Road South	C	336	1800	41	840	40	125	17.16	5.64	108.09	20.76
	6	1	Link Road South RTL	D	50	1542	41	719	7	1195	13.48	0.68	13.09	17.08
	7	1	(untitled)		386	1800	90	1800	21	320	0.27	0.03	0.24	8.67
	8	1	Link Road North	A	168	2034	41	949	18	409	14.37	2.45	46.88	17.97
	9	1	Link Road South RTL	B	19	1499	41	700	3	3214	13.14	0.25	4.86	16.74
	10	1	(untitled)		406	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	25.87
	11	1	(untitled)		209	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		187	1800	90	1800	10	766	0.12	0.01	0.05	8.52

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	38	34	1	1
	3	✓	2	C,D	38	45	7	7	7
	4	✓	6	E,F	50	62	12	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2034	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	39	129	102	1800	12	39.38	2.42	13.92	15.84	1.20	17.04
	2	1	30	200	78	1800	12	37.42	1.80	10.33	11.51	0.89	12.40
	3	1	0	Unrestricted	99	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	39	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	40	125	336	1800	41	17.16	5.64	108.09	22.75	2.72	25.47
	6	1	7	1195	50	1542	41	13.48	0.68	13.09	2.66	0.33	2.99
	7	1	21	320	386	1800	90	0.27	0.03	0.24	0.42	0.00	0.42
	8	1	18	409	168	2034	41	14.37	2.45	46.88	9.52	1.20	10.72
	9	1	3	3214	19	1499	41	13.14	0.25	4.86	0.98	0.12	1.11
	10	1	0	Unrestricted	406	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	209	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	10	766	187	1800	90	0.12	0.01	0.05	0.09	0.00	0.09

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s per cycle)
08:00-09:00	1	1	102	102	0		1800	260	39		129	0.00	12
	2	1	78	78	0		1800	260	30		200	0.00	12
	3	1	99	99	0		Unrestricted	Unrestricted	0		Unrestricted	0.91	90
	4	1	39	39	0		Unrestricted	Unrestricted	0		Unrestricted	0.91	90
	5	1	336	336	0		1800	840	40		125	0.00	41
	6	1	50	50	0		1542	719	7		1195	0.00	41
	7	1	386	386	0		1800	1800	21		320	0.00	90
	8	1	168	168	0		2034	949	18		409	0.00	41
	9	1	19	19	0		1499	700	3		3214	0.00	41
	10	1	406	406	0		Unrestricted	Unrestricted	0		Unrestricted	0.65	90
	11	1	209	209	0		Unrestricted	Unrestricted	0		Unrestricted	0.70	90
	12	1	187	187	0		1800	1800	10		766	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	39.38	1.12	15.84	93.56	95.43	1.20
	2	1	12.00	37.42	0.81	11.51	90.83	70.85	0.89
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	17.16	1.60	22.75	64.64	217.19	2.72
	6	1	3.60	13.48	0.19	2.66	53.34	26.67	0.33
	7	1	8.40	0.27	0.03	0.42	0.00	0.00	0.00
	8	1	3.60	14.37	0.67	9.52	56.75	95.34	1.20
	9	1	3.60	13.14	0.07	0.98	52.10	9.90	0.12
	10	1	25.87	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	8.40	0.12	0.01	0.09	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)	Estimated blocking
08:00-09:00	1	1	0.00	2.42	17.39	13.92	0.00	0.00	
	2	1	0.00	1.80	17.39	10.33	0.00	0.00	
	3	1	0.00	0.00	17.39	0.00	0.00	42.00	
	4	1	0.00	0.00	17.39	0.00	0.00	68.00	
	5	1	0.00	5.64	5.22	108.09	0.00	0.00	
	6	1	0.00	0.68	5.22	13.09	0.00	40.00	
	7	1	0.00	0.03	12.17	0.24	0.00	5.00	
	8	1	0.00	2.45	5.22	46.88	0.00	0.00	
	9	1	0.00	0.25	5.22	4.86	0.00	41.00	
	10	1	0.00	0.00	37.49	0.00	0.00	18.00	
	11	1	0.00	0.00	34.18	0.00	0.00	19.00	
	12	1	0.00	0.01	12.17	0.05	0.00	0.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	2.42	0.13	2.31	1.00	0.00	17.04
	2	1	0.00	0.00	✓	1.80	0.06	1.73	1.00	0.00	12.40
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	5.64	0.13	4.61	1.00	0.00	25.47
	6	1	0.00	0.00	✓	0.68	0.00	0.67	1.00	0.00	2.99
	7	1	0.00	0.00	✓	0.03			1.00	0.00	0.42
	8	1	0.00	0.00	✓	2.45	0.02	2.26	1.00	0.00	10.72
	9	1	0.00	0.00	✓	0.25	0.00	0.25	1.00	0.00	1.11
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.01			1.00	0.00	0.09

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
11	03/10/2019 19:28:44	03/10/2019 19:28:45	08:00	90	70.23	4.49	40.00	5/1	0	0	5/1	7/1	5/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	40	125	2079	728	7.78	63.77	6.46	70.23

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	2079	2079	0		40		125	728

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	12.57	7.78	4.49	63.77	24.79	515.38	6.46

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	108.09	0.00	233.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	70.23

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
	1	2	3	4	
From	1	0.0	0.0	73.0	75.3
	2	0.0	0.0	75.0	77.2
	3	41.4	37.8	0.0	55.3
	4	37.3	38.5	50.1	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	20	41.44	20	41.44
4	3	2	50	37.75	50	37.75
6	4	2	49	38.49	49	38.49
7	4	3	119	50.07	119	50.07
8	4	1	19	37.25	19	37.25
9	3	4	316	55.30	316	55.30
10	1	4	39	75.28	39	75.28
11	1	3	39	73.00	39	73.00
12	2	3	51	74.96	51	74.96
13	2	4	51	77.25	51	77.25

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	102	1800	12	0.00	39	129	51.38	39.38	93.56	2.42
2	1	Western Residential Link		1	F	78	1800	12	0.00	30	200	49.42	37.42	90.83	1.80
3	1	(untitled)				99	Unrestricted	90	42.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				39	Unrestricted	90	68.00	0	Unrestricted	12.00	0.00	0.00	0.00
5	1	Link Road South		1	C	336 <	1800	41	0.00	40	125	20.76	17.16	64.64	5.64 +
6	1	Link Road South RTL		1	D	50	1542	41	40.00	7	1195	17.08	13.48	53.34	0.68
7	1	(untitled)				386	1800	90	5.00	21	320	8.67	0.27	0.00	0.03
8	1	Link Road North		1	A	168	2034	41	0.00	18	409	17.97	14.37	56.75	2.45
9	1	Link Road South RTL		1	B	19	1499	41	41.00	3	3214	16.74	13.14	52.10	0.25
10	1	(untitled)				406	Unrestricted	90	18.00	0	Unrestricted	25.87	0.00	0.00	0.00
11	1	(untitled)				209	Unrestricted	90	19.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				187	1800	90	0.00	10	766	8.52	0.12	0.00	0.01

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	217.70	11.75	18.53	4.49	63.77	6.46	0.00	70.23
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	217.70	11.75	18.53	4.49	63.77	6.46	0.00	70.23

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

A12 - 2036 DS PM

D12 - 2036 DS PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
12	03/10/2019 19:28:45	03/10/2019 19:28:45	08:00	90	39.76	2.53	23.64	2/1	0	0	2/1	12/1	2/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2036 DS PM		D12	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2036 DS PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2043	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	17	43.09		2043
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	43	43
2	1	52	52
3	1	59	59
4	1	100	100
5	1	167	167
6	1	30	30
7	1	197	197
8	1	168	168
9	1	50	50
10	1	164	164
11	1	187	187
12	1	218	218

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

From	To			
	1	2	3	4
1	0	0	26	26
2	0	0	22	21
3	50	30	0	117
4	50	29	139	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	50
	4		3	2	7/1, 6/1, 3/1	Normal	30
	6		4	2	12/1, 8/1, 3/1	Normal	29
	7		4	3	12/1, 8/1, 11/1	Normal	139
	8		4	1	12/1, 9/1, 4/1	Normal	50
	9		3	4	7/1, 5/1, 10/1	Normal	117
	10		1	4	2/1, 10/1	Normal	26
	11		1	3	2/1, 11/1	Normal	26
	12		2	3	1/1, 11/1	Normal	22
	13		2	4	1/1, 10/1	Normal	21

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	3, 39, 46, 61, 79

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	86	3	7	7	7
	2	✓	3	A,B,C,D	3	39	36	1	1
	3	✓	2	C,D	39	46	7	7	7
	4	✓	6	E,F	51	61	10	7	7
	5	✓	7	G	72	79	7	1	7

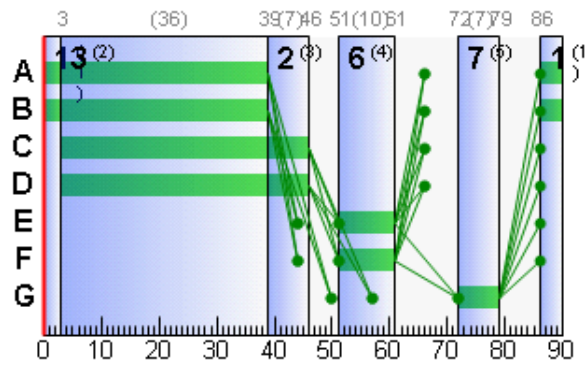
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	86	39	43
	B	1	✓	86	39	43
	C	1	✓	3	46	43
	D	1	✓	3	46	43
	E	1	✓	51	61	10
	F	1	✓	51	61	10
	G	1	✓	72	79	7

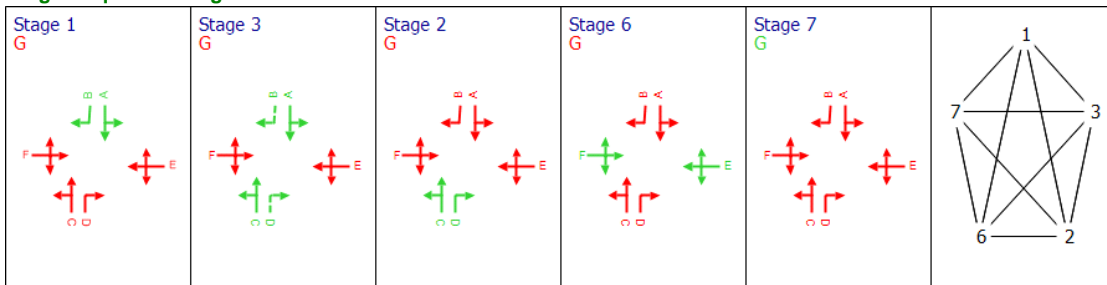
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	51	61	10
2	1		1	F	51	61	10
5	1		1	C	3	46	43
6	1		1	D	3	46	43
8	1		1	A	86	39	43
9	1		1	B	86	39	43

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	43	1800	10	220	20	360	37.52	0.98	5.63	49.52
	2	1	Western Residential Link	F	52	1800	10	220	24	281	38.27	1.21	6.94	50.27
	3	1	(untitled)		59	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		100	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	5	1	Link Road South	C	167	1800	43	880	19	374	13.45	2.34	44.88	17.05
	6	1	Link Road South RTL	D	30	1537	43	751	4	2154	12.11	0.38	7.36	15.71
	7	1	(untitled)		197	1800	90	1800	11	722	0.12	0.01	0.06	8.52
	8	1	Link Road North	A	168	2043	43	999	17	435	13.18	2.35	45.05	16.78
	9	1	Link Road South RTL	B	50	1496	43	732	7	1217	12.31	0.66	12.56	15.91
	10	1	(untitled)		164	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	25.87
	11	1	(untitled)		187	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		218	1800	90	1800	12	643	0.14	0.01	0.07	8.54

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	86	3	7	7	7
	2	✓	3	A,B,C,D	3	39	36	1	1
	3	✓	2	C,D	39	46	7	7	7
	4	✓	6	E,F	51	61	10	7	7
	5	✓	7	G	72	79	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2043	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	20	360	43	1800	10	37.52	0.98	5.63	6.36	0.48	6.85
	2	1	24	281	52	1800	10	38.27	1.21	6.94	7.85	0.60	8.45
	3	1	0	Unrestricted	59	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	100	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	19	374	167	1800	43	13.45	2.34	44.88	8.86	1.15	10.00
	6	1	4	2154	30	1537	43	12.11	0.38	7.36	1.43	0.19	1.62
	7	1	11	722	197	1800	90	0.12	0.01	0.06	0.10	0.00	0.10
	8	1	17	435	168	2043	43	13.18	2.35	45.05	8.73	1.14	9.88
	9	1	7	1217	50	1496	43	12.31	0.66	12.56	2.43	0.32	2.75
	10	1	0	Unrestricted	164	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	187	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	12	643	218	1800	90	0.14	0.01	0.07	0.12	0.00	0.12

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	43	43	0		1800	220	20		360	0.00	10
	2	1	52	52	0		1800	220	24		281	0.00	10
	3	1	59	59	0		Unrestricted	Unrestricted	0		Unrestricted	0.87	90
	4	1	100	100	0		Unrestricted	Unrestricted	0		Unrestricted	0.87	90
	5	1	167	167	0		1800	880	19		374	0.00	43
	6	1	30	30	0		1537	751	4		2154	0.00	43
	7	1	197	197	0		1800	1800	11		722	0.00	90
	8	1	168	168	0		2043	999	17		435	0.00	43
	9	1	50	50	0		1496	732	7		1217	0.00	43
	10	1	164	164	0		Unrestricted	Unrestricted	0		Unrestricted	0.65	90
	11	1	187	187	0		Unrestricted	Unrestricted	0		Unrestricted	0.65	90
	12	1	218	218	0		1800	1800	12		643	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	37.52	0.45	6.36	89.77	38.60	0.48
	2	1	12.00	38.27	0.55	7.85	91.47	47.56	0.60
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	13.45	0.62	8.86	54.75	91.43	1.15
	6	1	3.60	12.11	0.10	1.43	49.91	14.97	0.19
	7	1	8.40	0.12	0.01	0.10	0.00	0.00	0.00
	8	1	3.60	13.18	0.62	8.73	54.21	91.07	1.14
	9	1	3.60	12.31	0.17	2.43	51.11	25.55	0.32
	10	1	25.87	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	8.40	0.14	0.01	0.12	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	0.98	17.39	5.63	0.00	9.00	
	2	1	0.00	1.21	17.39	6.94	0.00	8.00	
	3	1	0.00	0.00	17.39	0.00	0.00	60.00	
	4	1	0.00	0.00	17.39	0.00	0.00	40.00	
	5	1	0.00	2.34	5.22	44.88	0.00	0.00	
	6	1	0.00	0.38	5.22	7.36	0.00	43.00	
	7	1	0.00	0.01	12.17	0.06	0.00	0.00	
	8	1	0.00	2.35	5.22	45.05	0.00	0.00	
	9	1	0.00	0.66	5.22	12.56	0.00	42.00	
	10	1	0.00	0.00	37.49	0.00	0.00	23.00	
	11	1	0.00	0.00	34.18	0.00	0.00	22.00	
	12	1	0.00	0.01	12.17	0.07	0.00	0.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.98	0.02	0.97	1.00	0.00	6.85
	2	1	0.00	0.00	✓	1.21	0.04	1.18	1.00	0.00	8.45
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	2.34	0.02	2.16	1.00	0.00	10.00
	6	1	0.00	0.00	✓	0.38	0.00	0.38	1.00	0.00	1.62
	7	1	0.00	0.00	✓	0.01			1.00	0.00	0.10
	8	1	0.00	0.00	✓	2.35	0.02	2.16	1.00	0.00	9.88
	9	1	0.00	0.00	✓	0.66	0.00	0.64	1.00	0.00	2.75
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.01			1.00	0.00	0.12

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
12	03/10/2019 19:28:45	03/10/2019 19:28:45	08:00	90	39.76	2.53	23.64	2/1	0	0	2/1	12/1	2/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	24	281	1435	732	6.34	35.88	3.88	39.76

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	1435	1435	0		24		281	732

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	11.62	6.34	2.53	35.88	21.55	309.19	3.88

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	45.05	0.00	247.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	39.76

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
	1	2	3	4	
From	1	0.0	0.0	73.9	76.1
	2	0.0	0.0	73.1	75.4
	3	37.6	36.2	0.0	51.4
	4	36.5	37.3	48.9	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	50	37.57	50	37.57
4	3	2	30	36.23	30	36.23
6	4	2	29	37.32	29	37.32
7	4	3	139	48.90	139	48.90
8	4	1	50	36.45	50	36.45
9	3	4	117	51.44	117	51.44
10	1	4	26	76.14	26	76.14
11	1	3	26	73.86	26	73.86
12	2	3	22	73.10	22	73.10
13	2	4	21	75.39	21	75.39

Final Prediction Table

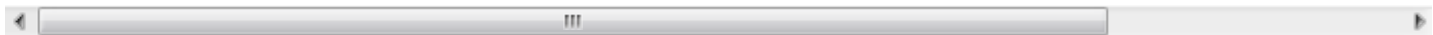
Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	43	1800	10	9.00	20	360	49.52	37.52	89.77	0.98
2	1	Western Residential Link		1	F	52	1800	10	8.00	24	281	50.27	38.27	91.47	1.21
3	1	(untitled)				59	Unrestricted	90	60.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				100	Unrestricted	90	40.00	0	Unrestricted	12.00	0.00	0.00	0.00
5	1	Link Road South		1	C	167	1800	43	0.00	19	374	17.05	13.45	54.75	2.34
6	1	Link Road South RTL		1	D	30	1537	43	43.00	4	2154	15.71	12.11	49.91	0.38
7	1	(untitled)				197	1800	90	0.00	11	722	8.52	0.12	0.00	0.01
8	1	Link Road North		1	A	168	2043	43	0.00	17	435	16.78	13.18	54.21	2.35
9	1	Link Road South RTL		1	B	50	1496	43	42.00	7	1217	15.91	12.31	51.11	0.66
10	1	(untitled)				164	Unrestricted	90	23.00	0	Unrestricted	25.87	0.00	0.00	0.00
11	1	(untitled)				187	Unrestricted	90	22.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				218	1800	90	0.00	12	643	8.54	0.14	0.00	0.01

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	139.01	7.16	19.41	2.53	35.88	3.88	0.00	39.76
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	139.01	7.16	19.41	2.53	35.88	3.88	0.00	39.76

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



APPENDIX F

TRANSYT Output Files – Option B

<h1>TRANSYT 15</h1>
Version: 15.5.2.7994 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trisoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: 170092- Transyt school link Option B.t15
Path: G:\2017\p170092\SHD - HOUSING\calcs\transyt
Report generation date: 03/10/2019 19:03:13

- »A1 - 2021 DM AM : D1 - 2021 DM AM* :
- »A2 - 2021 DM PM : D2 - 2021 DM PM* :
- »A3 - 2021 DS AM : D3 - 2021 DS AM* :
- »A4 - 2021 DS PM : D4 - 2021 DS PM* :
- »A5 - 2026 DM AM : D5 - 2026 DM AM* :
- »A6 - 2026 DM PM : D6 - 2026 DM PM* :
- »A7 - 2026 DS AM : D7 - 2026 DS AM* :
- »A8 - 2026 DS PM : D8 - 2026 DS PM* :
- »A9 - 2036 DM AM : D9 - 2036 DM AM* :
- »A10 - 2036 DM PM : D10 - 2036 DM PM* :
- »A11 - 2036 DS AM : D11 - 2036 DS AM* :
- »A12 - 2036 DS PM : D12 - 2036 DS PM* :

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	22/08/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HEADOFFICE\mcgeoughp
Description	

Model and Results

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

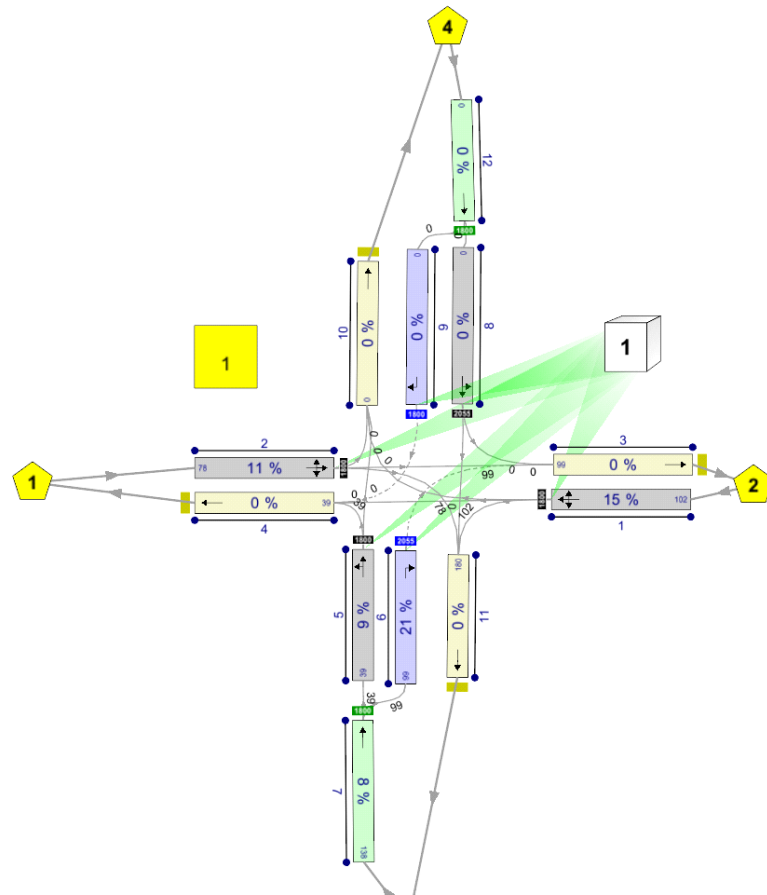
Units

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

Sorting

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

Network Diagrams



A1 - 2021 DM AM

D1 - 2021 DM AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	03/10/2019 18:55:20	03/10/2019 18:55:21	08:00	90	13.96	0.90	14.76	1/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2021 DM AM		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2021 DM AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	62	62
2	1	0	0
3	1	79	79
4	1	0	0
5	1	0	0
6	1	79	79
7	1	79	79
8	1	0	0
9	1	0	0
10	1	0	0
11	1	62	62
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	62	0
	3	0	79	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	79
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	62
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 37, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	37	32	7	7
	4	✓	6	E,F	42	62	20	7	7
	5	✓	7	G	73	80	7	1	7

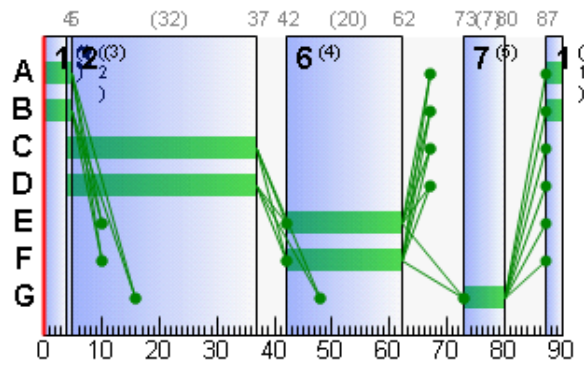
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	37	33
	D	1	✓	4	37	33
	E	1	✓	42	62	20
	F	1	✓	42	62	20
	G	1	✓	73	80	7

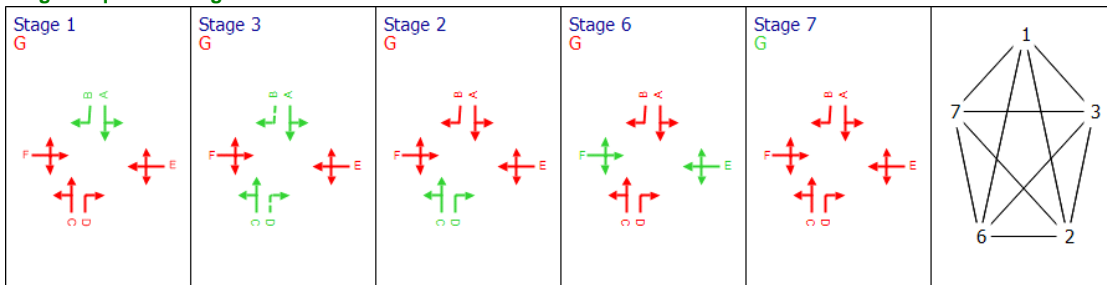
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	42	62	20
2	1		1	F	42	62	20
5	1		1	C	4	37	33
6	1		1	D	4	37	33
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	62	1800	20	420	15	510	28.17	1.24	7.10	40.17
	2	1	Western Residential Link	F	0	1800	20	420	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		79	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	33	680	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	79	2019	33	763	10	769	18.68	1.28	24.51	22.28
	7	1	(untitled)		79	1800	90	1800	4	1951	0.05	0.00	0.01	8.45
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		62	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	37	32	7	7
	4	✓	6	E,F	42	62	20	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	15	510	62	1800	20	28.17	1.24	7.10	6.89	0.61	7.50
	2	1	0	Unrestricted	0	1800	20	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	79	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	Unrestricted	0	1800	33	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	10	769	79	2019	33	18.68	1.28	24.51	5.82	0.63	6.45
	7	1	4	1951	79	1800	90	0.05	0.00	0.01	0.01	0.00	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	62	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	62	62	0		1800	420	15		510	0.00	20
	2	1	0	0	0		1800	420	0		Unrestricted	0.00	20
	3	1	79	79	0		Unrestricted	Unrestricted	0		Unrestricted	1.17	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	680	0		Unrestricted	0.00	33
	6	1	79	79	0		2019	763	10		769	0.00	33
	7	1	79	79	0		1800	1800	4		1951	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	62	62	0		Unrestricted	Unrestricted	0		Unrestricted	1.32	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	28.17	0.49	6.89	78.40	48.61	0.61
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	18.68	0.41	5.82	63.43	50.11	0.63
	7	1	8.40	0.05	0.00	0.01	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	1.24	17.39	7.10	0.00	0.00	
	2	1	0.00	0.00	17.39	0.00	0.00	21.00	
	3	1	0.00	0.00	17.39	0.00	0.00	55.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	34.00	
	6	1	0.00	1.28	5.22	24.51	0.00	0.00	
	7	1	0.00	0.00	12.17	0.01	0.00	0.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	66.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	1.24	0.01	1.20	1.00	0.00	7.50
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	1.28	0.01	1.23	1.00	0.00	6.45
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.01
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	03/10/2019 18:55:20	03/10/2019 18:55:21	08:00	90	13.96	0.90	14.76	1/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	15	-100	361	662	8.94	12.72	1.24	13.96

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	361	361	0		15		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	11.36	8.94	0.90	12.72	27.35	98.72	1.24

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	24.51	0.00	464.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	13.96

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	63.8	0.0
3	0.0	42.7	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	79	42.72	79	42.72
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	62	63.76	62	63.76
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	62	1800	20	0.00	15	510	40.17	28.17	78.40	1.24
2	1	Western Residential Link		1	F	0	1800	20	21.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				79	Unrestricted	90	55.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	33	34.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	79	2019	33	0.00	10	769	22.28	18.68	63.43	1.28
7	1	(untitled)				79	1800	90	0.00	4	1951	8.45	0.05	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				62	Unrestricted	90	66.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	34.19	2.04	16.79	0.90	12.72	1.24	0.00	13.96
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	34.19	2.04	16.79	0.90	12.72	1.24	0.00	13.96

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

A2 - 2021 DM PM

D2 - 2021 DM PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
2	03/10/2019 18:55:21	03/10/2019 18:55:21	08:00	90	2.06	0.13	4.17	6/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2021 DM PM		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2021 DM PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	16	16
2	1	0	0
3	1	8	8
4	1	0	0
5	1	0	0
6	1	8	8
7	1	8	8
8	1	0	0
9	1	0	0
10	1	0	0
11	1	16	16
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	16	0
	3	0	8	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	8
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	16
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 12, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	12	7	7	7
	4	✓	6	E,F	17	62	45	7	7
	5	✓	7	G	73	80	7	1	7

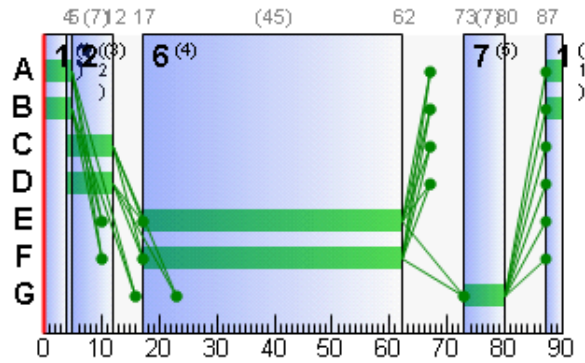
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	12	8
	D	1	✓	4	12	8
	E	1	✓	17	62	45
	F	1	✓	17	62	45
	G	1	✓	73	80	7

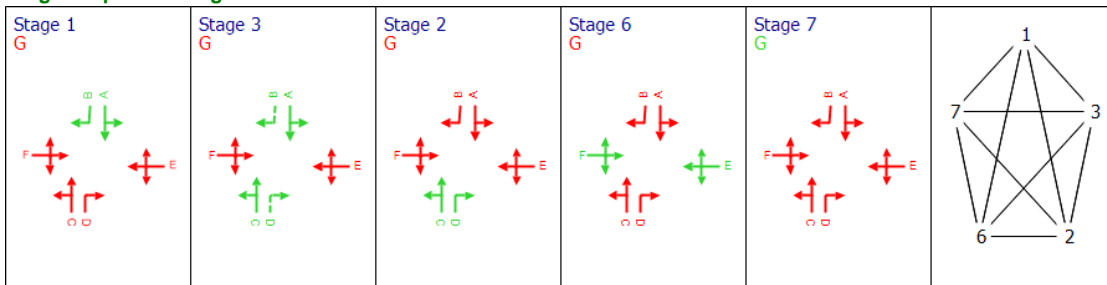
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	17	62	45
2	1		1	F	17	62	45
5	1		1	C	4	12	8
6	1		1	D	4	12	8
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	16	1800	45	920	2	5075	11.03	0.20	1.13	23.03
	2	1	Western Residential Link	F	0	1800	45	920	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		8	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	8	180	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	8	1918	8	192	4	2058	37.31	0.18	3.47	40.91
	7	1	(untitled)		8	1800	90	1800	0	20150	0.00	0.00	0.00	8.40
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		16	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	12	7	7	7
	4	✓	6	E,F	17	62	45	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	2	5075	16	1800	45	11.03	0.20	1.13	0.70	0.10	0.79
	2	1	0	Unrestricted	0	1800	45	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	8	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	Unrestricted	0	1800	8	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	4	2058	8	1918	8	37.31	0.18	3.47	1.18	0.09	1.27
	7	1	0	20150	8	1800	90	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	16	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	16	16	0		1800	920	2		5075	0.00	45
	2	1	0	0	0		1800	920	0		Unrestricted	0.00	45
	3	1	8	8	0		Unrestricted	Unrestricted	0		Unrestricted	1.63	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	180	0		Unrestricted	0.00	8
	6	1	8	8	0		1918	192	4		2058	0.00	8
	7	1	8	8	0		1800	1800	0		20150	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	16	16	0		Unrestricted	Unrestricted	0		Unrestricted	0.83	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	11.03	0.05	0.70	47.61	7.62	0.10
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	37.31	0.08	1.18	89.14	7.13	0.09
	7	1	8.40	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	0.20	17.39	1.13	0.00	45.00	
	2	1	0.00	0.00	17.39	0.00	0.00	46.00	
	3	1	0.00	0.00	17.39	0.00	0.00	86.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	9.00	
	6	1	0.00	0.18	5.22	3.47	0.00	8.00	
	7	1	0.00	0.00	12.17	0.00	0.00	90.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	85.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.20	0.00	0.20	1.00	0.00	0.79
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	0.18	0.00	0.18	1.00	0.00	1.27
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
2	03/10/2019 18:55:21	03/10/2019 18:55:21	08:00	90	2.06	0.13	4.17	6/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	4	-100	56	662	8.48	1.87	0.18	2.06

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	56	56	0		4		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	13.60	8.48	0.13	1.87	26.34	14.75	0.18

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	3.47	0.00	657.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	2.06

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	46.6	0.0
3	0.0	61.3	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	8	61.31	8	61.31
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	16	46.62	16	46.62
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	16	1800	45	45.00	2	5075	23.03	11.03	47.61	0.20
2	1	Western Residential Link		1	F	0	1800	45	46.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				8	Unrestricted	90	86.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	8	1918	8	8.00	4	2058	40.91	37.31	89.14	0.18
7	1	(untitled)				8	1800	90	90.00	0	20150	8.40	0.00	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				16	Unrestricted	90	85.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	6.34	0.34	18.47	0.13	1.87	0.18	0.00	2.06
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	6.34	0.34	18.47	0.13	1.87	0.18	0.00	2.06

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

A3 - 2021 DS AM D3 - 2021 DS AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
3	03/10/2019 18:55:19	03/10/2019 18:55:20	08:00	90	20.66	1.33	17.59	1/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2021 DS AM		D3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2021 DS AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	102	102
2	1	0	0
3	1	99	99
4	1	0	0
5	1	0	0
6	1	99	99
7	1	99	99
8	1	0	0
9	1	0	0
10	1	0	0
11	1	102	102
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	102	0
	3	0	99	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	99
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	102
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 29, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	29	24	7	7
	4	✓	6	E,F	34	62	28	7	7
	5	✓	7	G	73	80	7	1	7

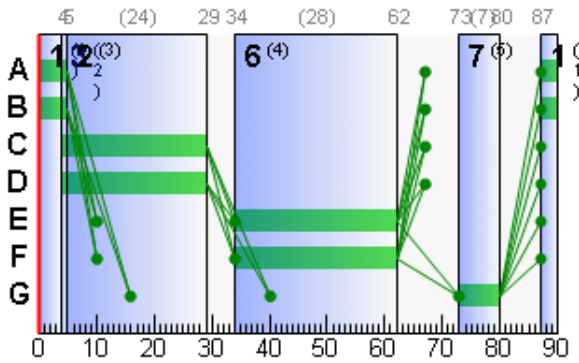
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	29	25
	D	1	✓	4	29	25
	E	1	✓	34	62	28
	F	1	✓	34	62	28
	G	1	✓	73	80	7

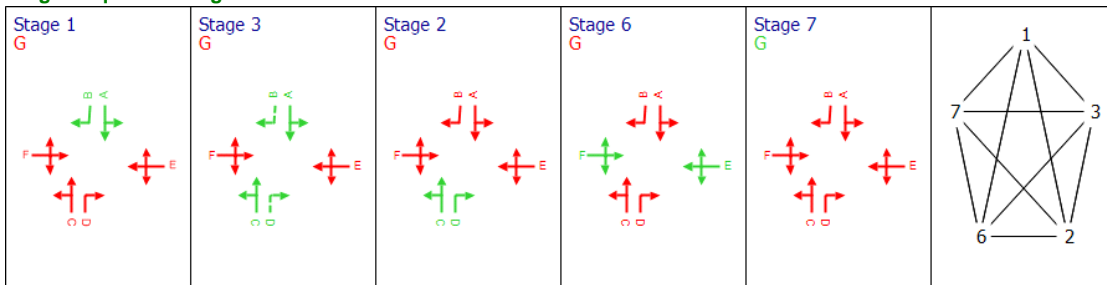
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	34	62	28
2	1		1	F	34	62	28
5	1		1	C	4	29	25
6	1		1	D	4	29	25
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	102	1800	28	580	18	412	22.60	1.83	10.53	34.60
	2	1	Western Residential Link	F	0	1800	28	580	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		99	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	25	520	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	99	2008	25	580	17	427	24.91	1.86	35.65	28.51
	7	1	(untitled)		99	1800	90	1800	6	1536	0.06	0.00	0.01	8.46
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		102	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	29	24	7	7
	4	✓	6	E,F	34	62	28	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	
1	A	A	7	300	0	0	Unknown	
	B	B	7	300	0	0	Unknown	
	III							
	D	D	7	300	0	0	Unknown	
	E	E	7	300	0	0	Unknown	
	F	F	7	300	0	0	Unknown	
	G	G	7	300	0	0	Unknown	

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)	
08:00-09:00	1	1	18	412	102	1800	28	22.60	1.83	10.53	9.09	0.90	9.99	
	2	1	0	Unrestricted	0	1800	28	0.00	0.00	0.00	0.00	0.00	0.00	
	3	1	0	Unrestricted	99	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00	
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00	
	5	1	0	Unrestricted	0	1800	25	0.00	0.00	0.00	0.00	0.00	0.00	
	6	1	17	427	99	2008	25	24.91	1.86	35.65	9.73	0.92	10.64	
	7	1	6	1536	99	1800	90	0.06	0.00	0.01	0.02	0.00	0.00	0.02
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	102	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	102	102	0		1800	580	18		412	0.00	28
	2	1	0	0	0		1800	580	0		Unrestricted	0.00	28
	3	1	99	99	0		Unrestricted	Unrestricted	0		Unrestricted	1.35	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	520	0		Unrestricted	0.00	25
	6	1	99	99	0		2008	580	17		427	0.00	25
	7	1	99	99	0		1800	1800	6		1536	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	102	102	0		Unrestricted	Unrestricted	0		Unrestricted	1.18	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	22.60	0.64	9.09	70.53	71.94	0.90
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	24.91	0.69	9.73	73.84	73.10	0.92
	7	1	8.40	0.06	0.00	0.02	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	1.83	17.39	10.53	0.00	0.00	
	2	1	0.00	0.00	17.39	0.00	0.00	29.00	
	3	1	0.00	0.00	17.39	0.00	0.00	62.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	26.00	
	6	1	0.00	1.86	5.22	35.65	0.00	0.00	
	7	1	0.00	0.00	12.17	0.01	0.00	0.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	57.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	1.83	0.02	1.75	1.00	0.00	9.99
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	1.86	0.02	1.78	1.00	0.00	10.64
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.02
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
3	03/10/2019 18:55:19	03/10/2019 18:55:20	08:00	90	20.66	1.33	17.59	1/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	18	-100	501	662	9.53	18.84	1.82	20.66

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	501	501	0		18		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	11.99	9.53	1.33	18.84	28.95	145.04	1.82

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	35.65	0.00	462.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	20.66

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	58.2	0.0
3	0.0	49.0	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	99	48.97	99	48.97
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	102	58.18	102	58.18
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	102	1800	28	0.00	18	412	34.60	22.60	70.53	1.83
2	1	Western Residential Link		1	F	0	1800	28	29.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				99	Unrestricted	90	62.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	25	26.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	99	2008	25	0.00	17	427	28.51	24.91	73.84	1.86
7	1	(untitled)				99	1800	90	0.00	6	1536	8.46	0.06	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				102	Unrestricted	90	57.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	50.05	3.00	16.71	1.33	18.84	1.82	0.00	20.66
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	50.05	3.00	16.71	1.33	18.84	1.82	0.00	20.66

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

A4 - 2021 DS PM

D4 - 2021 DS PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
4	03/10/2019 18:55:20	03/10/2019 18:55:20	08:00	90	9.84	0.63	11.32	1/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2021 DS PM		D4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2021 DS PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	43	43
2	1	0	0
3	1	59	59
4	1	0	0
5	1	0	0
6	1	59	59
7	1	59	59
8	1	0	0
9	1	0	0
10	1	0	0
11	1	43	43
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	43	0
	3	0	59	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	59
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	43
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 39, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	39	34	7	7
	4	✓	6	E,F	44	62	18	7	7
	5	✓	7	G	73	80	7	1	7

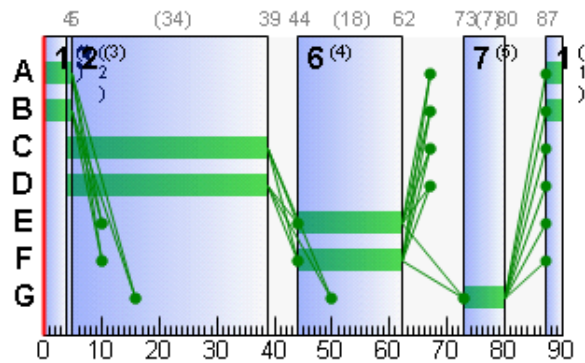
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	39	35
	D	1	✓	4	39	35
	E	1	✓	44	62	18
	F	1	✓	44	62	18
	G	1	✓	73	80	7

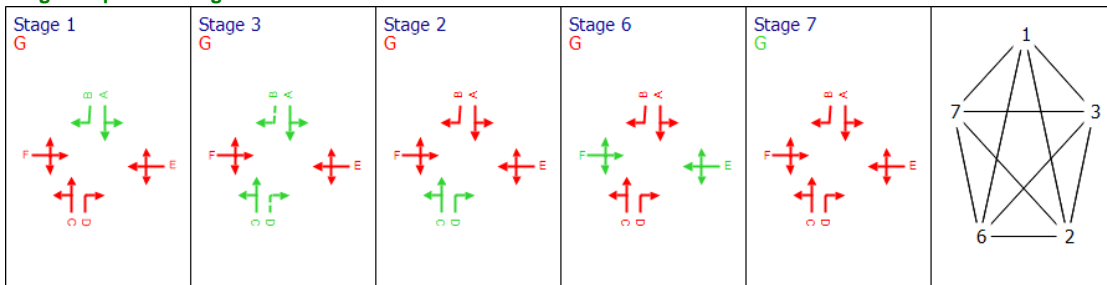
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	44	62	18
2	1		1	F	44	62	18
5	1		1	C	4	39	35
6	1		1	D	4	39	35
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	43	1800	18	380	11	695	29.34	0.87	4.99	41.34
	2	1	Western Residential Link	F	0	1800	18	380	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		59	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	35	720	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	59	2021	35	808	7	1133	17.10	0.92	17.65	20.70
	7	1	(untitled)		59	1800	90	1800	3	2646	0.03	0.00	0.00	8.43
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		43	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	39	34	7	7
	4	✓	6	E,F	44	62	18	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	11	695	43	1800	18	29.34	0.87	4.99	4.98	0.43	5.40
	2	1	0	Unrestricted	0	1800	18	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	59	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	Unrestricted	0	1800	35	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	7	1133	59	2021	35	17.10	0.92	17.65	3.98	0.45	4.43
	7	1	3	2646	59	1800	90	0.03	0.00	0.00	0.01	0.00	0.01
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	43	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	43	43	0		1800	380	11		695	0.00	18
	2	1	0	0	0		1800	380	0		Unrestricted	0.00	18
	3	1	59	59	0		Unrestricted	Unrestricted	0		Unrestricted	1.13	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	720	0		Unrestricted	0.00	35
	6	1	59	59	0		2021	808	7		1133	0.00	35
	7	1	59	59	0		1800	1800	3		2646	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	43	43	0		Unrestricted	Unrestricted	0		Unrestricted	1.35	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	29.34	0.35	4.98	79.36	34.12	0.43
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	17.10	0.28	3.98	61.09	36.04	0.45
	7	1	8.40	0.03	0.00	0.01	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	0.87	17.39	4.99	0.00	17.00	
	2	1	0.00	0.00	17.39	0.00	0.00	19.00	
	3	1	0.00	0.00	17.39	0.00	0.00	64.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	36.00	
	6	1	0.00	0.92	5.22	17.65	0.00	33.00	
	7	1	0.00	0.00	12.17	0.00	0.00	90.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	70.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.87	0.01	0.86	1.00	0.00	5.40
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	0.92	0.00	0.89	1.00	0.00	4.43
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.01
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
4	03/10/2019 18:55:20	03/10/2019 18:55:20	08:00	90	9.84	0.63	11.32	1/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	11	-100	263	662	8.64	8.96	0.88	9.84

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	263	263	0		11		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	11.20	8.64	0.63	8.96	26.68	70.16	0.88

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	17.65	0.00	617.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	9.84

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	64.9	0.0
3	0.0	41.1	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	59	41.13	59	41.13
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	43	64.92	43	64.92
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	43	1800	18	17.00	11	695	41.34	29.34	79.36	0.87
2	1	Western Residential Link		1	F	0	1800	18	19.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				59	Unrestricted	90	64.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	35	36.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	59	2021	35	33.00	7	1133	20.70	17.10	61.09	0.92
7	1	(untitled)				59	1800	90	90.00	3	2646	8.43	0.03	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				43	Unrestricted	90	70.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	24.55	1.45	16.94	0.63	8.96	0.88	0.00	9.84
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	24.55	1.45	16.94	0.63	8.96	0.88	0.00	9.84

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

A5 - 2026 DM AM

D5 - 2026 DM AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
5	03/10/2019 18:55:21	03/10/2019 18:55:22	08:00	90	13.96	0.90	14.76	1/1	0	0	9/1	7/1	9/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2026 DM AM		D5	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2026 DM AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	62	62
2	1	0	0
3	1	79	79
4	1	0	0
5	1	0	0
6	1	79	79
7	1	79	79
8	1	0	0
9	1	0	0
10	1	0	0
11	1	62	62
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	62	0
	3	0	79	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	79
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	62
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 37, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	37	32	7	7
	4	✓	6	E,F	42	62	20	7	7
	5	✓	7	G	73	80	7	1	7

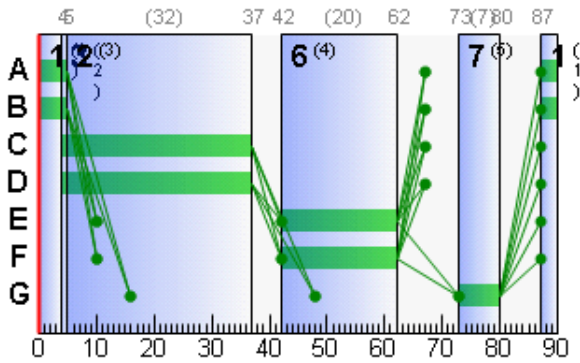
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	37	33
	D	1	✓	4	37	33
	E	1	✓	42	62	20
	F	1	✓	42	62	20
	G	1	✓	73	80	7

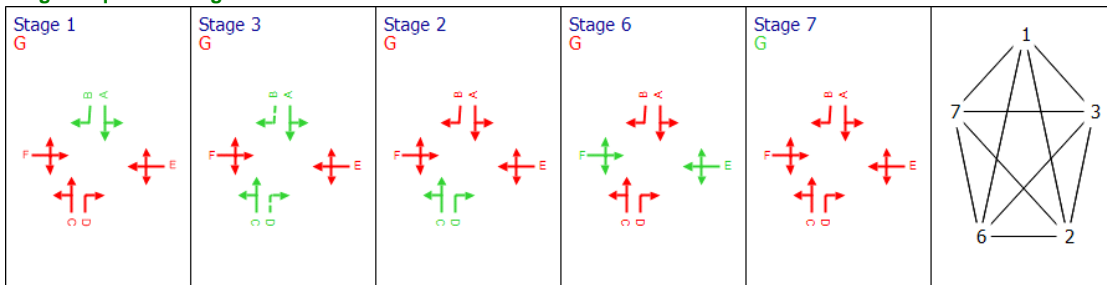
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	42	62	20
2	1		1	F	42	62	20
5	1		1	C	4	37	33
6	1		1	D	4	37	33
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	62	1800	20	420	15	510	28.17	1.24	7.10	40.17
	2	1	Western Residential Link	F	0	1800	20	420	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		79	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	33	680	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	79	2019	33	763	10	769	18.68	1.28	24.51	22.28
	7	1	(untitled)		79	1800	90	1800	4	1951	0.05	0.00	0.01	8.45
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		62	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	37	32	7	7
	4	✓	6	E,F	42	62	20	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	15	510	62	1800	20	28.17	1.24	7.10	6.89	0.61	7.50
	2	1	0	Unrestricted	0	1800	20	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	79	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	Unrestricted	0	1800	33	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	10	769	79	2019	33	18.68	1.28	24.51	5.82	0.63	6.45
	7	1	4	1951	79	1800	90	0.05	0.00	0.01	0.01	0.00	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	62	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s per cycle)
08:00-09:00	1	1	62	62	0		1800	420	15		510	0.00	20
	2	1	0	0	0		1800	420	0		Unrestricted	0.00	20
	3	1	79	79	0		Unrestricted	Unrestricted	0		Unrestricted	1.17	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	680	0		Unrestricted	0.00	33
	6	1	79	79	0		2019	763	10		769	0.00	33
	7	1	79	79	0		1800	1800	4		1951	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	62	62	0		Unrestricted	Unrestricted	0		Unrestricted	1.32	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	28.17	0.49	6.89	78.40	48.61	0.61
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	18.68	0.41	5.82	63.43	50.11	0.63
	7	1	8.40	0.05	0.00	0.01	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)	Estimated blocking
08:00-09:00	1	1	0.00	1.24	17.39	7.10	0.00	0.00	
	2	1	0.00	0.00	17.39	0.00	0.00	21.00	
	3	1	0.00	0.00	17.39	0.00	0.00	55.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	34.00	
	6	1	0.00	1.28	5.22	24.51	0.00	0.00	
	7	1	0.00	0.00	12.17	0.01	0.00	0.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	66.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	1.24	0.01	1.20	1.00	0.00	7.50
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	1.28	0.01	1.23	1.00	0.00	6.45
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.01
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
5	03/10/2019 18:55:21	03/10/2019 18:55:22	08:00	90	13.96	0.90	14.76	1/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	15	-100	361	662	8.94	12.72	1.24	13.96

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	361	361	0		15		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	11.36	8.94	0.90	12.72	27.35	98.72	1.24

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	24.51	0.00	464.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	13.96

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	63.8	0.0
3	0.0	42.7	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	79	42.72	79	42.72
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	62	63.76	62	63.76
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	62	1800	20	0.00	15	510	40.17	28.17	78.40	1.24
2	1	Western Residential Link		1	F	0	1800	20	21.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				79	Unrestricted	90	55.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	33	34.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	79	2019	33	0.00	10	769	22.28	18.68	63.43	1.28
7	1	(untitled)				79	1800	90	0.00	4	1951	8.45	0.05	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				62	Unrestricted	90	66.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	34.19	2.04	16.79	0.90	12.72	1.24	0.00	13.96
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	34.19	2.04	16.79	0.90	12.72	1.24	0.00	13.96

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

A6 - 2026 DM PM

D6 - 2026 DM PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
6	03/10/2019 18:55:22	03/10/2019 18:55:22	08:00	90	2.06	0.13	4.17	6/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2026 DM PM		D6	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2026 DM PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	16	16
2	1	0	0
3	1	8	8
4	1	0	0
5	1	0	0
6	1	8	8
7	1	8	8
8	1	0	0
9	1	0	0
10	1	0	0
11	1	16	16
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	16	0
	3	0	8	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	8
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	16
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 12, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	2							
	3							
	4							
	5							
	6							
	7							

From	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	12	7	7	7
	4	✓	6	E,F	17	62	45	7	7
	5	✓	7	G	73	80	7	1	7

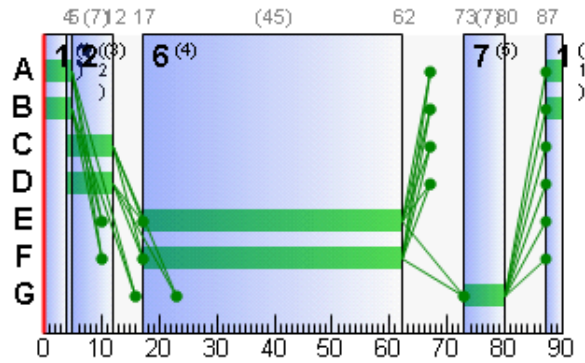
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	12	8
	D	1	✓	4	12	8
	E	1	✓	17	62	45
	F	1	✓	17	62	45
	G	1	✓	73	80	7

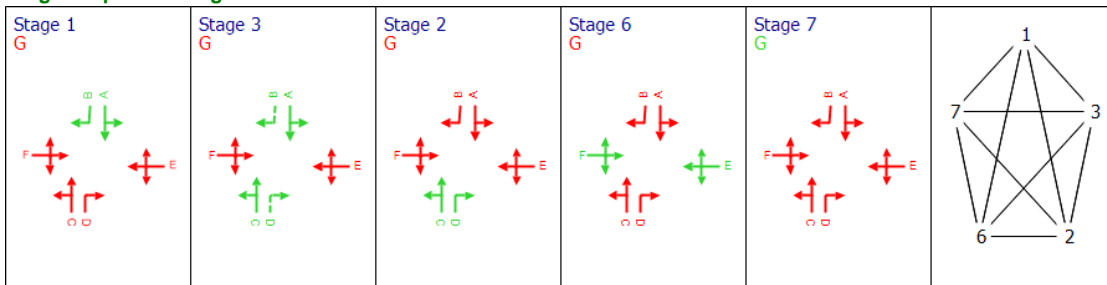
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	17	62	45
2	1		1	F	17	62	45
5	1		1	C	4	12	8
6	1		1	D	4	12	8
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	16	1800	45	920	2	5075	11.03	0.20	1.13	23.03
	2	1	Western Residential Link	F	0	1800	45	920	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		8	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	8	180	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	8	1918	8	192	4	2058	37.31	0.18	3.47	40.91
	7	1	(untitled)		8	1800	90	1800	0	20150	0.00	0.00	0.00	8.40
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		16	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	12	7	7	7
	4	✓	6	E,F	17	62	45	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	2	5075	16	1800	45	11.03	0.20	1.13	0.70	0.10	0.79
	2	1	0	Unrestricted	0	1800	45	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	8	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	Unrestricted	0	1800	8	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	4	2058	8	1918	8	37.31	0.18	3.47	1.18	0.09	1.27
	7	1	0	20150	8	1800	90	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	16	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	16	16	0		1800	920	2		5075	0.00	45
	2	1	0	0	0		1800	920	0		Unrestricted	0.00	45
	3	1	8	8	0		Unrestricted	Unrestricted	0		Unrestricted	1.63	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	180	0		Unrestricted	0.00	8
	6	1	8	8	0		1918	192	4		2058	0.00	8
	7	1	8	8	0		1800	1800	0		20150	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	16	16	0		Unrestricted	Unrestricted	0		Unrestricted	0.83	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	11.03	0.05	0.70	47.61	7.62	0.10
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	37.31	0.08	1.18	89.14	7.13	0.09
	7	1	8.40	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	0.20	17.39	1.13	0.00	45.00	
	2	1	0.00	0.00	17.39	0.00	0.00	46.00	
	3	1	0.00	0.00	17.39	0.00	0.00	86.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	9.00	
	6	1	0.00	0.18	5.22	3.47	0.00	8.00	
	7	1	0.00	0.00	12.17	0.00	0.00	90.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	85.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.20	0.00	0.20	1.00	0.00	0.79
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	0.18	0.00	0.18	1.00	0.00	1.27
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
6	03/10/2019 18:55:22	03/10/2019 18:55:22	08:00	90	2.06	0.13	4.17	6/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	4	-100	56	662	8.48	1.87	0.18	2.06

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))
08:00-09:00	56	56	0		4		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	13.60	8.48	0.13	1.87	26.34	14.75	0.18

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))
08:00-09:00	3.47	0.00	657.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	2.06

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	46.6	0.0
3	0.0	61.3	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	8	61.31	8	61.31
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	16	46.62	16	46.62
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	16	1800	45	45.00	2	5075	23.03	11.03	47.61	0.20
2	1	Western Residential Link		1	F	0	1800	45	46.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				8	Unrestricted	90	86.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	8	1918	8	8.00	4	2058	40.91	37.31	89.14	0.18
7	1	(untitled)				8	1800	90	90.00	0	20150	8.40	0.00	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				16	Unrestricted	90	85.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	6.34	0.34	18.47	0.13	1.87	0.18	0.00	2.06
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	6.34	0.34	18.47	0.13	1.87	0.18	0.00	2.06

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

A7 - 2026 DS AM

D7 - 2026 DS AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
7	03/10/2019 18:55:22	03/10/2019 18:55:23	08:00	90	31.87	2.05	21.25	6/1	0	0	9/1	7/1	9/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2026 DS AM		D7	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2026 DS AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	102	102
2	1	78	78
3	1	99	99
4	1	39	39
5	1	39	39
6	1	99	99
7	1	138	138
8	1	0	0
9	1	0	0
10	1	0	0
11	1	180	180
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	78	0
	2	0	0	102	0
	3	39	99	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	39
	4		3	2	7/1, 6/1, 3/1	Normal	99
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	78
	12		2	3	1/1, 11/1	Normal	102
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 24, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	24	19	7	7
	4	✓	6	E,F	29	62	33	7	7
	5	✓	7	G	73	80	7	1	7

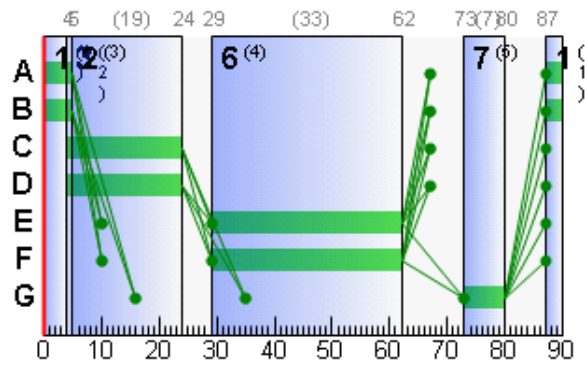
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	24	20
	D	1	✓	4	24	20
	E	1	✓	29	62	33
	F	1	✓	29	62	33
	G	1	✓	73	80	7

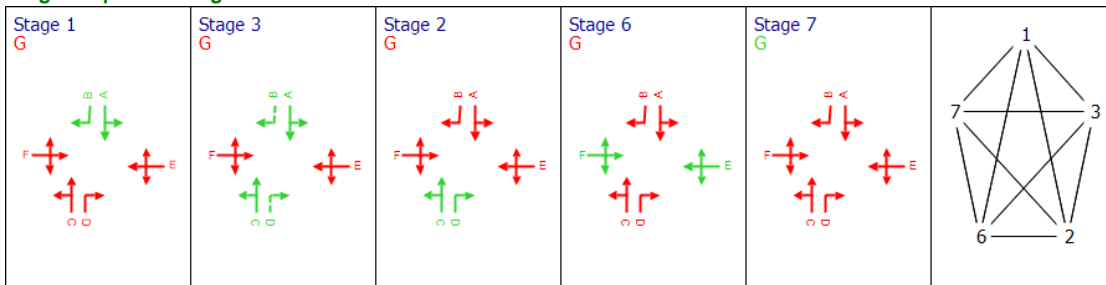
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	29	62	33
2	1		1	F	29	62	33
5	1		1	C	4	24	20
6	1		1	D	4	24	20
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	102	1800	33	680	15	500	18.96	1.68	9.69	30.96
	2	1	Western Residential Link	F	78	1800	33	680	11	685	18.58	1.26	7.27	30.58
	3	1	(untitled)		99	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		39	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	5	1	Link Road South	C	39	1800	20	420	9	869	27.54	0.76	14.63	31.14
	6	1	Link Road South RTL	D	99	1996	20	466	21	323	29.23	2.04	39.03	32.83
	7	1	(untitled)		138	1800	90	1800	8	1074	0.08	0.00	0.03	8.48
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		180	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	24	19	7	7
	4	✓	6	E,F	29	62	33	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	15	500	102	1800	33	18.96	1.68	9.69	7.63	0.83	8.45
	2	1	11	685	78	1800	33	18.58	1.26	7.27	5.72	0.62	6.34
	3	1	0	Unrestricted	99	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	39	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	9	869	39	1800	20	27.54	0.76	14.63	4.24	0.38	4.61
	6	1	21	323	99	1996	20	29.23	2.04	39.03	11.41	1.00	12.42
	7	1	8	1074	138	1800	90	0.08	0.00	0.03	0.05	0.00	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	180	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	102	102	0		1800	680	15		500	0.00	33
	2	1	78	78	0		1800	680	11		685	0.00	33
	3	1	99	99	0		Unrestricted	Unrestricted	0		Unrestricted	1.45	90
	4	1	39	39	0		Unrestricted	Unrestricted	0		Unrestricted	1.45	90
	5	1	39	39	0		1800	420	9		869	0.00	20
	6	1	99	99	0		1996	466	21		323	0.00	20
	7	1	138	138	0		1800	1800	8		1074	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	180	180	0		Unrestricted	Unrestricted	0		Unrestricted	1.09	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	18.96	0.54	7.63	64.72	66.01	0.83
	2	1	12.00	18.58	0.40	5.72	63.51	49.54	0.62
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	27.54	0.30	4.24	76.95	30.01	0.38
	6	1	3.60	29.23	0.80	11.41	80.68	79.87	1.00
	7	1	8.40	0.08	0.00	0.05	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	1.68	17.39	9.69	0.00	0.00	
	2	1	0.00	1.26	17.39	7.27	0.00	0.00	
	3	1	0.00	0.00	17.39	0.00	0.00	67.00	
	4	1	0.00	0.00	17.39	0.00	0.00	76.00	
	5	1	0.00	0.76	5.22	14.63	0.00	19.00	
	6	1	0.00	2.04	5.22	39.03	0.00	0.00	
	7	1	0.00	0.00	12.17	0.03	0.00	0.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	48.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	1.68	0.01	1.60	1.00	0.00	8.45
	2	1	0.00	0.00	✓	1.26	0.01	1.22	1.00	0.00	6.34
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.76	0.00	0.75	1.00	0.00	4.61
	6	1	0.00	0.00	✓	2.04	0.03	1.93	1.00	0.00	12.42
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.05
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
7	03/10/2019 18:55:22	03/10/2019 18:55:23	08:00	90	31.87	2.05	21.25	6/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	21	-100	774	662	9.51	29.04	2.83	31.87

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	774	774	0		21		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	12.55	9.51	2.05	29.04	29.13	225.43	2.83

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	39.03	0.00	408.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	31.87

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
	1	2	3	4	
From	1	0.0	0.0	54.2	0.0
	2	0.0	0.0	54.5	0.0
	3	51.6	53.3	0.0	0.0
	4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	39	51.62	39	51.62
4	3	2	99	53.31	99	53.31
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	78	54.17	78	54.17
12	2	3	102	54.54	102	54.54
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	102	1800	33	0.00	15	500	30.96	18.96	64.72	1.68
2	1	Western Residential Link		1	F	78	1800	33	0.00	11	685	30.58	18.58	63.51	1.26
3	1	(untitled)				99	Unrestricted	90	67.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				39	Unrestricted	90	76.00	0	Unrestricted	12.00	0.00	0.00	0.00
5	1	Link Road South		1	C	39	1800	20	19.00	9	869	31.14	27.54	76.95	0.76
6	1	Link Road South RTL		1	D	99	1996	20	0.00	21	323	32.83	29.23	80.68	2.04
7	1	(untitled)				138	1800	90	0.00	8	1074	8.48	0.08	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				180	Unrestricted	90	48.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	80.98	4.74	17.07	2.05	29.04	2.83	0.00	31.87
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	80.98	4.74	17.07	2.05	29.04	2.83	0.00	31.87

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

A8 - 2026 DS PM

D8 - 2026 DS PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
8	03/10/2019 18:55:23	03/10/2019 18:55:23	08:00	90	24.01	1.54	17.33	2/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2026 DS PM		D8	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2026 DS PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	43	43
2	1	52	52
3	1	59	59
4	1	100	100
5	1	100	100
6	1	59	59
7	1	159	159
8	1	0	0
9	1	0	0
10	1	0	0
11	1	95	95
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	52	0
	2	0	0	43	0
	3	100	59	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	100
	4		3	2	7/1, 6/1, 3/1	Normal	59
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	52
	12		2	3	1/1, 11/1	Normal	43
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 43, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	43	38	7	7
	4	✓	6	E,F	48	62	14	7	7
	5	✓	7	G	73	80	7	1	7

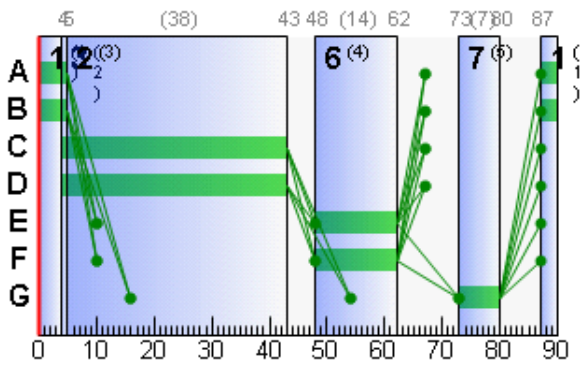
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	43	39
	D	1	✓	4	43	39
	E	1	✓	48	62	14
	F	1	✓	48	62	14
	G	1	✓	73	80	7

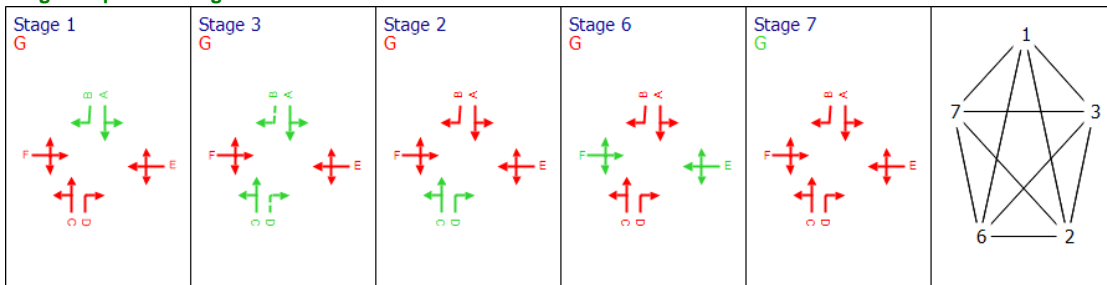
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	48	62	14
2	1		1	F	48	62	14
5	1		1	C	4	43	39
6	1		1	D	4	43	39
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	43	1800	14	300	14	528	33.05	0.92	5.29	45.05
	2	1	Western Residential Link	F	52	1800	14	300	17	419	33.47	1.13	6.50	45.47
	3	1	(untitled)		59	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		100	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	5	1	Link Road South	C	100	1800	39	800	13	620	15.03	1.45	27.86	18.63
	6	1	Link Road South RTL	D	59	2024	39	900	7	1272	14.64	0.85	16.38	18.24
	7	1	(untitled)		159	1800	90	1800	9	919	0.10	0.00	0.04	8.50
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		95	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	43	38	7	7
	4	✓	6	E,F	48	62	14	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	14	528	43	1800	14	33.05	0.92	5.29	5.61	0.45	6.06
	2	1	17	419	52	1800	14	33.47	1.13	6.50	6.86	0.56	7.42
	3	1	0	Unrestricted	59	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	100	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	13	620	100	1800	39	15.03	1.45	27.86	5.93	0.71	6.64
	6	1	7	1272	59	2024	39	14.64	0.85	16.38	3.41	0.42	3.82
	7	1	9	919	159	1800	90	0.10	0.00	0.04	0.06	0.00	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	95	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	43	43	0		1800	300	14		528	0.00	14
	2	1	52	52	0		1800	300	17		419	0.00	14
	3	1	59	59	0		Unrestricted	Unrestricted	0		Unrestricted	1.04	90
	4	1	100	100	0		Unrestricted	Unrestricted	0		Unrestricted	1.04	90
	5	1	100	100	0		1800	800	13		620	0.00	39
	6	1	59	59	0		2024	900	7		1272	0.00	39
	7	1	159	159	0		1800	1800	9		919	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	95	95	0		Unrestricted	Unrestricted	0		Unrestricted	1.38	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	33.05	0.39	5.61	84.24	36.22	0.45
	2	1	12.00	33.47	0.48	6.86	85.62	44.52	0.56
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	15.03	0.42	5.93	56.82	56.82	0.71
	6	1	3.60	14.64	0.24	3.41	56.43	33.29	0.42
	7	1	8.40	0.10	0.00	0.06	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	0.92	17.39	5.29	0.00	13.00	
	2	1	0.00	1.13	17.39	6.50	0.00	12.00	
	3	1	0.00	0.00	17.39	0.00	0.00	64.00	
	4	1	0.00	0.00	17.39	0.00	0.00	49.00	
	5	1	0.00	1.45	5.22	27.86	0.00	0.00	
	6	1	0.00	0.85	5.22	16.38	0.00	37.00	
	7	1	0.00	0.00	12.17	0.04	0.00	0.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	66.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.92	0.01	0.91	1.00	0.00	6.06
	2	1	0.00	0.00	✓	1.13	0.02	1.10	1.00	0.00	7.42
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	1.45	0.01	1.40	1.00	0.00	6.64
	6	1	0.00	0.00	✓	0.85	0.00	0.82	1.00	0.00	3.82
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.06
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
8	03/10/2019 18:55:23	03/10/2019 18:55:23	08:00	90	24.01	1.54	17.33	2/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	17	-100	667	662	8.31	21.87	2.14	24.01

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	667	667	0		17		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10.79	8.31	1.54	21.87	25.62	170.86	2.14

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	27.86	0.00	439.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	24.01

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To			
		1	2	3	4
From	1	0.0	0.0	69.1	0.0
	2	0.0	0.0	68.6	0.0
	3	39.1	38.7	0.0	0.0
	4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	100	39.13	100	39.13
4	3	2	59	38.74	59	38.74
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	52	69.05	52	69.05
12	2	3	43	68.63	43	68.63
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	43	1800	14	13.00	14	528	45.05	33.05	84.24	0.92
2	1	Western Residential Link		1	F	52	1800	14	12.00	17	419	45.47	33.47	85.62	1.13
3	1	(untitled)				59	Unrestricted	90	64.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				100	Unrestricted	90	49.00	0	Unrestricted	12.00	0.00	0.00	0.00
5	1	Link Road South		1	C	100	1800	39	0.00	13	620	18.63	15.03	56.82	1.45
6	1	Link Road South RTL		1	D	59	2024	39	37.00	7	1272	18.24	14.64	56.43	0.85
7	1	(untitled)				159	1800	90	0.00	9	919	8.50	0.10	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				95	Unrestricted	90	66.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	59.97	3.54	16.95	1.54	21.87	2.14	0.00	24.01
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	59.97	3.54	16.95	1.54	21.87	2.14	0.00	24.01

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

A9 - 2036 DM AM

D9 - 2036 DM AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
9	03/10/2019 18:55:23	03/10/2019 18:55:23	08:00	90	12.44	0.80	14.50	6/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2036 DM AM		D9	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2036 DM AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	79	79
2	1	0	0
3	1	51	51
4	1	0	0
5	1	0	0
6	1	51	51
7	1	51	51
8	1	0	0
9	1	0	0
10	1	0	0
11	1	79	79
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	79	0
	3	0	51	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	51
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	79
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 19, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	19	14	7	7
	4	✓	6	E,F	24	62	38	7	7
	5	✓	7	G	73	80	7	1	7

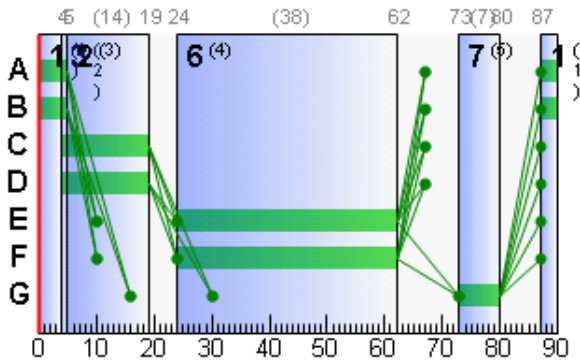
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	19	15
	D	1	✓	4	19	15
	E	1	✓	24	62	38
	F	1	✓	24	62	38
	G	1	✓	73	80	7

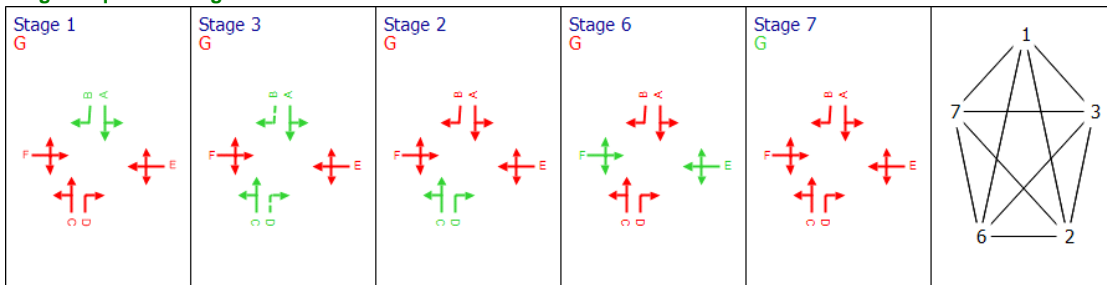
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	24	62	38
2	1		1	F	24	62	38
5	1		1	C	4	19	15
6	1		1	D	4	19	15
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	79	1800	38	780	10	789	15.40	1.17	6.72	27.40
	2	1	Western Residential Link	F	0	1800	38	780	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		51	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	15	320	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	51	1978	15	352	15	521	32.44	1.09	20.87	36.04
	7	1	(untitled)		51	1800	90	1800	3	3076	0.03	0.00	0.00	8.43
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		79	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	19	14	7	7
	4	✓	6	E,F	24	62	38	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	10	789	79	1800	38	15.40	1.17	6.72	4.80	0.57	5.37
	2	1	0	Unrestricted	0	1800	38	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	51	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	Unrestricted	0	1800	15	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	15	521	51	1978	15	32.44	1.09	20.87	6.53	0.54	7.06
	7	1	3	3076	51	1800	90	0.03	0.00	0.00	0.01	0.00	0.01
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	79	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	79	79	0		1800	780	10		789	0.00	38
	2	1	0	0	0		1800	780	0		Unrestricted	0.00	38
	3	1	51	51	0		Unrestricted	Unrestricted	0		Unrestricted	1.54	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	320	0		Unrestricted	0.00	15
	6	1	51	51	0		1978	352	15		521	0.00	15
	7	1	51	51	0		1800	1800	3		3076	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	79	79	0		Unrestricted	Unrestricted	0		Unrestricted	0.98	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	15.40	0.34	4.80	57.85	45.70	0.57
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	32.44	0.46	6.53	84.09	42.89	0.54
	7	1	8.40	0.03	0.00	0.01	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	1.17	17.39	6.72	0.00	0.00	
	2	1	0.00	0.00	17.39	0.00	0.00	39.00	
	3	1	0.00	0.00	17.39	0.00	0.00	74.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	16.00	
	6	1	0.00	1.09	5.22	20.87	0.00	13.00	
	7	1	0.00	0.00	12.17	0.00	0.00	90.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	49.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	1.17	0.01	1.12	1.00	0.00	5.37
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	1.09	0.01	1.06	1.00	0.00	7.06
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.01
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
9	03/10/2019 18:55:23	03/10/2019 18:55:23	08:00	90	12.44	0.80	14.50	6/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	15	-100	311	662	9.24	11.33	1.11	12.44

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	311	311	0		15		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	12.98	9.24	0.80	11.33	28.48	88.59	1.11

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	20.87	0.00	569.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	12.44

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	51.0	0.0
3	0.0	56.5	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	51	56.47	51	56.47
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	79	50.99	79	50.99
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	79	1800	38	0.00	10	789	27.40	15.40	57.85	1.17
2	1	Western Residential Link		1	F	0	1800	38	39.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				51	Unrestricted	90	74.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	15	16.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	51	1978	15	13.00	15	521	36.04	32.44	84.09	1.09
7	1	(untitled)				51	1800	90	90.00	3	3076	8.43	0.03	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				79	Unrestricted	90	49.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	33.63	1.92	17.52	0.80	11.33	1.11	0.00	12.44
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	33.63	1.92	17.52	0.80	11.33	1.11	0.00	12.44

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

A10 - 2036 DM PM

D10 - 2036 DM PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
10	03/10/2019 18:55:24	03/10/2019 18:55:24	08:00	90	2.06	0.13	4.17	6/1	0	0	9/1	7/1	9/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2036 DM PM		D10	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2036 DM PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	16	16
2	1	0	0
3	1	8	8
4	1	0	0
5	1	0	0
6	1	8	8
7	1	8	8
8	1	0	0
9	1	0	0
10	1	0	0
11	1	16	16
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	16	0
	3	0	8	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	0
	4		3	2	7/1, 6/1, 3/1	Normal	8
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	0
	12		2	3	1/1, 11/1	Normal	16
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 12, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	12	7	7	7
	4	✓	6	E,F	17	62	45	7	7
	5	✓	7	G	73	80	7	1	7

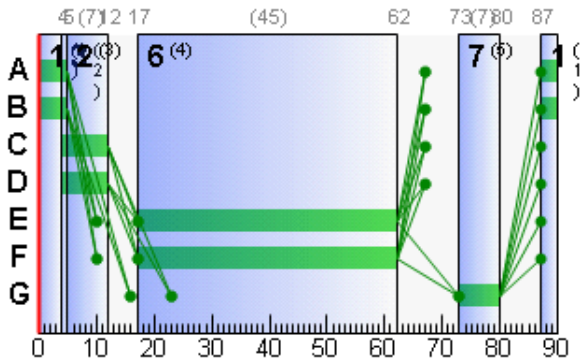
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	12	8
	D	1	✓	4	12	8
	E	1	✓	17	62	45
	F	1	✓	17	62	45
	G	1	✓	73	80	7

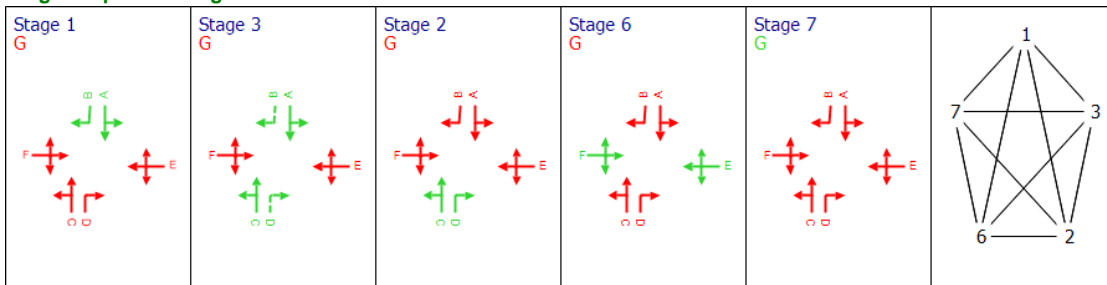
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	17	62	45
2	1		1	F	17	62	45
5	1		1	C	4	12	8
6	1		1	D	4	12	8
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	16	1800	45	920	2	5075	11.03	0.20	1.13	23.03
	2	1	Western Residential Link	F	0	1800	45	920	0	Unrestricted	0.00	0.00	0.00	0.00
	3	1	(untitled)		8	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	5	1	Link Road South	C	0	1800	8	180	0	Unrestricted	0.00	0.00	0.00	0.00
	6	1	Link Road South RTL	D	8	1918	8	192	4	2058	37.31	0.18	3.47	40.91
	7	1	(untitled)		8	1800	90	1800	0	20150	0.00	0.00	0.00	8.40
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		16	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	12	7	7	7
	4	✓	6	E,F	17	62	45	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	2	5075	16	1800	45	11.03	0.20	1.13	0.70	0.10	0.79
	2	1	0	Unrestricted	0	1800	45	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	0	Unrestricted	8	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0	Unrestricted	0	1800	8	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	4	2058	8	1918	8	37.31	0.18	3.47	1.18	0.09	1.27
	7	1	0	20150	8	1800	90	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	16	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	16	16	0		1800	920	2		5075	0.00	45
	2	1	0	0	0		1800	920	0		Unrestricted	0.00	45
	3	1	8	8	0		Unrestricted	Unrestricted	0		Unrestricted	1.63	90
	4	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	5	1	0	0	0		1800	180	0		Unrestricted	0.00	8
	6	1	8	8	0		1918	192	4		2058	0.00	8
	7	1	8	8	0		1800	1800	0		20150	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	16	16	0		Unrestricted	Unrestricted	0		Unrestricted	0.83	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	11.03	0.05	0.70	47.61	7.62	0.10
	2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	1	3.60	37.31	0.08	1.18	89.14	7.13	0.09
	7	1	8.40	0.00	0.00	0.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	0.20	17.39	1.13	0.00	45.00	
	2	1	0.00	0.00	17.39	0.00	0.00	46.00	
	3	1	0.00	0.00	17.39	0.00	0.00	86.00	
	4	1	0.00	0.00	17.39	0.00	0.00	90.00	
	5	1	0.00	0.00	5.22	0.00	0.00	9.00	
	6	1	0.00	0.18	5.22	3.47	0.00	8.00	
	7	1	0.00	0.00	12.17	0.00	0.00	90.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	85.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.20	0.00	0.20	1.00	0.00	0.79
	2	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	6	1	0.00	0.00	✓	0.18	0.00	0.18	1.00	0.00	1.27
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
10	03/10/2019 18:55:24	03/10/2019 18:55:24	08:00	90	2.06	0.13	4.17	6/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	4	-100	56	662	8.48	1.87	0.18	2.06

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	56	56	0		4		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	13.60	8.48	0.13	1.87	26.34	14.75	0.18

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	3.47	0.00	657.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	2.06

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To			
	1	2	3	4
1	0.0	0.0	0.0	0.0
2	0.0	0.0	46.6	0.0
3	0.0	61.3	0.0	0.0
4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	0	0.00	0	0.00
4	3	2	8	61.31	8	61.31
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	0	0.00	0	0.00
12	2	3	16	46.62	16	46.62
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	16	1800	45	45.00	2	5075	23.03	11.03	47.61	0.20
2	1	Western Residential Link		1	F	0	1800	45	46.00	0	Unrestricted	0.00	0.00	0.00	0.00
3	1	(untitled)				8	Unrestricted	90	86.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
5	1	Link Road South		1	C	0	1800	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
6	1	Link Road South RTL		1	D	8	1918	8	8.00	4	2058	40.91	37.31	89.14	0.18
7	1	(untitled)				8	1800	90	90.00	0	20150	8.40	0.00	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				16	Unrestricted	90	85.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	6.34	0.34	18.47	0.13	1.87	0.18	0.00	2.06
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	6.34	0.34	18.47	0.13	1.87	0.18	0.00	2.06

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

A11 - 2036 DS AM

D11 - 2036 DS AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
11	03/10/2019 18:55:24	03/10/2019 18:55:24	08:00	90	31.87	2.05	21.25	6/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2036 DS AM		D11	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2036 DS AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type
Default

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	102	102
2	1	78	78
3	1	99	99
4	1	39	39
5	1	39	39
6	1	99	99
7	1	138	138
8	1	0	0
9	1	0	0
10	1	0	0
11	1	180	180
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	78	0
	2	0	0	102	0
	3	39	99	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	39
	4		3	2	7/1, 6/1, 3/1	Normal	99
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	78
	12		2	3	1/1, 11/1	Normal	102
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 24, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	24	19	7	7
	4	✓	6	E,F	29	62	33	7	7
	5	✓	7	G	73	80	7	1	7

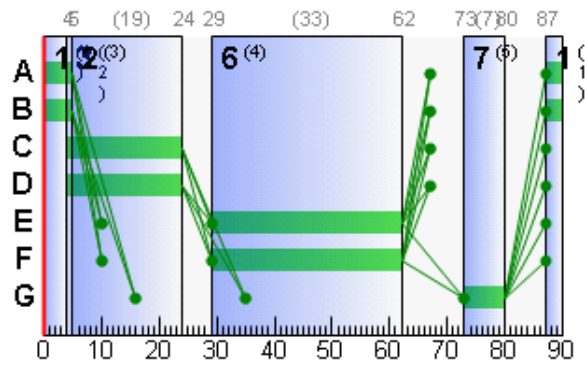
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	24	20
	D	1	✓	4	24	20
	E	1	✓	29	62	33
	F	1	✓	29	62	33
	G	1	✓	73	80	7

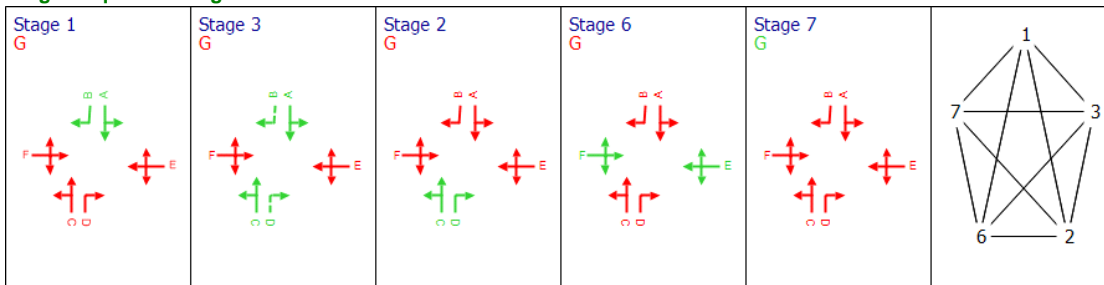
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	29	62	33
2	1		1	F	29	62	33
5	1		1	C	4	24	20
6	1		1	D	4	24	20
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	102	1800	33	680	15	500	18.96	1.68	9.69	30.96
	2	1	Western Residential Link	F	78	1800	33	680	11	685	18.58	1.26	7.27	30.58
	3	1	(untitled)		99	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		39	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	5	1	Link Road South	C	39	1800	20	420	9	869	27.54	0.76	14.63	31.14
	6	1	Link Road South RTL	D	99	1996	20	466	21	323	29.23	2.04	39.03	32.83
	7	1	(untitled)		138	1800	90	1800	8	1074	0.08	0.00	0.03	8.48
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		180	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	24	19	7	7
	4	✓	6	E,F	29	62	33	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	15	500	102	1800	33	18.96	1.68	9.69	7.63	0.83	8.45
	2	1	11	685	78	1800	33	18.58	1.26	7.27	5.72	0.62	6.34
	3	1	0	Unrestricted	99	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	39	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	9	869	39	1800	20	27.54	0.76	14.63	4.24	0.38	4.61
	6	1	21	323	99	1996	20	29.23	2.04	39.03	11.41	1.00	12.42
	7	1	8	1074	138	1800	90	0.08	0.00	0.03	0.05	0.00	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	180	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	102	102	0		1800	680	15		500	0.00	33
	2	1	78	78	0		1800	680	11		685	0.00	33
	3	1	99	99	0		Unrestricted	Unrestricted	0		Unrestricted	1.45	90
	4	1	39	39	0		Unrestricted	Unrestricted	0		Unrestricted	1.45	90
	5	1	39	39	0		1800	420	9		869	0.00	20
	6	1	99	99	0		1996	466	21		323	0.00	20
	7	1	138	138	0		1800	1800	8		1074	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	180	180	0		Unrestricted	Unrestricted	0		Unrestricted	1.09	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	18.96	0.54	7.63	64.72	66.01	0.83
	2	1	12.00	18.58	0.40	5.72	63.51	49.54	0.62
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	27.54	0.30	4.24	76.95	30.01	0.38
	6	1	3.60	29.23	0.80	11.41	80.68	79.87	1.00
	7	1	8.40	0.08	0.00	0.05	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	1.68	17.39	9.69	0.00	0.00	
	2	1	0.00	1.26	17.39	7.27	0.00	0.00	
	3	1	0.00	0.00	17.39	0.00	0.00	67.00	
	4	1	0.00	0.00	17.39	0.00	0.00	76.00	
	5	1	0.00	0.76	5.22	14.63	0.00	19.00	
	6	1	0.00	2.04	5.22	39.03	0.00	0.00	
	7	1	0.00	0.00	12.17	0.03	0.00	0.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	48.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	1.68	0.01	1.60	1.00	0.00	8.45
	2	1	0.00	0.00	✓	1.26	0.01	1.22	1.00	0.00	6.34
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	0.76	0.00	0.75	1.00	0.00	4.61
	6	1	0.00	0.00	✓	2.04	0.03	1.93	1.00	0.00	12.42
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.05
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
11	03/10/2019 18:55:24	03/10/2019 18:55:24	08:00	90	31.87	2.05	21.25	6/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	21	-100	774	662	9.51	29.04	2.83	31.87

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	774	774	0		21		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	12.55	9.51	2.05	29.04	29.13	225.43	2.83

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	39.03	0.00	408.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	31.87

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
	1	2	3	4	
From	1	0.0	0.0	54.2	0.0
	2	0.0	0.0	54.5	0.0
	3	51.6	53.3	0.0	0.0
	4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	39	51.62	39	51.62
4	3	2	99	53.31	99	53.31
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	78	54.17	78	54.17
12	2	3	102	54.54	102	54.54
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	102	1800	33	0.00	15	500	30.96	18.96	64.72	1.68
2	1	Western Residential Link		1	F	78	1800	33	0.00	11	685	30.58	18.58	63.51	1.26
3	1	(untitled)				99	Unrestricted	90	67.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				39	Unrestricted	90	76.00	0	Unrestricted	12.00	0.00	0.00	0.00
5	1	Link Road South		1	C	39	1800	20	19.00	9	869	31.14	27.54	76.95	0.76
6	1	Link Road South RTL		1	D	99	1996	20	0.00	21	323	32.83	29.23	80.68	2.04
7	1	(untitled)				138	1800	90	0.00	8	1074	8.48	0.08	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				180	Unrestricted	90	48.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	80.98	4.74	17.07	2.05	29.04	2.83	0.00	31.87
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	80.98	4.74	17.07	2.05	29.04	2.83	0.00	31.87

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

A12 - 2036 DS PM

D12 - 2036 DS PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
12	03/10/2019 18:55:24	03/10/2019 18:55:25	08:00	90	24.01	1.54	17.33	2/1	0	0	9/1	7/1	9/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
2036 DS PM		D12	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2036 DS PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

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

Advanced

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

Traffic options

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

Advanced

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

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

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

Tram parameters

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

Pedestrian parameters

Dispersion type

Optimisation options

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

Advanced

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

Economics

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

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	Gaelscoil Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
2	1	Western Residential Link		✓	100.00	✓	Sum of lanes	1800	✓		Normal	
3	1	(untitled)			100.00						Normal	
4	1	(untitled)			100.00						Normal	
5	1	Link Road South			30.00	✓	Sum of lanes	1800	✓		Normal	
6	1	Link Road South RTL			30.00	✓	Sum of lanes	2055	✓	✓	Normal	
7	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	
8	1	Link Road North			30.00	✓	Sum of lanes	2055	✓		Normal	
9	1	Link Road South RTL			30.00	✓	Sum of lanes	1800	✓	✓	Normal	
10	1	(untitled)		✓	215.57						Normal	
11	1	(untitled)		✓	196.54						Normal	
12	1	(untitled)			70.00	✓	Sum of lanes	1800			Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1800
2	1	1	(untitled)											1800
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											1800
6	1	1	(untitled)											2055
7	1	1	(untitled)											1800
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	43.09		2055
9	1	1	(untitled)											1800
10	1	1	(untitled)											
11	1	1	(untitled)											
12	1	1	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Has degree of saturation limit
(ALL)	1	NetworkDefault	100	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	90

Normal traffic - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	1	100	100

Normal traffic - Advanced

Arm	Traffic Stream	Dispersion type for Normal Traffic
(ALL)	1	NetworkDefault

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	43	43
2	1	52	52
3	1	59	59
4	1	100	100
5	1	100	100
6	1	59	59
7	1	159	159
8	1	0	0
9	1	0	0
10	1	0	0
11	1	95	95
12	1	0	0

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	E	
2	1	1	F	
5	1	1	C	
6	1	1	D	
8	1	1	A	
9	1	1	B	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)
1	1	12.00	30.00
2	1	12.00	30.00
7	1	8.40	30.00
12	1	8.40	30.00

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (kph)	Auto turning radius	Traffic turn style	Turning radius (m)
3	1	1	2/1	3/1	12.00	30.00	✓	Straight	Straight Movement
4	1	1	1/1	4/1	12.00	30.00	✓	Straight	Straight Movement
5	1	1	7/1	5/1	3.60	30.00	✓	Straight	Straight Movement
6	1	1	7/1	6/1	3.60	30.00	✓	Straight	Straight Movement
8	1	1	12/1	8/1	3.60	30.00	✓	Straight	Straight Movement
9	1	1	12/1	9/1	3.60	30.00	✓	Straight	Straight Movement
10	1	1	5/1	10/1	25.87	30.00	✓	Straight	Straight Movement
11	1	1	8/1	11/1	23.59	30.00	✓	Straight	Straight Movement
3	1	2	8/1	3/1	12.00	30.00	✓	Nearside	43.09
4	1	2	9/1	4/1	12.00	30.00	✓	Offside	59.22
10	1	2	2/1	10/1	25.87	30.00	✓	Nearside	23.71
11	1	2	2/1	11/1	23.59	30.00	✓	Offside	61.48
3	1	3	6/1	3/1	12.00	30.00	✓	Offside	61.68
4	1	3	5/1	4/1	12.00	30.00	✓	Nearside	20.92
10	1	3	1/1	10/1	25.87	30.00	✓	Offside	66.46
11	1	3	1/1	11/1	23.59	30.00	✓	Nearside	40.34

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	1	Movement		

Give Way Data - Movements

Arm	Traffic Stream	Movement	Destination traffic stream	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Percentage opposed (%)
6	1	1	3/1	1439	2055	100
9	1	1	4/1	1439	1800	100

Give Way Data - Movements - Conflicts

Arm	Traffic Stream	Movement	Destination traffic stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
6	1	1	3/1		TrafficStream	8/1	100	0.00		0	0
9	1	1	4/1		TrafficStream	5/1	100	0.00		0	0

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To			
		1	2	3	4
From	1	0	0	52	0
	2	0	0	43	0
	3	100	59	0	0
	4	0	0	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	2/1	4/1	#0000FF
	2	(untitled)	1/1	3/1	#FF0000
	3	(untitled)	7/1	11/1	#00FF00
	4	(untitled)	12/1	10/1	#FFFF00

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1	2	2/1, 3/1	Normal	0
	2		2	1	1/1, 4/1	Normal	0
	3		3	1	7/1, 5/1, 4/1	Normal	100
	4		3	2	7/1, 6/1, 3/1	Normal	59
	6		4	2	12/1, 8/1, 3/1	Normal	0
	7		4	3	12/1, 8/1, 11/1	Normal	0
	8		4	1	12/1, 9/1, 4/1	Normal	0
	9		3	4	7/1, 5/1, 10/1	Normal	0
	10		1	4	2/1, 10/1	Normal	0
	11		1	3	2/1, 11/1	Normal	52
	12		2	3	1/1, 11/1	Normal	43
	13		2	4	1/1, 10/1	Normal	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
1	(untitled)		1	NetworkDefault	90

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	(ALL)	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
1	1	A, B	7
	2	C, D	7
	3	A, B, C, D	1
	4	E	1
	5	F	1
	6	E, F	7
	7	G	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
1	1	(untitled)	Single	1, 3, 2, 6, 7	4, 5, 43, 62, 80

Intergreen Matrix for Controller Stream 1

		To						
		A	B	C	D	E	F	G
From	A					5	5	11
	B					5	5	11
	C					5	5	11
	D					5	5	11
	E	5	5	5	5			11
	F	5	5	5	5			11
	G	7	7	7	7	7	7	

Banned Stage transitions for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1							
	2							
	3							
	4							
	5							
	6							
	7							

Interstage Matrix for Controller Stream 1

		To						
		1	2	3	4	5	6	7
From	1	0	0	0	5	5	5	11
	2	0	0	0	5	5	5	11
	3	0	0	0	5	5	5	11
	4	5	5	5	0	0	0	11
	5	5	5	5	0	0	0	11
	6	5	5	5	0	0	0	11
	7	7	7	7	7	7	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	43	38	7	7
	4	✓	6	E,F	48	62	14	7	7
	5	✓	7	G	73	80	7	1	7

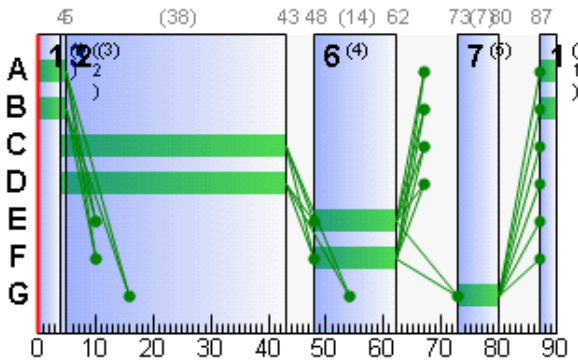
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	87	5	8
	B	1	✓	87	5	8
	C	1	✓	4	43	39
	D	1	✓	4	43	39
	E	1	✓	48	62	14
	F	1	✓	48	62	14
	G	1	✓	73	80	7

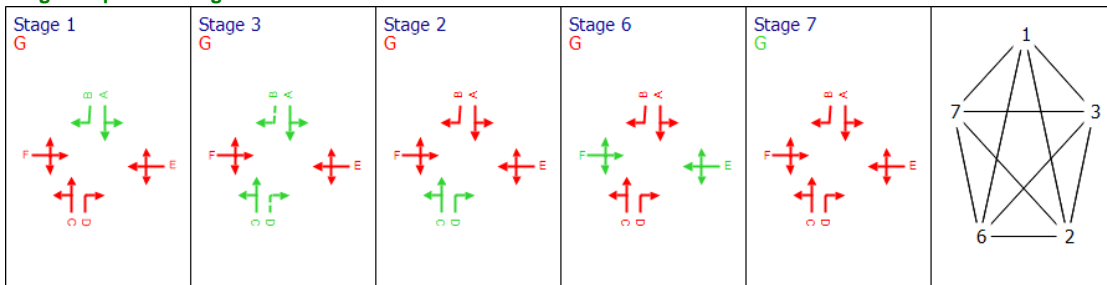
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1	1		1	E	48	62	14
2	1		1	F	48	62	14
5	1		1	C	4	43	39
6	1		1	D	4	43	39
8	1		1	A	87	5	8
9	1		1	B	87	5	8

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	Gaelscoil Link	E	43	1800	14	300	14	528	33.05	0.92	5.29	45.05
	2	1	Western Residential Link	F	52	1800	14	300	17	419	33.47	1.13	6.50	45.47
	3	1	(untitled)		59	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	4	1	(untitled)		100	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	5	1	Link Road South	C	100	1800	39	800	13	620	15.03	1.45	27.86	18.63
	6	1	Link Road South RTL	D	59	2024	39	900	7	1272	14.64	0.85	16.38	18.24
	7	1	(untitled)		159	1800	90	1800	9	919	0.10	0.00	0.04	8.50
	8	1	Link Road North	A	0	2055	8	206	0	Unrestricted	0.00	0.00	0.00	0.00
	9	1	Link Road South RTL	B	0	0	8	0	0	-100	0.00	0.00	0.00	0.00
	10	1	(untitled)		0	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	11	1	(untitled)		95	Unrestricted	90	Unrestricted	0	Unrestricted	0.00	0.00	0.00	23.59
	12	1	(untitled)		0	1800	90	1800	0	Unrestricted	0.00	0.00	0.00	0.00

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	87	4	7	7	7
	2	✓	3	A,B,C,D	4	5	1	1	1
	3	✓	2	C,D	5	43	38	7	7
	4	✓	6	E,F	48	62	14	7	7
	5	✓	7	G	73	80	7	1	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
2	1	✓	100.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
3	1		100.00	NetworkDefault	0.00	Normal						100	100
4	1		100.00	NetworkDefault	0.00	Normal						100	100
5	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
6	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	2055	100	100
7	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
8	1		30.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2055	100	100
9	1		30.00	NetworkDefault	0.00	Normal	✓	✓	✓	Sum of lanes	1800	100	100
10	1	✓	215.57	NetworkDefault	0.00	Normal						100	100
11	1	✓	196.54	NetworkDefault	0.00	Normal						100	100
12	1		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	14	528	43	1800	14	33.05	0.92	5.29	5.61	0.45	6.06
	2	1	17	419	52	1800	14	33.47	1.13	6.50	6.86	0.56	7.42
	3	1	0	Unrestricted	59	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	0	Unrestricted	100	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	13	620	100	1800	39	15.03	1.45	27.86	5.93	0.71	6.64
	6	1	7	1272	59	2024	39	14.64	0.85	16.38	3.41	0.42	3.82
	7	1	9	919	159	1800	90	0.10	0.00	0.04	0.06	0.06	0.00
	8	1	0	Unrestricted	0	2055	8	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0	-100	0	0	8	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0	Unrestricted	0	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	0	Unrestricted	95	Unrestricted	90	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0	Unrestricted	0	1800	90	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Calculated sat flow (PCU/hr)	Calculated capacity (PCU/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))
08:00-09:00	1	1	43	43	0		1800	300	14		528	0.00	14
	2	1	52	52	0		1800	300	17		419	0.00	14
	3	1	59	59	0		Unrestricted	Unrestricted	0		Unrestricted	1.04	90
	4	1	100	100	0		Unrestricted	Unrestricted	0		Unrestricted	1.04	90
	5	1	100	100	0		1800	800	13		620	0.00	39
	6	1	59	59	0		2024	900	7		1272	0.00	39
	7	1	159	159	0		1800	1800	9		919	0.00	90
	8	1	0	0	0		2055	206	0		Unrestricted	0.00	8
	9	1	0	0	0		0	0	0		-100	0.00	8
	10	1	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	90
	11	1	95	95	0		Unrestricted	Unrestricted	0		Unrestricted	1.38	90
	12	1	0	0	0		1800	1800	0		Unrestricted	0.00	90

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	12.00	33.05	0.39	5.61	84.24	36.22	0.45
	2	1	12.00	33.47	0.48	6.86	85.62	44.52	0.56
	3	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	1	3.60	15.03	0.42	5.93	56.82	56.82	0.71
	6	1	3.60	14.64	0.24	3.41	56.43	33.29	0.42
	7	1	8.40	0.10	0.00	0.06	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	1	23.59	0.00	0.00	0.00	0.00	0.00	0.00
	12	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s (per cycle))	Estimated blocking
08:00-09:00	1	1	0.00	0.92	17.39	5.29	0.00	13.00	
	2	1	0.00	1.13	17.39	6.50	0.00	12.00	
	3	1	0.00	0.00	17.39	0.00	0.00	64.00	
	4	1	0.00	0.00	17.39	0.00	0.00	49.00	
	5	1	0.00	1.45	5.22	27.86	0.00	0.00	
	6	1	0.00	0.85	5.22	16.38	0.00	37.00	
	7	1	0.00	0.00	12.17	0.04	0.00	0.00	
	8	1	0.00	0.00	5.22	0.00	0.00	9.00	
	9	1	0.00	0.00	5.22	0.00	0.00	9.00	
	10	1	0.00	0.00	37.49	0.00	0.00	90.00	
	11	1	0.00	0.00	34.18	0.00	0.00	66.00	
	12	1	0.00	0.00	12.17	0.00	0.00	90.00	

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.92	0.01	0.91	1.00	0.00	6.06
	2	1	0.00	0.00	✓	1.13	0.02	1.10	1.00	0.00	7.42
	3	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	4	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	5	1	0.00	0.00	✓	1.45	0.01	1.40	1.00	0.00	6.64
	6	1	0.00	0.00	✓	0.85	0.00	0.82	1.00	0.00	3.82
	7	1	0.00	0.00	✓	0.00			1.00	0.00	0.06
	8	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	9	1	0.00	0.00	✓	0.00	0.00	0.00	1.00	0.00	0.00
	10	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	11	1	0.00	0.00	✓	0.00			1.00	0.00	0.00
	12	1	0.00	0.00	✓	0.00			1.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
12	03/10/2019 18:55:24	03/10/2019 18:55:25	08:00	90	24.01	1.54	17.33	2/1	0	0	9/1	7/1	9/

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	17	-100	667	662	8.31	21.87	2.14	24.01

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)
08:00-09:00	667	667	0		17		-100	662

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Total stops (Stops per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	10.79	8.31	1.54	21.87	25.62	170.86	2.14

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time total (s per cycle)
08:00-09:00	27.86	0.00	439.00

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	1.00	0.00	0.00	24.01

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To				
	1	2	3	4	
From	1	0.0	0.0	69.1	0.0
	2	0.0	0.0	68.6	0.0
	3	39.1	38.7	0.0	0.0
	4	0.0	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Normal journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	1	2	0	0.00	0	0.00
2	2	1	0	0.00	0	0.00
3	3	1	100	39.13	100	39.13
4	3	2	59	38.74	59	38.74
6	4	2	0	0.00	0	0.00
7	4	3	0	0.00	0	0.00
8	4	1	0	0.00	0	0.00
9	3	4	0	0.00	0	0.00
10	1	4	0	0.00	0	0.00
11	1	3	52	69.05	52	69.05
12	2	3	43	68.63	43	68.63
13	2	4	0	0.00	0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1	Gaelscoil Link		1	E	43	1800	14	13.00	14	528	45.05	33.05	84.24	0.92
2	1	Western Residential Link		1	F	52	1800	14	12.00	17	419	45.47	33.47	85.62	1.13
3	1	(untitled)				59	Unrestricted	90	64.00	0	Unrestricted	12.00	0.00	0.00	0.00
4	1	(untitled)				100	Unrestricted	90	49.00	0	Unrestricted	12.00	0.00	0.00	0.00
5	1	Link Road South		1	C	100	1800	39	0.00	13	620	18.63	15.03	56.82	1.45
6	1	Link Road South RTL		1	D	59	2024	39	37.00	7	1272	18.24	14.64	56.43	0.85
7	1	(untitled)				159	1800	90	0.00	9	919	8.50	0.10	0.00	0.00
8	1	Link Road North		1	A	0	2055	8	9.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1	Link Road South RTL		1	B	0	0	8	9.00	0	-100	0.00	0.00	0.00	0.00
10	1	(untitled)				0	Unrestricted	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00
11	1	(untitled)				95	Unrestricted	90	66.00	0	Unrestricted	23.59	0.00	0.00	0.00
12	1	(untitled)				0	1800	90	90.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	59.97	3.54	16.95	1.54	21.87	2.14	0.00	24.01
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	59.97	3.54	16.95	1.54	21.87	2.14	0.00	24.01

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

