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CIVIL ENGINEERING CONSULTANTS

TRANSPORT ASSESSMENT

GRID REF: 528027E, 193454N

PROPOSED DEVELOPMENT AT THE NORTH LONDON BUSINESS PARK

NEW SOUTHGATE, BARNET, LONDON

prepared for

COMER HOMES GROUP

AUGUST 2021

REFERENCE: ST3013/TA-2108North London Business Park
REVISION: Rev 0

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Revision	Author	Checked by	Issue Date
0	PC	NJM	08/04/21

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APPENDICES

Note: Traffic count data files provided separately if requested

1. Introduction

1.1. Background Information

1.1.1. Stomor Ltd. has been commissioned by Comer Homes Group to prepare a Transport Assessment (TA) in support of a Hybrid Planning Application for the regeneration of the North London Business Park to provide a mixed-use development of up to 2,428 dwellings, 2,353sq.m of workspace, 3,835 sqm flexible non-residential floorspace, which could be used for community use, medical use, retail, offices, cafes etc. and a new 5FE school building with an anticipated 1,050-pupil capacity.

1.1.2. The site measures 16.37 hectares (ha), of which approximately 13ha comprises areas of disused open space and car parking. The site is bounded by the East Coast Mainline railway along the entire western boundary, with residential development and Brunswick Park Road adjacent to the eastern boundary. Further details of the site location are shown in the parameter plans produced by Plus Architecture contained in **Appendix A.**

1.1.3. The site benefits from planning permission for redevelopment. The original application was submitted in hybrid form and planning permission was granted at appeal in February 2020 for:

"the phased comprehensive redevelopment of the North London Business Park to deliver a residential led mixed-use development. The detailed element comprises 360 residential units in five blocks reaching eight storeys, the provision of a 5 Form Entry Secondary School, a gymnasium, a multi-use sports pitch and associated changing facilities, and improvements to open space and transport infrastructure, including improvements to the access from Brunswick Park Road, and; the outline element comprises up to 990 additional residential units in buildings ranging from two to nine storeys, up to 5,177 sqm of non-residential floor space (Use Classes A1-A4, B1 and D1) and 2.54haof public open space. Associated site preparation/enabling works, transport infrastructure and junction works, landscaping and car parking."

(London Borough of Barnet reference 15/07932/OUT and PINS reference APP/N5090/W/17/3189843)

1.1.4. In 2015, a TA was prepared by Awcock Ward Partnership (AWP) for 1,200 dwellings, alongside the community, commercial and educational land uses. Further to the 2015 TA, a TA Addendum was prepared by AWP in March 2017 to consider the transport implications of a proposed uplift in the residential development from 1,250 to 1,350 dwellings.

1.1.5. The revised 2021 development proposals are for the following:

"Hybrid planning application for the phased comprehensive redevelopment of the North London Business Park to deliver a residential-led mixed use development. The detailed element comprises 466 residential units in five blocks reaching 9 storeys, the provision of a 5 form entry secondary school, a gymnasium, a multi-use sports pitch and associated changing facilities and improvements to open space and transport infrastructure, including improvements to the access from Brunswick Park Road and; the outline element comprises up to 1,998 additional residential units in buildings ranging from three to twelve storeys, up to 5,331 sqm of non-residential floor space (use Class E) and 20,250sqm of open space. Associated site preparation/enabling work, transport infrastructure and junction work, landscaping and car parking."

1.2. Transport Assessment Scoping

1.2.1. Scoping discussions for the proposals set out in this TA were held with both the London Borough of Barnet (LBB) and Transport for London (TfL) in April/May 2021. A summary of the key points raised from these scoping discussions is set out below:

- Given the passage of time since the previous TA, the initial 2015 traffic count data was not considered to be acceptable. Therefore, TfL requested that new traffic count data should be obtained for the junctions within the study area to inform the baseline;
- Only the development above and beyond the extant 1,350 dwellings and 3,125sq. m of commercial space permitted in 2020 will need to be assessed within the revised TA. Therefore, a total of 1,150 dwellings need to be assessed within this revised TA;
- An assessment of the impact of the proposed development on the London Underground network will need to be undertaken;
- Data for the future year assessments would need to be derived using TfL`s model;
- Car parking provision within the proposed development should accord with the standards set out in the London Plan; and
- A comprehensive Active Travel Assessment is required to be undertaken.

1.2.2. Further details pertaining to the scoping exercise are contained in **Appendix B** for reference.

1.2.3. With regard to the secondary school, it has been concluded that the proposals for the school relate to a re-location only, and subsequently no additional traffic will be

generated by the school proposal. In light of this, no assessment of the secondary school development has been included within this assessment.

1.2.4. This TA has been prepared to assess the travel demand and impact of the proposed development until full occupancy. The development will be taken forward in a series of development phases.

1.2.5. The content of the previous 2015 TA has been used to inform this document.

2. Existing Conditions

2.1. Existing Site Information

2.1.1. The site is bounded by the East Coast Mainline railway along the entire western boundary. The eastern boundary is abutted by Properties on Brunswick Park Gardens to the north east and Brunswick Park Road to the south east. New Southgate Cemetery is located to the south east of the site. To the north are properties on Weirdale Road, Ashbourne Avenue, Linden Road and Pine Road. To the south are properties on Brunswick Crescent and Haynes Close.

2.1.2. The A109, Oakleigh Road North abuts the south eastern corner of the site.

2.1.3. Properties to the north and south are predominantly residential, typically characterised by 2/3 storey suburban detached, semi-detached and terraced housing.

2.1.4. The site provides circa 38,000 sq. m of office, temporary educational and community floorspace developed in a campus style with approximately 1,300 car parking spaces and is currently let to a variety of occupiers falling broadly with former use class B1.

2.1.5. The site varies significantly in topography with a steep gradient comprising a level difference of 24m across the site from the northern boundary to its lowest point at Brunswick Park Road.

2.2. Local Highway Network

2.2.1. The site has two existing access points, one to the south onto the A109 Oakleigh Road North and one to the east onto Brunswick Park Road.

2.2.2. There is also a redundant, unused access point to the northern boundary which would provide access to Ashbourne Avenue, were it not currently fenced off. Ashbourne Avenue leads onto the B5143 Russell Lane, which comprises a mix of residential properties and neighbourhood retail frontage.

2.2.3. Access to the existing employment is provided via both existing accesses into the site. The A109 Oakleigh Road North access takes the form of a priority junction at the southern extent of the redevelopment site. There is a zebra crossing immediately to the north west of this access and there is space for a vehicle to wait to turn into the site between the zig-zag line markings associated with this crossing, out of the line of traffic. There is also an existing auxiliary lane directly from Brunswick Avenue to the North London Business Park access road.

2.2.4. The access road in this location has a width of approximately 7.8m. A footway leads into the redevelopment site on the western side of the access road, gated at the site entrance. This footway has a width of 2m adjacent to Oakleigh Road North, increasing to 3m further into the site.

2.2.5. The existing access from Brunswick Park Road takes the form of a crossroads arrangement on the eastern edge of the redevelopment site. Goldrill Drive is located opposite the site access, and both form minor arms to Brunswick Park Road. An existing zebra crossing is located approximately 20m to the north of the junction.

2.2.6. The site access road at this location is approximately 8.5m in width. There are footways on either side of the carriageway approximately 2m in width and gated at the site entrance. Approximately 23m from Brunswick Park Road, the site access has a three-arm roundabout with priority given to vehicles travelling into the site from Brunswick Park Road over vehicles on the circulatory.

2.2.7. Further afield, the A109 Oakleigh Road South continues towards Friern Barnet, to the south of the redevelopment site. To the north of the site access the A109 Oakleigh Road North continues on towards Whetstone Village neighbourhood centre.

2.2.8. Brunswick Park Road provides a north-south link between the B1453, Osidge Lane and the A1003, Waterfall Road situated between Friern Barnet and Arnos Grove. Osidge Lane connects to Brunswick Park Road and provides an approximate 500m eastwards link to the neighbourhood centre at Hampden Square in Osidge.

2.2.9. Parking on Brunswick Park Road takes the form of on carriageway informal parking and kerb mounted parking bays. Additionally, a free off-highway parking area is provided approximately 55m south of the junction of Brunswick Park Road and Brunswick Avenue.

2.2.10. Ashbourne Avenue continues south-north from the northern site boundary to Russell Lane. A highway stub exists to the site boundary, and it is understood that this was previously used for pedestrian access to the development site but is now closed. A track

runs between the site boundary and the rear of properties on Weirdale Avenue, providing access to garages and rear gardens. This track is accessed via the Ashbourne Avenue southern stub and from Russell Lane to the north west. The Ashbourne Avenue connection between the site and Russell Lane is approximately 230m in length and the road features footway and street lighting on both sides of the carriageway.

2.2.11. Russell Lane from east to west and provides a link between the mini roundabout at Oakleigh Road North/Pollard Road and the mini roundabout at Brunswick Park Road/Church Hill Road. The directional lanes on the central section of Russell Lane are divided by a green area, creating an urban dual carriageway.

2.2.12. Brunswick Avenue provides a link between Oakleigh Road South and Brunswick Park Road, approximately 10m to the south of the existing A109 Oakleigh Road North site access.

2.2.13. The highway network in the vicinity of the site is subject to a 30mph speed limit. There are no 'red routes' (TLRN) in the vicinity of the site.

2.3. Policy Overview – National Policy

2.3.1. National policy is set out in the National Planning Policy Framework dated (February 2019). Section 4 of the National Planning Policy Framework sets out policies for promoting sustainable transport, recognising that different policies and measures will be required in different communities, and opportunities to maximise sustainable transport solutions will vary from urban to rural areas.

2.3.2. The following assessment identifies the potential impact of the proposed development in transport terms, it demonstrates how opportunities for using existing infrastructure can be used, how technology might contribute towards managing travel demand (i.e. via home working) and how opportunities for promoting sustainable modes of travel have been positively promoted as a realistic alternative to using private motor vehicles.

2.4. Policy Overview – Local Policy

Barnet Draft Local Plan (January 2020)

2.4.1. The Council is reviewing and updating the Borough's Local Plan, and at the time of writing is currently out to public consultation (under the Draft Regulation 19). The Local Plan sets out a vision for how Barnet will change as a place over the next 15 years. The emerging Plan will, when it replaces the existing 2012 Local Plan, provide the main basis upon which future planning applications will be determined.

2.4.2. The following objectives are identified within the Barnet Draft Local Plan:

- To deliver growth to meet housing aspirations and needs;
- To improve orbital connectivity and sustainable travel options including cycling and walking; and
- To ensure new development is high quality, sustainable, and capable of adaption to meet the needs of residents over their lifetime.

2.4.3. The Draft Local Plan identifies the need for 46,000 new homes to be delivered until 2036 to accommodate the planned growth in Barnet. Furthermore, the Local Plan seeks efficient use of previously developed land to address Barnet`s housing needs:

'*Policies BSS01 and GSS01 aims to make the best use of previously developed land which can be planned at higher densities…'*

2.4.4. With regards to walking and cycling, the Local Plan states:

'*Walking and cycling are transport modes that the Council is keen to promote due to the many benefits they provide ranging from reducing the use of private cars with consequent improvements for air quality to a more active and healthy population that increased walking and cycling leads to in terms of the health benefits to the individuals from derived from partaking in exercise.'*

2.4.5. In relation to vehicle parking, for non-residential uses the Council supports the application of London Plan car parking standards. For residential uses the Council advocates an approach which is more reflective of local circumstances. The accessibility of individual locations will be taken into consideration, based on:

- The overall public transport accessibility level (PTAL);
- Orbital PTAL;
- Parking stress including the level of on-street parking control;
- Population density and parking ownership of surrounding areas;
- Location (i.e. is it in a town centre);
- Ease of access by cycling and walking; and

- Other relevant planning or highways considerations, such as to whether the proposal is a conversion of an existing use.

2.4.6. The Draft Local Plan aims to increase the rate of change in terms of car use, which includes support for active travel and public transport opportunities, as well as promoting innovative ways to enable long term modal shift.

Draft Barnet Long Term Transport Strategy 2020 – 2041 (December 2019)

2.4.7. The Strategy sets a direction for change to offer greater choices for travel, encourage more active lifestyles which will increase the health and well-being of Barnet's residents and improve air quality. The Strategy also sets out a number of proposed schemes for each type of travel along with activities to help change behaviour and encourage positive changes to the way we currently travel.

2.4.8. The following key objectives are identified within the Strategy:

- '*Objective 1: Barnet's transport network contributes to the creation of better places to live, work and visit, allows local businesses to thrive sustainably, and is flexible, adapting to future opportunities presented by technology and change in travel patterns;*

- *Objective 2: Transport in Barnet keeps the borough moving, enabling people and goods to move within and through the borough efficiently using high quality orbital and radial links;*

- *Objective 3: The transport system is as accessible as possible regardless. of age, ability and income, and the negative impacts of transport are minimised;*

- *Objective 4: Transport contributes positively to the health of the borough, by prioritising active travel and ensuring continued improvement in air quality; and*

- *Objective 5: The road network and transport system in Barnet is safe and residents and visitors feel safe across all transport modes*.'

The London Plan 2021

2.4.9. The London Plan 2021 is the Spatial Development Strategy for Greater London. It sets out a framework for how London will develop over the next 20-25 years and the Mayor's vision for sustainable growth.

2.4.10. Policy GG2 Making the best use of land states that:

'*To create successful sustainable mixed-use places that make the best use of land, those involved in planning and development must:*

- *enable the development of brownfield land, particularly in Opportunity Areas, on surplus public sector land, and sites within and on the edge of town centres, as well as utilising small sites*
- *prioritise sites which are well-connected by existing or planned public transport*
- *proactively explore the potential to intensify the use of land to support additional homes and workspaces, promoting higher density development, particularly in locations that are well-connected to jobs, services, infrastructure and amenities by public transport, walking and cycling*
- *plan for good local walking, cycling and public transport connections to support a strategic target of 80 per cent of all journeys using sustainable travel, enabling car-free lifestyles that allow an efficient use of land, as well as using new and enhanced public transport links to unlock growth.*'

2.4.11. With reference to housing, The London Plan acknowledges that brownfield sites are crucial to deliver new homes. Furthermore, it is stated that '*Boroughs should proactively use brownfield registers and permission in principle to increase planning certainty for those wishing to build new homes*.'

2.4.12. Policy D8 Public Realm states that development proposals should:

- '*maximise the contribution that the public realm makes to encourage active travel and ensure its design discourages travel by car and excessive on street parking, which can obstruct people's safe enjoyment of the space. This includes design that reduces the impact of traffic noise and encourages appropriate vehicle speeds; and*
- *ensure the priority modes of travel for the area should be identified and catered for, as appropriate. Desire lines for people walking and cycling should be a particular focus, including the placement of street crossings, which should be regular, convenient and accessible; and*
- *ensure that any on-street parking is designed so that it is not dominant or continuous, and that there is space for green infrastructure as well as cycle parking in the carriageway. Parking should not obstruct pedestrian lines*.'

2.4.13. Policy T2 Healthy Streets sets out that development should deliver patterns of land use that facilitate residents making shorter, regular trips by walking or cycling.

2.4.14. In addition, Policy T2 states that development proposals should:

- '*demonstrate how they will deliver improvements that support the ten Healthy Streets Indicators in line with Transport for London guidance*
- *reduce the dominance of vehicles on London's streets whether stationary or moving*
- *be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport*.'

2.4.15. The 10 Healthy Street Indicators are shown below in **Figure 1** which has been extracted from Figure 10.2 of The London Plan.

Figure 1 – The 10 Healthy Streets Indicators

2.4.16. Policy T4 Assessing and mitigation transport impacts states the following:

- *'Where appropriate, mitigation, either through direct provision of public transport, walking and cycling facilities and highways improvements or through financial contributions, will be required to address adverse transport impacts that are identified.*

- *Where the ability to absorb increased travel demand through active travel modes has been exhausted, existing public transport capacity is insufficient to allow for the travel generated by proposed developments, and no firm plans and funding exist for an increase in capacity to cater for the increased demand, planning permission will be contingent on the provision of necessary public transport and active travel infrastructure.'*

2.4.17. Policy T6 Car Parking states that '*Car parking should be restricted in line with levels of existing and future public transport accessibility and connectivity.'*

Policy Summary

2.4.18. The proposed development accords with the objectives outlined in his Section given the following considerations:

- The proposed development will provide 2,500 much needed homes identified in the Borough;

- The proposed development is located entirely within a brownfield site;

- Appropriate vehicle parking will be provided which will reflect the access to public transport, walking and cycling infrastructure, as opposed to an abundance of vehicle parking to encourage travel via car;

- The proposed development will provide a comprehensive on-site footpath network based on key desire lines which prioritises pedestrians over vehicular traffic. This will include the delivery of as many pedestrian and cycle connections as is practical during each phase of the development build out to maximise connectivity and integration to key local destinations; and

- Pedestrians and cyclists will benefit from a mixture of specific off-road facilities and on-road low speed site layout design to enhance safety.

2.5. Existing Site

2.5.1. The site occupies 16.37ha of brownfield land in a predominantly residential area, located to the west of Southgate and to the south of East Barnet.

2.5.2. The site is located in the London Borough of Barnet, circa 8 miles to the north-west of Central London. The site lies slightly outside of the circular route prescribed by the A406 North Circular Road.

2.6. Existing Public Transport Facilities

2.6.1. The development site is well located in terms of access on foot and by bicycle to public transport. Drawing ST-3013-02 'Accessibility Plan' has been attached in **Appendix C**, which shows the existing public transport facilities within the vicinity of the site.

2.7. PTAL Assessment

2.7.1. The Public Transport Accessibility Level (PTAL) methodology is used by TfL as a means to quantify and compare accessibility to public transport services for given sites. It takes into account the time taken to access the public transport network, including:

- The walking time to public transport services;
- The average waiting for each service; and
- The reliability of each service.

2.7.2. The methodology is based on a walk speed of 4.8kph and considers railway stations within a 12-minute walk (960m) of a site and bus stops within an 8-minute walk (640m). The PTAL assessment is undertaken using the AM peak hour operating patterns of existing services.

2.7.3. An Equivalent Doorstep Frequency (EDF) is calculated for each of the public transport services accessible from the site based on the criteria described above. These individual EDF values are weighted to provide an accessibility index (AI) value for each service accessible from the site. The sum of the AIs for each mode are aggregated to provide a single measure of accessibility.

2.7.4. TfL's web-based calculator has been used to determine the site's existing PTAL, which shows a rating of 1a with an AI score of 17.78. This demonstrates that based on the PTAL calculator, the site is considered to have poor access to public transport. The PTAL rating varies between 1a, 1b and 2 across the site depending upon proximity to the . Further details are shown in **Figure 2** below which has been extracted from TfL`s PTAL website.

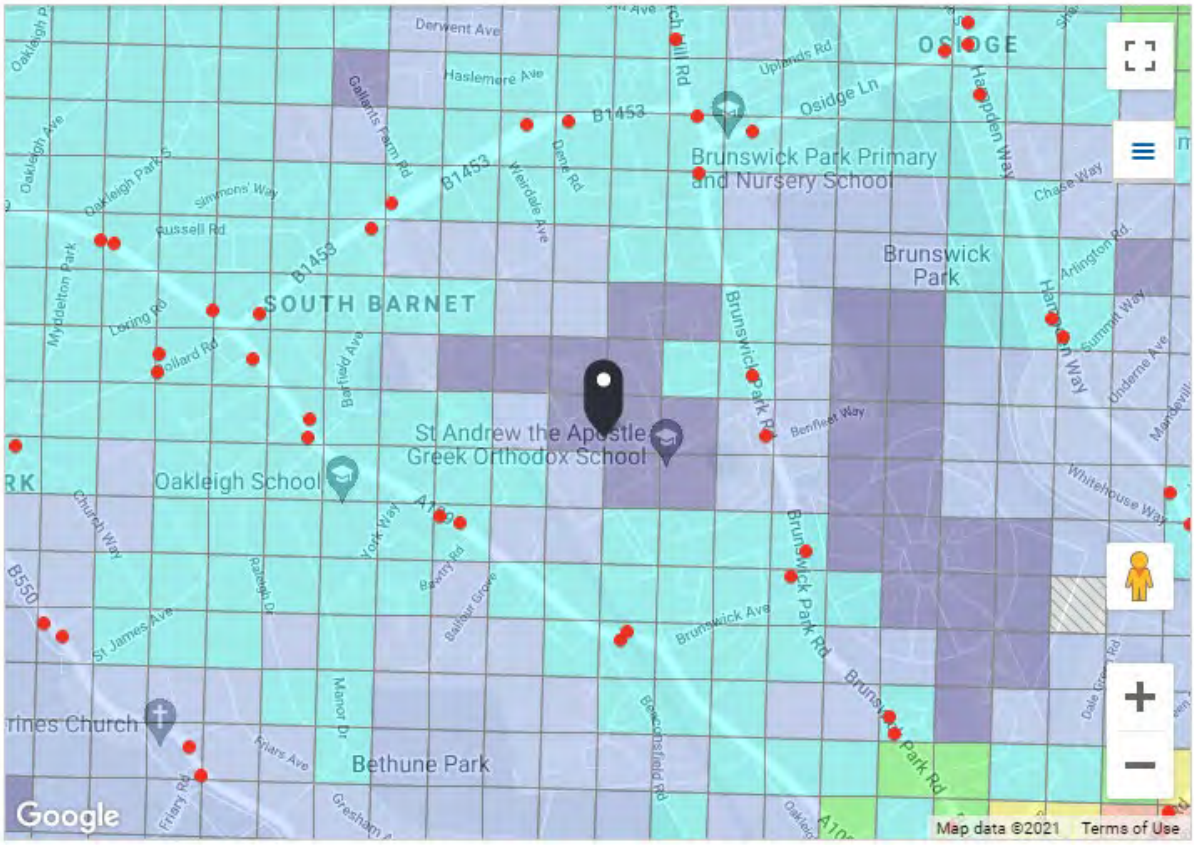


Figure 2 – Proposed Development PRAL Output Map (Base 2021)

2.7.5. Notwithstanding the above, this assessment demonstrates that the proposed development is located within 400m of a number of bus services operating on a high frequency, as described in more detail below.

2.8. Bus Services

2.8.1. There are two bus stops located adjacent to the site access: one on Brunswick Park Road and the other on the A109 Oakleigh Road North. Both of these stops are within 400m as measured from the centre of the site, and as illustrated in the Accessibility Plan contained in **Appendix C.**

2.8.2. The bus stops along the A109 Oakleigh Road North are accessible via the footways available from the site and along both sides of the A109 Oakleigh Road North. Access to the northbound bus stop is facilitated via a zebra crossing located along the A109 Oakleigh Road North adjacent to the southern site access.

2.8.3. The bus stops along Brunswick Park Road are accessible via the footways available from the site and along both sides of Brunswick Park Road. Access to the southbound

bus stop is facilitated via a zebra crossing located along Brunswick Park Road to the north of the site access.

2.8.4. In addition to the bus stops located adjacent to the existing site accesses, there are also bus stops located along the B1453 Russell Lane. Whilst there is no existing access within the vicinity of the B1453 Russell Lane, a pedestrian/cycle access will be delivered as part of the proposals, which will link the north of the site to Ashbourne Avenue, which connects to the B1453 Russell Lane. As a result, the development parcels located within the northern area of the site will be within a 400m walking distance of existing stops along the B1453 Russell Lane.

2.8.5. The following bus services are available from the stops located along the A109 Oakleigh Road North:

- **Service 34** operates between Barnet Church and Walthamstow Central with one service in both directions every 8-10 minutes during the week, increasing to a 30 min frequency during the weekends. Service 34 also provides a link to Arnos Grove Underground Station, Walthamstow Central Station and neighbourhood centres at Whetstone, Barnet centre, Edmonton and Walthamstow;

- **Service 251** operates between Edgeware Bus Station and Arnos Grove Underground Station, with one service in each direction every 8-12 minutes during the week, reducing to every 20-30 minutes on Sundays. Service 251 also provides a link to Mill Hill Broadway Station.

2.8.6. **Service 382** is available from the stops located along Brunswick Park Road. Service 382 operates between Millbrook Park and Southgate and runs on a 15 min frequency, increasing to a 30-minute frequency on Sundays. Service 382 also provides a link to Mill Hill East Underground Station, Finchley Central Station, Arnos Grove Underground Station and Southgate Underground Station.

2.8.7. **Service 125** is available from the bus stops along the B1453 Russell Lane, operating between Colindale Station and Winchmore Hill, with one service in each direction every 10-12 minutes during the week and Saturday, with services every 15 minutes on Sundays.

2.8.8. An interactive public transport services map is provided online by TfL which shows live departures, routes and timetables from the stops adjacent to the site. This information can be found at Buses - Transport for London (tfl.gov.uk). **Figure 3** provides an example

of live information available for Service 34 available from the stops at the A109 Oakleigh Road South.

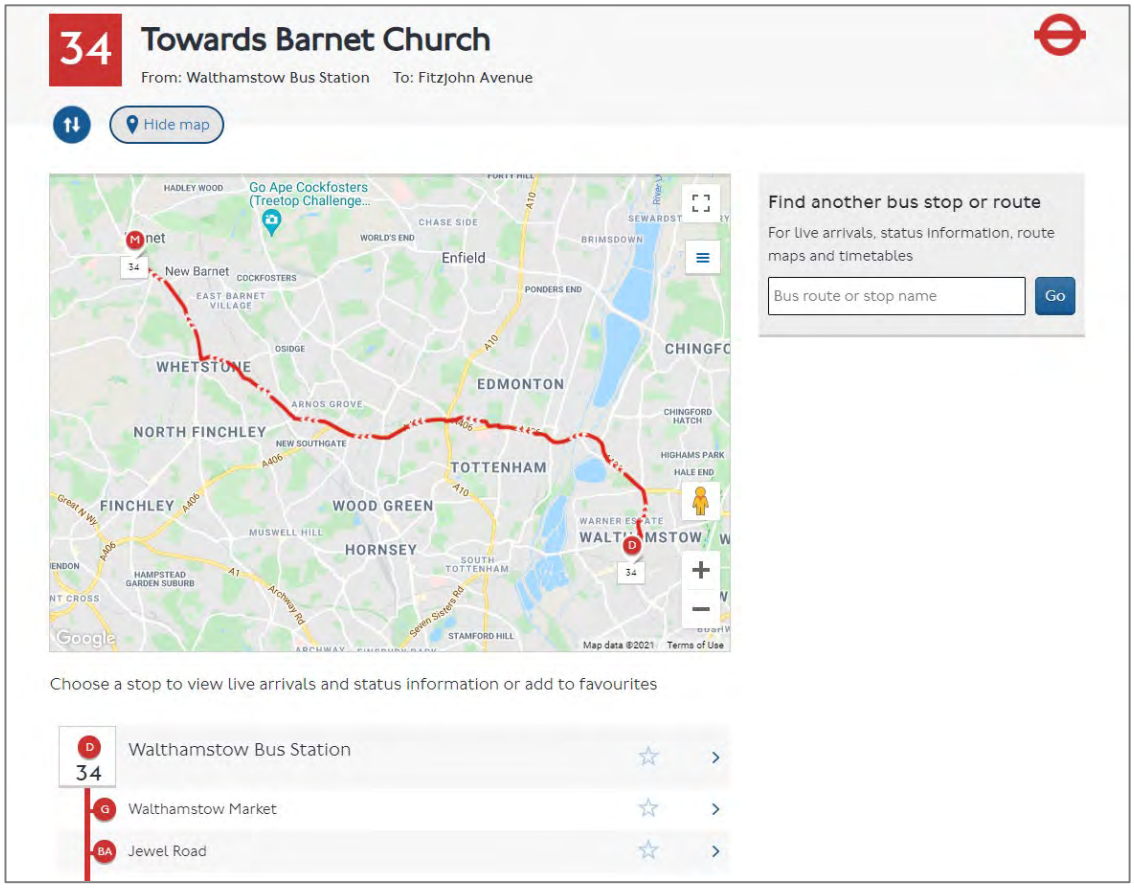


Figure 3: Extract from TfL Interactive Bus Services Map, June 2021

2.8.9. Bus journey time during peak periods from the stops along the A109 Oakleigh Road North to:

- Arnos Grove Underground is 6 minutes;
- Walthamstow Central Station is 35 minutes;
- Mill Hill Broadway Station is 20 minutes; and
- Edgeware Bus Station is 30 minutes.

2.8.10. Bus journey time during peak periods from the stops along Brunswick Park Road to:

- Arnos Grove Underground Station is 6 minutes;
- Southgate Underground Station is 10 minutes; and
- Finchley Central Station is 35 minutes.

2.8.11. This level of service is therefore considered acceptable for the area, with a good, combined frequency of service, a multitude of travel options and a short walk distance to stops.

2.9. Public Transport – National Rail Services

2.9.1. The nearest National Rail stations to the site are Oakleigh Park to the north and New Southgate to the south (a 23-minute walk or 8-minute cycle journey from the centre of the site). These stations are on the Great Northern line between Moorgate and Welwyn Garden City.

2.9.2. Southbound services into London (Moorgate) are provided at 20-minute intervals during the week, which increase to a 30-minute interval during the weekends. The Northern, Circle, Metropolitan and Hammersmith & City underground lines all stop at the Moorgate hub.

2.9.3. Northbound services (to Welwyn Garden City) are provided at 20-minute intervals during the week, which increase to a 30-minute interval during the weekends.

2.9.4. The first weekday train departs New Southgate to Moorgate at 05:50, arriving at 06:16. The last train from Moorgate departs at 23:57. The journey between New Southgate and Oakleigh Park is approximately 3 minutes. This shows that the stations provide a service which caters to commuters working in the more central areas of London.

2.9.5. Passengers have the option to interchange to alternative surface rail services along the route from New Southgate. Key interchange stations include Finsbury Park, Highbury & Islington and Old Street.

2.9.6. Secure cycle storage is available at New Southgate and Oakleigh Park stations, making sustainable trips to the station attractive to residents of the area. Station information suggests there are currently 10 cycle storage spaces at New Southgate and 8 spaces at Oakleigh Park station.

2.10. Public Transport – London Underground Services

2.10.1. The site is located between two London Underground lines; the Northern Line and Piccadilly Line, with the nearest station being Arnos Grove on the Piccadilly Line (24-minute walk or 8-minute cycle away). There are 10 cycle storage spaces at the station with additional stands in the local area.

2.10.2. The nearest station on the Northern Line is Totteridge & Whetstone (28-minute walk or 8-minute cycle journey via the Ashbourne Road link). There are 10 cycle storage spaces at the station. A table of key destinations is summarised below.

Stations	Line	Termini and Major Interchanges
Totteridge & Whetstone	Northern	Euston, Leicester Square, Tottenham Court Road, Bank, Elephant & Castle, Morden
Arnos Grove	Piccadilly	Euston, Leicester Square, Tottenham Court Road, Bank, Elephant & Castle, Morden

Table 1: London Underground Service Summary

2.10.3. Northern Line services from the Totteridge & Whetstone provide ample opportunity for interchange between lines or modes as well as serving a number of desirable destinations directly. Tottenham Court Road will also become a Crossrail station upon completion of the project, facilitating further options for travel east/west.

2.10.4. Piccadilly line from Arnos Grove serves several central interchange stations including King's Cross and Green Park. Between them these stations provide options for onwards travel by National Rail, Victoria London Underground line and Jubilee London Underground line amongst others**.**

2.11. Pedestrians and Cyclists

2.11.1. Zebra crossings are in place adjacent to both existing site accesses. Additional zebra crossings are also located along Oakleigh Road North and South; adjacent to Oakleigh Close; adjacent to Raleigh Drive, at the Russell Lane western mini roundabout; and to the south at Betstyle Circus. Other pedestrian facilities along Brunswick Park Road include a zebra crossing approximately 450m north of the existing site access and additional informal crossing points at regular intervals with dropped kerbs.

2.11.2. Footways continue on both sides of Oakleigh Road South and Oakleigh Road North between Friern Barnet and Whetstone. Street lighting is in place in conjunction with the footway provision. Footways in the vicinity of this existing access are 2m wide on average.

2.11.3. To the east of the site, footways are present on both sides of the carriageway with street lighting provided. At points the footway is set back from the carriageway with vegetation segregating the two uses

2.11.4. With regards to cycling, an off-highway cycle route to the east of the site provides a north-south connection towards East Barnet and New Southgate through Brunswick

Park, between Osidge Lane and Wilmer Way. Beaconsfield Road is a further locally recognised cycle route from the site which allows cyclists to avoid Betstyle Circus.

2.12. Local Amenities and Facilities

2.12.1. The Institution of Highways and Transportation document "Guidelines for Providing for Journeys on Foot" (GPJF) contains suggested acceptable walking distances for pedestrians for some common facilities. This document is intended to advise on planning for and providing for pedestrians, maintaining pedestrian infrastructure and promoting walking and as a result the distances stated in the document may be used for planning and evaluation purposes. Table 3.2 from Guidelines for Providing for Journeys on Foot (GPJF) is reproduced in Table 2 below for reference.

	Town Centres (m)	Commuting/School (m)	Elsewhere
Desirable	200	500	400
Acceptable	400	1000	800
Preferred maximum	800	2000	1200

Table 2 –Suggested Acceptable Walking Distance (Reproduced from Table 3.2 of GPJF)

2.12.2. The Accessibility Plan contained in **Appendix C** highlights the location of local facilities with respect to the development site. To provide context, boundaries indicating distances from the site boundary in 500m (or 6-minute walk/2-minute cycle), 1000m (12-minute walk/4-minute cycle) 1500m (18-minute walk/6-minute cycle) and 2000m (24-minute walk/8-minute cycle) increments are also shown.

2.12.3. As shown in Table 3 below, residents of the development will be able to access a range of local facilities on foot within an approximate 5, 10 and 15-minute walk of the development.

Facility	Approximate Distance (m/mins)									
	0-400m		400-800m		800-1200m		1200-1500		1600-2000	
	0-5mins walking	1-2 mins cycling	5-10 mins walking	2-3 mins cycling	10-15 mins walking	3-4 mins cycling	15-20 mins walking	5-6 mins cycling	20-25 mins walking	6-7 mins cycling
St Andrew the Apostle Greek Orthodox School		✓								
Oakleigh Road Bus Stops		✓								
Brunswick Park Road Bus Stops		✓								
Oakleigh Road North / Balfour Grove Shopping Parade		✓								
Russell Lane Shopping Parade		✓								
Brunswick Park Medical Practice					✓					
Brunswick Park Primary School					✓					

Table 3 – Walking/Cycling Accessibility to Local Facilities – Summary Table

2.12.4. Table 3 shows that there is a comprehensive range of facilities within a desirable and acceptable walking distance of the site including retail, education and health destinations.

2.12.5. There are over 10 schools within the preferred maximum distance from the site, including two secondary schools. This means that a variety of provision can be reached through sustainable means.

2.12.6. There is very little need for individuals to travel by car to meet every-day needs. The shopping parades at Oakleigh Road North/Balfour Grove and on B1453 Russell Lane have a variety of shops including convenience stores.

2.12.7. Further retail facilities are available at the Oakleigh Road North/Barfield Avenue and Hampden Square Neighbourhood Centres. The Oakleigh Road North/Barfield Avenue neighbourhood centre is within an approximate 10-minute walk of the redevelopment site and features food and convenience retail including a Tesco Express.

2.12.8. In additional Tesco Express is available at the Hampden Square neighbourhood centre as well as a variety of local stores. This centre is within an approximate 12-minute walk of the redevelopment site.

2.12.9. Health coverage in the area is wide ranging. A GP surgery and a pharmacy are both within a desirable distance of the redevelopment site. Patients can access the Hampdens Surgery within an approximate 4-minute walk of the redevelopment site. Four additional surgeries are located within a preferred maximum distance of the site.

2.12.10. With this variety of facilities within such a short distance of the site, it is considered that the site is in a sustainable location.

2.13. Summary

2.13.1. Access to the existing employment is achieved through the use of one of two accesses into the site.

2.13.2. The Oakleigh Road North access takes the form of a priority junction at the southern extent of the redevelopment site. The existing access from Brunswick Park Road takes the form of a crossroads arrangement on the eastern edge of the development site.

2.13.3. Zebra crossings are in place adjacent to both existing site accesses. Additional zebra crossings are located on Oakleigh Road North adjacent to Oakleigh Close, adjacent to Raleigh Drive, at the B14533 Russell Lane mini roundabout on Oakley Road South at Betstyle Circus and on Brunswick Park Road to the north of Prevost Road.

2.13.4. With regards to cycling, an off-highway cycle route to the east of the site provides a north-south connection towards East Barnet and New Southgate through Brunswick Park.

2.13.5. The level of service is therefore considered acceptable for the area, with a good, combined frequency of service to key facilities and transport infrastructure, a multitude of travel options and a short walk distance to stops.

2.13.6. The National Rail and London Underground provision in the vicinity allows for sustainable travel to a variety of destinations including employment centres.

2.13.7. There are a variety of facilities within a short walking distance of the site including education, retail and health facilities.

2.13.8. It is therefore considered that the site is in a sustainable location as required by the NPPF.

2.14. Traffic Flows on Links and Junctions within the Study Area

2.14.1. As requested by TfL during the scoping discussions, traffic counts were undertaken within the agreed area, as shown in **Figure 4** below and summarised in Table 4.

Ref.	Location	Junction Type
J1	A109 Oakleigh Road North/Oakleigh Park/Myddelton Park	Signalised Crossroads
J2	Church Hill Road/Russell Lane/Brunswick Park Road	3-arm Mini roundabout
J2a	Brunswick Park Road/Osidge Lane	3-arm Mini roundabout
J3	A109 Oakleigh Road North/Pollard Road/B5143 Russell Lane	4-arm Mini roundabout
J4	Site Access/Brunswick Park Road/Goldrill Drive	Crossroads
J5	A109 Oakleigh Road North/Site Access	Priority Junction
J5a	A109 Oakleigh Road South/Brunswick Avenue	Priority Junction
J6	A109 Oakleigh Road South/Coppies Grove	Priority Junction
J7	Friern Barnet Road/A109 Oakleigh Road North/Waterfall Road/Bowes Road (Betstyle Circus)	5-arm roundabout
J8	A109 Oakleigh Road/A1000 High Road/Totteridge Lane	Signalised Staggered Crossroads

Table 4 – Summary of Traffic Count Locations and Type

2.14.2. Manual Classified Count (MCC) surveys were undertake taken on Thursday 27th May 2021 at the locations shown on **Figure 4** below.

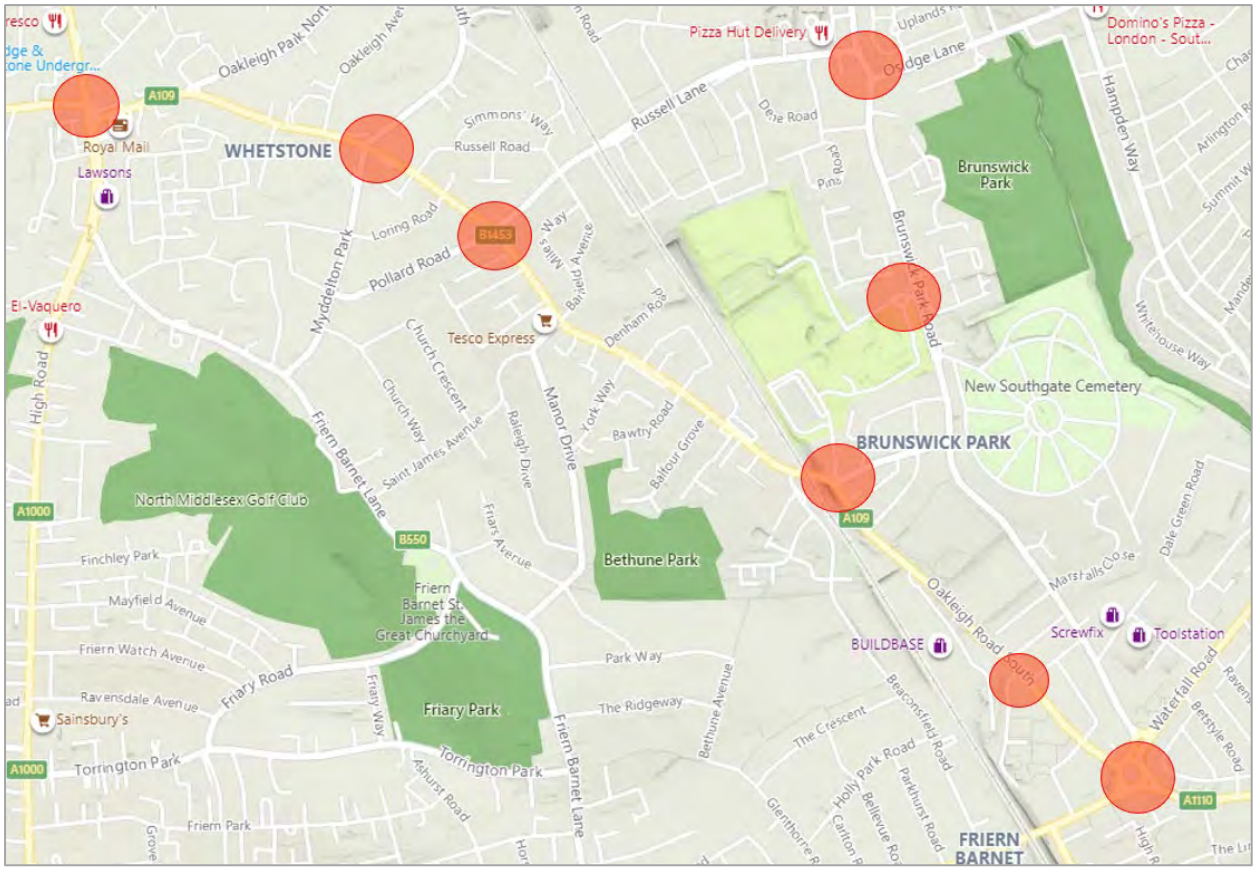


Figure 4 –2021 MCC Survey Locations (base mapping extracted from Bing Maps)

2.14.3. In addition to the MCCs undertaken, Automictic Traffic Counts (ATCs) were also installed within the vicinity of the site access along the A109 Oakleigh Road North and Brunswick Park Road.

2.14.4. These counts have been used to act as the baseline for assessment of traffic flows in the vicinity of the site and likely impact of traffic generated by the proposed development. The Observed 2021 traffic flow information is provided in **Appendix D.**

2.14.5. The baseline observed traffic flows and speeds are considered in more detail in Section 4 below in relation to development impact.

2.15. Personal Injury Accident Records

2.15.1. Personal Injury Collision (PIC) data covering the highway network within the vicinity of the site has been obtained from TfL. The data was obtained for the most recent period available; 5 years to the end of June 2019. For further details regarding the PIC data refer to London collision map - Transport for London (tfl.gov.uk).

2.15.2. Specific regard has been made to the occurrence of vulnerable road users[1] in any PIC data.

2.16. PIC Summary – Junctions

2.16.1. An assessment of the highway safety conditions at the 8 junctions identified within the study area are summarised below:

- Junction 1 – A109 Oakleigh Road North/Oakleigh Park/Myddelton Park - 1 PIC classified as Slight in severity occurred at J1 in 2017 and involved 2 cars. Another Slight PIC was recorded in 2018 and involved a car and a motorcycle. No PICs that were classified as Serious or Fatal in severity were recorded during the most recent 5-year period;

- Junction 2 – Church Hill Road/Russell Lane/Brunswick Park Road - 1 Slight PIC was recorded at J2 in 2015 which involved 2 cars. No other PICs were recorded at J2 during the 5-year period;

- Junction 2a – Brunswick Park Road/Osidge Lane - 1 Slight PIC was recorded at J2a in 2019 which involved a car and a motorcycle. No other PICs were recorded at J2a during the 5-year period;

- Junction 3 – A109 Oakleigh Road North/Pollard Road/Russell Lane - 3 Slight PICs were recorded at J3 in 2015. All of these incidents involved vehicles and no vulnerable road users. 1 Slight PIC was recorded in 2016 involving a bus. 1 Serious PIC was recorded in 2018 and involved a pedestrian and a motorcyclist;

- Junction 4 – Site Access/Brunswick Park Road/Goldrill Drive - No PICs were recorded at J4 during the 5-year period;

- Junction 5 – A109 Oakleigh Road North/Site Access - No PICs were recorded at J5 during the 5-year period;

- Junction 5a – A109 Oakleigh Road South/Brunswick Avenue - No PICs were recorded at J5a during the 5-year period;

- Junction 6 – A109 Oakleigh Road South/Coppies Grove - 1 Slight PIC was recorded at J6 in 2015 which involved 2 cars. 1 Slight PIC was recorded at J6 in 2018 which involved 2 cars;

[1] Vulnerable road users are considered to be pedestrians, scooters, cyclists, horse riders and powered two wheelers

- Junction 7 – Friern Barnet Road/A109 Oakleigh Road North/Waterfall Road/Bowes Road (Betstyle Circus) - 3 Slight PICs were recorded at J7 in 2015, all of which involved cars. 1 Slight PIC occurred in 2016 involving 2 cars. 1 Slight PIC was recorded in 2019 (along the eastern circulatory) which involved a car and a motorcycle. 3 further Slight PICs were recorded in 2019 that involved cars. 1 Serious PIC was recorded in 2019 (along the Friern Barnet Road approach) which involved a car and a pedestrian; and

- Junction 8 – A109 Oakleigh Road/A1000 High Road/Totteridge Lane signalised crossroads – 1 serious collision occurred in 2015 along the A1000 High Road northern arm involving a car and a cyclist. 2 serious collisions were recorded in 2017 and 2018, both involving motorcyclists along the A109 Oakleigh Road North approach. Another serious incident was recorded in 208 along the A109 Oakleigh Road North approach involving a vehicle only.

2.17. PIC Summary – Links

2.17.1. An assessment of the highway safety conditions along the key links within the study area has been undertaken. The following key links have been identified as they will provide access (both vehicular and pedestrian/cyclist) to the proposed development.

- PIC Link 1 – The A109 Oakleigh Road North and South (providing access to the site access to the south)

  - 4 Slight PICs in 2016, 1 involving a pedestrian (near Deodora Close). 1 Slight PIC involving a cyclist (near Oakleigh Crescent);

  - 2 Slight PICs in 2017;

  - 2 Slight PICs in 2018, 1 involving a cyclist (north of Waterfall Road) and 1 involving a motorcycle (near York Way). 1 Serious PIC recorded in 2018 involving a pedestrian.

  - 2 Slight PICs in 2019, 1 involving a pedestrian (near Carlisle Place);

- PIC Link 2 – Brunswick Park Road (providing access to the site via the east); no PICs recorded; and

- PIC Link 3 – Wierdale Avenue/Ashbourne Avenue/ B1453 Russell Lane (providing pedestrian/cycle only access to the north); no PICs recorded.

2.18. Summary

2.18.1. Table 5 below provides a summary of all PICs recorded at the junctions/links within the study area.

Ref.	Slight	Serious	Fatal	Total	Vulnerable road users involved	Comments
J1	2	0	0	2	Y	1 Slight PIC involved a motorcycle
J2	1	0	0	1	N	n/a
J2a	1	0	0	1	Y	1 Slight PIC involved a motorcycle
J3	4	1	0	5	Y	1 Serious PIC involved a pedestrian and a motorcycle
J4	0	0	0	0	N	n/a
J5	0	0	0	0	N	n/a
J5a	0	0	0	0	N	n/a
J6	2	0	0	0	N	n/a
J7	5	1	0	6	N	1 Slight PIC involved a motorcycle. One Serious PIC involved a pedestrian
J8	0	3	0	4	Y	2 Serious PICs involving motorcyclists and 1 Slight PIC involving a cyclist.
PIC Link 1	15	3	0	18	Y	1 Serious PIC involving a cyclist, 1 Serious PIC involving a cyclist. 1 Serious PIC involving a pedestrian. 1 Slight PIC involving a pedestrian.
PIC Link 2	0	0	0	0	-	-
PIC Link 3	0	0	0	0	-	-
Total				**37**		

Table 5 – Summary of Junction PICs

2.18.2. No PICs were recorded at any of the existing or proposed site accesses. In the wider study area, given the timescale and volume of traffic likely to utilise the road network, the number and severity of collisions is not considered to be excessive or giving rise to specific concerns regarding access to the proposed development.

3. Proposed Development

3.1.1. The proposed development is for the regeneration of North London Business Park to provide a mixed-use development of up to 2,428 dwellings, 2,353sq.m of workspace, 3,835 sqm flexible non-residential floorspace, which could be used for community use, medical use, retail, offices, cafes etc. and a new 5FE school building with an anticipated 1,050-pupil capacity.

3.1.2. The site measures 16.37ha, of which approximately 13ha is currently undeveloped, comprising areas of disused open space and car parking.

3.1.3. The Detail Planning Area (Phase 1) is proposed to accommodate 459 new residential units, with a mixture of houses, duplexes and apartments. The Detail Planning Area (Phase 1) will also include the 5th form entry secondary school, which will replace the existing temporary school building on site accommodating the St Andrew the Apostle School. Further details of Phase 1 are shown in the Parameter Plans contained in **Appendix A.**

3.1.4. All associated site works, landscaped areas (including Brunswick Lakeside Park), transport infrastructure and car parking required to support the delivery of the Detail Planning Area (Phase 1) will be included in the Detail Application.

3.1.5. The Outline Planning Area (Phases 2-5) will also accommodate a small number of non-residential uses. These ancillary uses are intended as uses that will compliment and support the planned residential community on the site.

3.1.6. Table 6 below shows the Phase 1 development schedule.

Block	1 x Bed	2 x Bed	3 x Bed	4 x Bed	Total Units
C	58	78	18	0	154
D	70	52	47	2	171
E	32	32	4	0	68
F	6	34	21	0	61
Total	**166**	**196**	**90**	**2**	**454**

Table 6 – Phase 1 Development Schedule

3.2. Means of Access Appraisal

3.2.1. The main site accesses for all vehicles will be taken from the existing access points on Brunswick Park Road (Eastern Access) and the A109 Oakleigh Road North (Southern

Access), as identified on the Access Strategy Drawing, ST-3013-701, provided in **Appendix E**.

3.2.2. A new pedestrian/cycle access will be provided to the north of the site to link with the residential street, Ashbourne Avenue.

3.2.3. The existing Eastern Access onto Brunswick Park Road will be upgraded from its current crossroads arrangement to a new signalised junction. The junction will incorporate pedestrian/cycle signal phases in signals. A proposed Means of Access Plan for this junction is also provided in **Appendix E**.

3.2.4. Swept Path Analysis drawings for a Refuse Vehicle and 15m coach travelling into and out of the proposed upgraded access are provided in **Appendix F**, Drawings ST-3013-10 and 07, respectively.

3.2.5. Initial pre-application discussion was held with LBB and TfL in May/June 2011 and via subsequent follow up remote meetings/discussion. The principle of two separate accesses for the site was discussed and it was agreed that the form of these junctions would reflect the modelled requirements based on capacity as well as access requirements for pedestrians and cyclists in accordance with current policy.

3.2.6. A Stage 1 Road Safety Audit (RSA) will be undertaken for the proposed site accesses. The final design of the accesses will reflect the findings of the RSA, and be incorporated into the final layout, in accordance with the agreed Designer's Response.

3.2.7. In addition, off-site upgrades are focused on promoting access by sustainable modes of transport and can be summarised as follows:

- Signalised pedestrian and cycle crossings will be provided across all arms of the new signalised Eastern Access onto Brunswick Park Road;
- A new pedestrian/cycle link to Ashbourne Avenue to the north of the site; and
- Upgrade of the existing bus stops along Brunswick Park Road and the A109 Oakleigh Road North to provide shelters, seating and Real Time Information (RTI).

3.2.8. Within the site, the various parcels of development will be designed with low traffic speeds as a priority, with 20mph maximum speed being the overall objective. Pedestrians and cyclists will benefit from a mixture of specific off-road facilities and on-road low speed/lightly trafficked routes.

3.2.9. The following summarises the key access design features within the site:

- Within the site, vision splays of 2.4m x 25m will be provided to comply with Manual for Streets requirements for 20mph design speed for vehicle-to-vehicle inter-visibility;

- 2.0m wide footways will be provided within the site with associated informal dropped kerb crossing points and tactile paving for pedestrians. Footways will be designed to connect to shared surface spaces; and

- An off-road shared use route will be provided to connect the site to Ashbourne Avenue to the north. This will provide an attractive, traffic free route to//from the site, and to the commercial facilities located along the B5143 Russell Lane.

3.2.10. The access roads will be designed to comply with the latest LBB Standards, including allowing access for waste and emergency vehicles.

3.2.11. All properties within the site will be within 400m walking distance of a bus stop.

3.2.12. The site layout and means of access have been designed to comply with current design standards and accord with the advice received from LBB at pre-application stage.

Green Routes

3.2.13. Green routes are an element of the masterplan that seek to connect public parkland within the masterplan and also to ensure the main public thoroughfares are provided with high quality and generously designed margins.

3.2.14. The Parkway is the central spine route within the masterplan that connects all principal Character Areas, from New Brunswick Park South to the Northern Homezones. Entry Avenues from the A109 Oakleigh Road North and Brunswick Park Road, existing off-site streets, are wide planted entry routes, providing a defined character to visitors and residents as they enter the masterplan area.

3.2.15. Further details of the proposed Green Routes are shown on **Figure 5** below which has been extracted from the Masterplan produced by Plus Architecture.

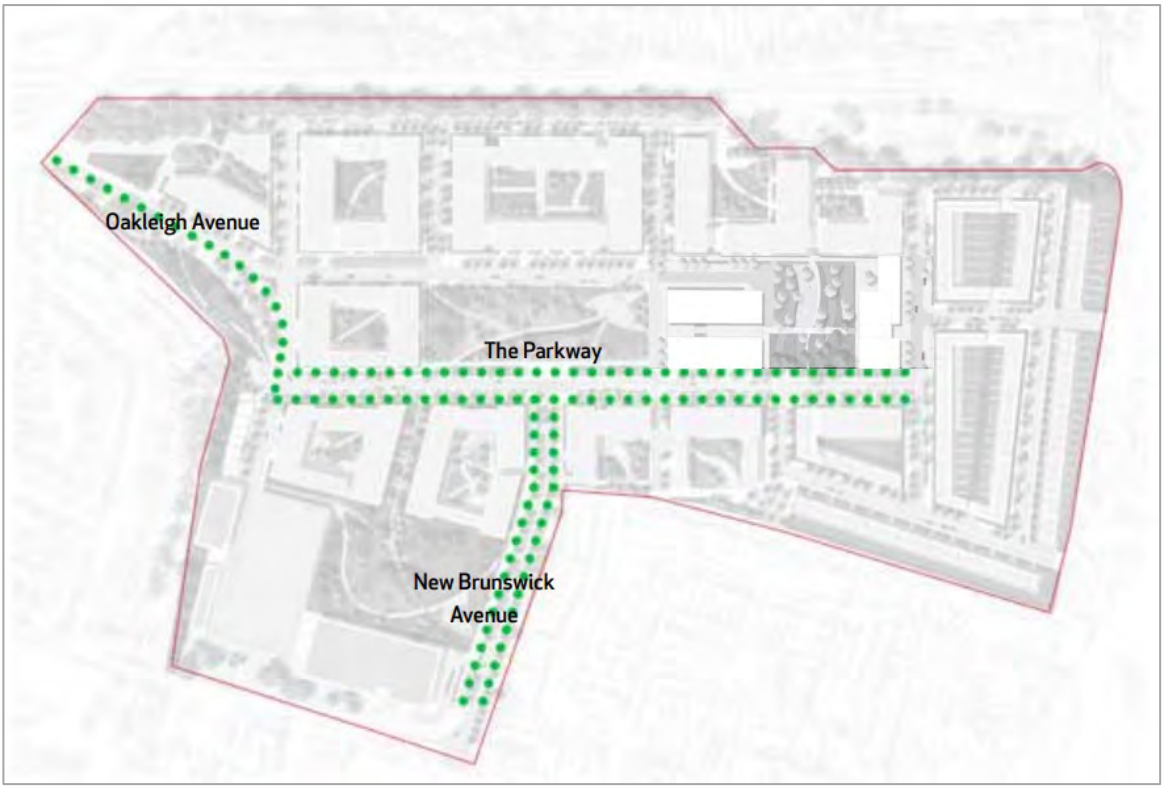


Figure 5 – Proposed Green Routes

3.3. Movement

3.3.1. Movement within the masterplan has been considered as the connection of parkland spaces with green routes. It is not conceived that the masterplan will become part of the wider public street network, albeit the site does act as a vehicle connection between the A109 Oakleigh Road North and Brunswick Park Road.

3.3.2. Passive discouragement of traffic passing through is proposed in the masterplan through design features in the public landscape. Vehicles are nonetheless free to use all primary and secondary streets within the masterplan, and a traditional arrangement of streets provide with parallel parking for visitors is proposed in most streets of the masterplan. Tertiary streets will be typically used only by residents for access.

3.3.3. The masterplan does open up the site to pedestrian traffic, both for new residents leaving and entering the site, with a variety of access locations and for the wider community as a new permeable pedestrian environment.

3.3.4. New connections include the A109 Oakleigh Road North and Brunswick Park Road entrances, as well as a new pedestrian and cycle connection to the north of the site at Ashbourne Avenue. Multiple route options within the site are presented to pedestrians,

allowing access to all public parkland space as well as the non-residential floorspace supporting the new community.

3.3.5. Further details of the vehicle and pedestrian movements are shown in **Figures 6** and **7** below, which have been extracted from the Masterplan produced by Plus Architecture.

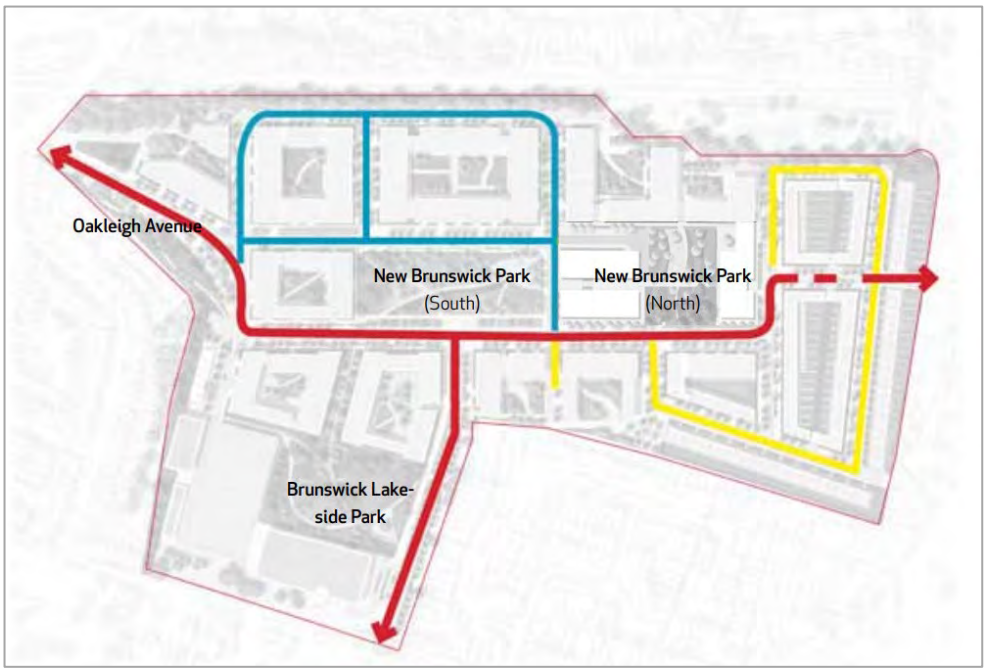


Figure 6 – Vehicle Movement

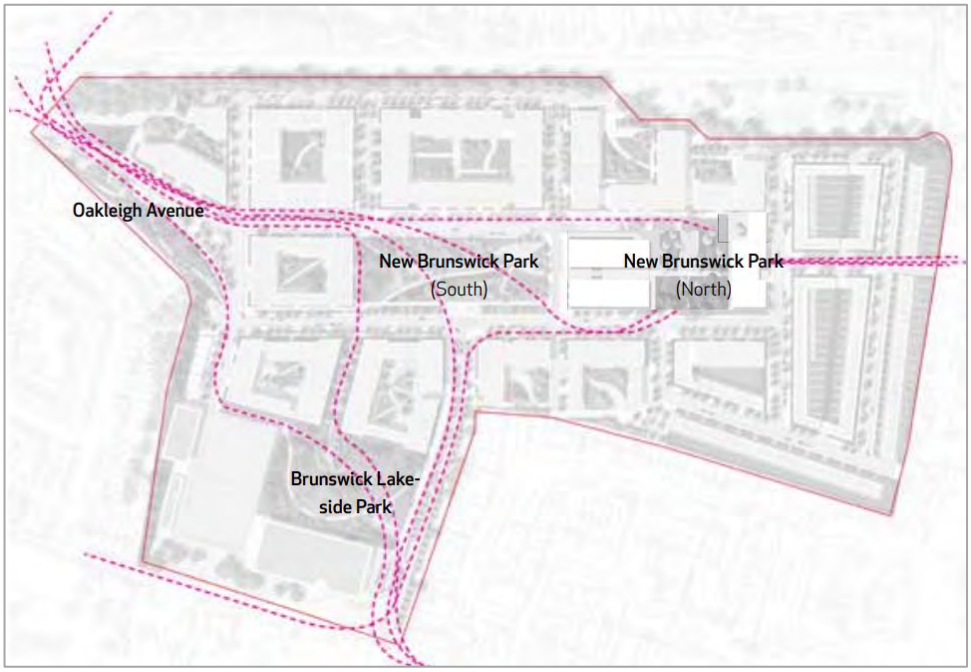


Figure 7 – Pedestrian Movement

3.4. Streets and Routes

3.4.1. Streets throughout the development area will be designed to constrain vehicle speeds and ensure pedestrian and cyclists' safety. Key elements of the street design alignment, street features such as raised tables, parking, footways, planting, furniture and lighting will be used to help keep traffic speeds to safe residential area.

3.4.2. The primary vehicular, pedestrian and cycle routes proposed at the development are shown in **Figure 8** below which has been extracted from the Masterplan produced by Plus Architecture.

Figure 8 – Primary Vehicular, Pedestrian and Cycle Routes

3.4.3. The following street hierarchy will be implemented as part of the development proposals:

Primary Streets

3.4.4. Primary streets form the principal circulation route through the site linking the A109 Oakleigh Road North to the south and Brunswick Park Road to the east. The design principles of the Primary Streets are as follows:

- Keep free of on-street parking to reduce overall width of paved road and maximise pedestrian routes;
- Raised tables at junctions Level gradient crossing points;
- Providing street widths between residential blocks of 24m;

3.4.5. The primary streets proposed at the development are shown in **Figure 9** below which has been extracted from the Masterplan produced by Plus Architecture.

Figure 9 – Primary Streets (extracted from the Masterplan produced by Plus Architecture

Secondary Streets

3.4.6. Secondary streets form the principal vehicle and pedestrian access to residential blocks and basement parking. The size of the streets should address a more residential feel than the primary routes. The design principles of the Secondary Streets are as follows:

- On-street parking to single side of the road;
- Raised tables at junctions; and
- Providing street widths between residential blocks with a minimum of 18m.

3.4.7. The secondary streets proposed at the development are shown in **Figure 10** below which has been extracted from the Masterplan produced by Plus Architecture.

Figure 10 – Secondary Streets (extracted from the Masterplan produced by Plus Architecture

Tertiary Streets

3.4.8. Tertiary streets are form the shared surface areas. The design principles of the Tertiary Streets are as follows:

- Raised area;
- No raised kerbs; and
- On-street parking in defined areas.

3.4.9. The tertiary streets proposed at the development are shown in **Figure 11** below which has been extracted from the Masterplan produced by Plus Architecture.

Figure 11 – Tertiary Streets and Routes (extracted from the Masterplan produced by Plus Architecture

4. Active Travel Assessment

4.1. Active Travel Zone (ATZ) Scope

4.1.1. The ATZ assessment is a qualitative analysis of cycle and walking network's surrounding the proposed development, the methodology has been developed by TfL to support the Healthy Streets approach and Vision Zero.

4.1.2. The Active Travel Zone (ATZ) assessment is carried out to assist the understanding of the proposed development's potential contribution to promoting sustainable travel. The ATZ assessment reviews the main routes to/from the site to key destinations within a 20-minute walking distance. Point of View (PoV) records of the key routes are taken at various intervals to assess the condition and suitability of these routes for pedestrians/cyclists. The photographic survey of the routes is then benchmarked against Healthy Streets indicators 3-10 as follows:

- Easy to cross;
- People feel safe;
- Things to see and do;
- Places to stop and rest;
- People feel relaxed;
- Not too noisy;
- Clean air; and
- Shade and shelter.

4.1.3. The ATZ is defined as the area within a 20-minute cycle of the proposed development. The ATZ for the proposed development is illustrated in **Appendix G.**

4.1.4. Details of the existing public transport services and infrastructure are outlined in Chapter 2.

4.2. Destination Priority

4.2.1. The priority of the sustainable mode's destination is based upon the prevalent user group of the proposed developments occupants.

4.2.2. The key trip land use associated with the proposed development therefore is primarily residential, and when determining the relevance of key destinations, those linked to the residential use have been prioritised as follows:

- Public Transport Services – High Priority;
- Local Centres – High Priority;
- Amenities – High Priority; and
- Local Cycle Network – Medium Priority.

4.2.3. The key destinations have been prioritised, as shown in Table 7, based on the expected main users of the site and their most common journeys.

Amenity	Destination	Priority	Included within the ATTZ
Public Transport Stops	Adjacent to the existing access along Brunswick Park Road (to the east) the A109 Oakleigh Road South (to the south) and the B1453 Russell Lane (to the north) which will be accessible via the future pedestrian/cycle link to the site	High	Yes
London Underground Rail Stations	Arnos Gove Station or Totteridge & Whetstone Station	High	No – however within a 10-minute cycle
Rail Stations	New Southgate Station or Oakleigh Park Station	High	No – however within a 10-minute cycle
Local Centres	Russell Lane, Osidge and Oakleigh Road North	High	Yes
Education Facility	Oak Hill School, Sacred Heart Roman Catholic Primary School, Oakleigh School and St Andrew the Apostle Greek Orthodox School	High	Yes
Medical Facility	Oakleigh Road Medical Centre, Brunswick Park Medical Centre	High	Yes
Parks	Brunswick Park, Friary Park, New Southgate Recreation Ground, Bethune Park	Medium	Yes
Cycle Network	Off-road cycle route provided within Brunswick Park and Friary Park	Medium	Yes

Table 7 – Key ATZ Destinations

4.2.4. **Appendix G** shows the routes for assessment.

4.3. ATZ Assessment

4.3.1. As part of the Active Travel Zones assessment, on-site studies are taken along the route to each key active travel destination. These routes are as follows:

- Route 1 – Ashbourne Avenue/ Weirdale Avenue;
- Route 2 – B1453 Russell Lane;

- Route 3 – A109 Oakleigh Road North – A1000 High Road – A5109 Totteridge Lane (towards Totteridge and Whetstone Underground Station);
- Route 4 – A1000 High Road (towards local centre);
- Route 5 – Raleigh Drive/St James Avenue/B550Friern Barnet Lane/Friary Road/Torrington Park/A1000 High Road;
- Route 6 – A109 Oakleigh Road South/Beaconsfield Road/The Crescent (towards Friern Barnet School);
- Route 7 – Beaconsfield Road/A1033 Friern Barnet Road/A109 Station Road (towards New Southgate Rail Station);
- Route 8 – A1110 Bowes Road (towards Arnos Grove Underground Station);
- Route 9 – Brunswick Park Avenue;
- Route 10 – Brunswick Park Road;
- Route 11 – Osidge Lane; and
- Route 12 – Church Hill Road.

4.3.2. The routes are demonstrated in Tables 8 - 19 below.

Route 1 – Ashbourne Avenue/Weirdale Avenue

4.3.3. The associated images with Route 1 are included at **Appendix H**. The journey is reviewed against each Healthy Streets indicator (please refer to **Figure 1** in Section 2) in Table 8.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	Traffic volumes are likely to be low on this route. There are a few trees present on abutting properties	There is no area for improvement.
People feel safe	Street lighting present. Residential street resulting in low vehicle speeds. Pavement is of sufficient width keeping pedestrians an adequate distance away from traffic.	There is no area for improvement.
Not too noisy	Quiet residential street.	There is no area for improvement.
Easy to cross	No existing formal crossings at present. However, given that the route is within a residential street, vehicle numbers will be low allowing crossing	Potential provision of zebra crossings at key locations

Places to stop and rest	This route does not provide any places to stop and rest.	There is no area for improvement.
Shade and shelter	The entire route is lined by trees, providing shade from the sun/weather.	There is no area for improvement.
People feel relaxed	The footway is sufficiently wide and is generally in good condition with a small number of incidences of uneven surface and vegetation growth encroaching.	General maintenance of the footway and vegetation.
Things to see and do	There is little to see and do, although this is a very short route in close proximity to the commercial facilities along the B4153 Russell Lane.	There is no area for improvement.

Table 8 – Healthy Streets Analysis of Route 1

Route 2 – B4351 Russell Lane

4.3.4. The associated images with Route 2 are included at **Appendix H.** The journey is reviewed against each Healthy Streets indicator (please refer to **Figure 1** in Section 2) in Table 9.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	The route is lined by trees and often grass verges. Entrances to the side roads and pedestrian crossings along the street section may cause traffic to stop and wait.	Further promotion of sustainable and active travel to reduce traffic volumes.
People feel safe	The entire route is sufficiently lit, and the footway and sufficiently wide.	There is no area for improvement.
Not too noisy	Limited levels of background noise associated with medium levels of traffic in an urban environment.	There is no area for improvement.
Easy to cross	There is a formal crossing with dropped kerbs and appropriate tactile paving at the north-eastern end of the B143 Russell Lane adjacent to the Church Hill Road junction. There is also a zebra crossing with dropped kerbs and tactile paving at the south-western end adjacent to the junction with the A109 Oakleigh Road North.	There is no area for improvement.
Places to stop and rest	This route does not provide any places to stop and rest.	There is no area for improvement.
Shade and shelter	The route is lined by trees, providing shade from the sun/weather. There are also bus shelters and commercial premises.	There is no area for improvement.
People feel relaxed	The footway is sufficiently wide, generally in good condition.	There is no area for improvement.
Things to see and do	The northern stretch of the B1453 Russell Lane benefits from active frontage providing users with things to see and do.	There is no area for improvement.

Table 9 – Healthy Streets Analysis of Route 2

Route 3 – A109 Oakleigh Road North – A1000 High Road – A5109 Totteridge Lane (towards Totteridge and Whetstone Underground Station)

4.3.5. The associated images with Route 3 are included at **Appendix H**. The journey is reviewed against each Healthy Streets indicator (please refer to Figure 1 in Section 2) in Table 10.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	The route is lined by trees and often with grass verges. Entrances to the side roads and pedestrian crossings along the street section may cause traffic to stop and wait.	Further promotion of sustainable and active travel to reduce traffic volumes.
People feel safe	The entire route is sufficiently lit, and the footway and sufficiently wide.	There is no area for improvement.
Not too noisy	Some levels of background noise associated with medium/high levels of traffic in an urban environment.	There is no area for improvement.
Easy to cross	There are 3 zebra crossings with dropped kerbs and tactile paving located along the A109 Oakleigh Road North, one of which is located adjacent to the Southern Site Access. There are several uncontrolled crossings with dropped kerbs and appropriate tactile paving located at key locations along the A109 Oakleigh Road North. There are 2 signal-controlled crossings located along the A109 Oakleigh Road. One is located at the A109 Oakleigh Road North/Oakleigh Park Road/Myddleton Park junction. The second is located at the A109 Oakleigh Road North/A1000 High Road/A5109 Totteridge Lane junction. There is an uncontrolled crossing facility along the A5109 Totteridge Lane opposite the Totteridge and Whetstone Underground Station.	There is no area for improvement.
Places to stop and rest	Benches are located along the route, providing users the opportunity to stop and rest.	There is no area for improvement.
Shade and shelter	Some stretches of the route are lined by trees, providing shade from the sun/weather. There are also bus shelters and commercial premises.	There is no area for improvement.
People feel relaxed	The footway is sufficiently wide, generally in good condition.	There is no area for improvement.
Things to see and do	The A1000 High Street benefits from active frontage providing users with things to see and do.	There is no area for improvement.

Table 10 – Healthy Streets Analysis of Route 3

Route 4 – A1000 High Road (towards local centre)

4.3.6. The associated images with Route 4 are included at **Appendix H.** The journey is reviewed against each Healthy Streets indicator (please refer to Figure 1 in Section 2) in Table 11.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	The route is lined by trees in some areas. Entrances to the side roads and pedestrian crossings along the street section may cause traffic to stop and wait.	Further promotion of sustainable and active travel to reduce traffic volumes.
People feel safe	The entire route is sufficiently lit, and the footway sufficiently wide.	There is no area for improvement.
Not too noisy	Some levels of background noise associated with medium/high levels of traffic in an urban environment.	There is no area for improvement.
Easy to cross	There are 4 zebra crossings with dropped kerbs and tactile paving located along the A1000 High Road. There are 2 signal-controlled crossings located along the A1000 Oakleigh Road. One of which is located at the A109 Oakleigh Road North/A1000 High Road/A5109Totteridge Lane junction.	There is no area for improvement.
Places to stop and rest	Benches are located along the route, providing users the opportunity to stop and rest.	There is no area for improvement.
Shade and shelter	Some stretches of the route are lined by trees, providing shade from the sun/weather. There are also bus shelters and commercial premises.	There is no area for improvement.
People feel relaxed	The footway is sufficiently wide and generally in good condition.	There is no area for improvement.
Things to see and do	The A1000 High Street benefits from active frontage providing users with things to see and do.	There is no area for improvement.

Table 11 – Healthy Streets Analysis of Route 4

Route 5 – Raleigh Drive/St James Avenue/B550Friern Barnet Lane/Friary Road/Torrington Park/A1000 High Road

4.3.7. The associated images with Route 5 are included at A**ppendix H**. The journey is reviewed against each Healthy Streets indicator (please refer to **Figure** 1 in Section 2) in Table 12.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	The route is lined by trees in some areas. This route also extends alongside the Friary Park and the North Middlesex Golf Club in parts. Entrances to the	Further promotion of sustainable and

	side roads and pedestrian crossings along the street section may cause traffic to stop and wait.	active travel to reduce traffic volumes.
People feel safe	The entire route is sufficiently lit, and the footway is sufficiently wide.	There is no area for improvement.
Not too noisy	Some levels of background noise associated with low levels of traffic in an urban environment.	There is no area for improvement.
Easy to cross	There are uncontrolled pedestrian crossing facilities with dropped kerbs and tactile paving located along Friary Road an Friern Barnet Lane.	There is no area for improvement.
Places to stop and rest	Benches are located along the route, providing users the opportunity to stop and rest.	There is no area for improvement.
Shade and shelter	Some stretches of the route are lined by trees, providing shade from the sun/weather. There are also bus shelters and commercial premises.	There is no area for improvement.
People feel relaxed	The footway is sufficiently wide and generally in good condition. This route also extends alongside the Friary Park.	There is no area for improvement.
Things to see and do	The A1000 High Street benefits from active frontage providing users with things to see and do. This route also extends alongside the Friary Park.	There is no area for improvement.

Table 12 – Healthy Streets Analysis of Route 5

Route 6 – A109 Oakleigh Road South/Beaconsfield Road/The Crescent (towards Friern Barnet School)

4.3.8. The associated images with Route 6 are included at **Appendix H.** The journey is reviewed against each Healthy Streets indicator (please refer to Figure 1 in Section 2) in Table 13.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	The route is very green and is lined by trees and often with grass verges. Furthermore, some extents of this route pass alongside Bethune Park (adjacent to Beaconsfield Road) and allotments (adjacent to The Crescent). Entrances to the side roads and pedestrian crossings along the street section may cause traffic to stop and wait.	There is no area for improvement
People feel safe	The entire route is sufficiently lit, and the footway is sufficiently wide. Stretches of Beaconsfield Road and The Crescent/Crescent Road are subject to a 20mph speed limit.	There is no area for improvement.
Not too noisy	Some levels of background noise associated with low levels of traffic in an urban environment.	There is no area for improvement.

Easy to cross	There is a zebra crossing facility with dropped kerbs and tactile paving located along the A109 Oakleigh Road North adjacent to the Southern Site Access. There are uncontrolled pedestrian crossing facilities with dropped kerbs and tactile paving located along Beaconsfield Road. There are no crossing facilities located adjacent to the Friern Barnet Primary School	Provision of a pedestrian crossing facility along Crescent Road to facilitate pedestrian movements to the Friern Barnet School.
Places to stop and rest	Benches are located along the route, providing users the opportunity to stop and rest.	There is no area for improvement.
Shade and shelter	The entire route is lined by trees, providing shade from the sun/weather. There are also bus shelters and commercial premises.	There is no area for improvement.
People feel relaxed	The footway is sufficiently wide, generally in good condition. This route also extends alongside the Bethune Park.	There is no area for improvement.
Things to see and do	This route also extends alongside Bethune Park.	There is no area for improvement.

Table 13 – Healthy Streets Analysis of Route 6

Route 7 – Beaconsfield Road/A1033 Friern Barnet Road/A109 Station Road (towards New Southgate Rail Station)

4.3.9. The associated images with Route 7 are included at **Appendix H.** The journey is reviewed against each Healthy Streets indicator (please refer to **Figure** 1 in Section 2) in Table 14.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	Pedestrian crossings and entrances to side roads may cause traffic to slow and stop, particularly during peak times. However, there are trees along the A1003 Friern Barnet Road, and the pavement is of sufficient width keeping pedestrians an adequate distance away from traffic.	There is no area for improvement
People feel safe	The entire route is sufficiently lit, and the footway is sufficiently wide.	There is no area for improvement.
Not too noisy	Some levels of background noise associated with low/medium levels of traffic in an urban environment.	There is no area for improvement.
Easy to cross	There is a zebra crossing facility and a signal-controlled crossing along the A1003 Friern Barnet Road. There is a signal-controlled crossing along the A109 Station Road. There is a zebra crossing along the A109 Station Road opposite the Southgate Rail Station entrance.	There is no area for improvement.
Places to stop and rest	This route does not provide any places to stop and rest.	There is no area for improvement.

Shade and shelter	Some parts of this route are lined by trees, providing shade from the sun/weather. There are also bus shelters and commercial premises.	There is no area for improvement.
People feel relaxed	The footway is sufficiently wide and in good condition.	There is no area for improvement.
Things to see and do	The A1003 Friern Barnet Road benefits from significant active frontage, providing users with things to see and do.	There is no area for improvement.

Table 14 – Healthy Streets Analysis of Route 7

Route 8 – A1110 Bowes Road (towards Arnos Grove Underground Station)

4.3.10. The associated images with Route 8 are included at **Appendix H**. The journey is reviewed against each Healthy Streets indicator (please refer to **Figure 1** in Section 2) in Table 15.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	Pedestrian crossings and entrances to side roads may cause traffic to slow and stop, particularly during peak times. However, there are trees along the A1110 Bowes Road, and the pavement is of sufficient width keeping pedestrians an adequate distance away from traffic.	There is no area for improvement
People feel safe	The entire route is sufficiently lit, and the footway and sufficiently wide.	There is no area for improvement.
Not too noisy	Some levels of background noise associated with medium levels of traffic in an urban environment.	There is no area for improvement.
Easy to cross	There are 3 zebra crossing facilities located along the A110 Bowes Road. 2 are located along the approach to Betsyle Circus, and 1 is located opposite Arnos Grove Underground station.	There is no area for improvement.
Places to stop and rest	There is a bench located at Arnos Grove Underground Station.	There is no area for improvement.
Shade and shelter	Some parts of this route are lined by trees, providing shade from the sun/weather. There are also bus shelters and commercial premises.	There is no area for improvement.
People feel relaxed	The footway is sufficiently wide and in good condition.	There is no area for improvement.
Things to see and do	The A1110 Bowes Road benefits from significant active frontage, providing users with things to see and do.	There is no area for improvement.

Table 15 – Healthy Streets Analysis of Route 8

Route 9 – Brunswick Park Avenue

4.3.11. The associated images with Route 9 are included at **Appendix H**. The journey is reviewed against each Healthy Streets indicator (please refer to **Figure 1** in Section 2) in Table 16.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	There are very few trees along this route, but there are garden frontages associated with the residential properties.	There is no area for improvement
People feel safe	Street lighting present. Residential street resulting in low vehicle speeds. Pavement is of sufficient width keeping pedestrians an adequate distance away from traffic.	There is no area for improvement.
Not too noisy	Quiet residential street.	There is no area for improvement.
Easy to cross	No existing formal crossings at present. However, given that the route is within a residential street, vehicle numbers will be low.	There is no area for improvement.
Places to stop and rest	There are no benches provided, however this route is short in length.	There is no area for improvement.
Shade and shelter	There are a few trees to provide shade/shelter.	There is no area for improvement.
People feel relaxed	The footway is sufficiently wide and generally in good condition although with incidences of uneven surface and vegetation growth encroaching.	General maintenance of the footway and vegetation.
Things to see and do	There are limited facilities along this route.	There is no area for improvement.

Table 16 – Healthy Streets Analysis of Route 9

Route 10 – Brunswick Park Road

4.3.12. The associated images with Route 10 are included at **Appendix H.** The journey is reviewed against each Healthy Streets indicator (please refer to **Figure 1** in Section 2) in Table 17.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	Trees line the entire route, and wide footways provide a safe space between pedestrians and traffic. Part of this route extends parallel to the New Southgate Recreation Ground and the New Southgate Cemetery and Crematorium. Entrances to the side roads and pedestrian crossings along the high street section may cause traffic to stop and wait.	There is no area for improvement
People feel safe	The entire route is lit. Pavement is of sufficient width keeping pedestrians an adequate distance away from traffic. Guard railing provided at some locations	There is no area for improvement.
Not too noisy	Some levels of background noise associated with medium levels of traffic in an urban environment likely to be experienced during peak times.	There is no area for improvement.

Easy to cross	2 zebra crossings provided along Brunswick Park Road. 1 within the vicinity of the existing Eastern Access, and 1 located along the approach to the B1453 Osidge Lane. There are several formal uncontrolled crossing facilities with dropped kerbs and tactile paving provided at key locations.	There is no area for improvement.
Places to stop and rest	There is a bench located at the northern end of Brunswick Park Road near to the junction with the B1453 Osidge Lane. Furthermore, there are benches provided within the New Southgate Recreation Ground which runs parallel to Brunswick Park Road.	There is no area for improvement.
Shade and shelter	The entire route is tree lined, providing shade from the sun/weather.	There is no area for improvement. Provision of bus shelters adjacent to the site access to provide shelter/seating.
People feel relaxed	The footway is sufficiently wide, generally in good condition although with incidences of uneven surface and vegetation growth encroaching.	General maintenance of the footway and vegetation.
Things to see and do	Part of this route extends parallel to the New Southgate Recreation Ground and the New Southgate Cemetery and Crematorium. There are a few shops located	There is no area for improvement.

Table 17 – Healthy Streets Analysis of Route 10

Route 11 – B1453 Osidge Lane

4.3.13. The associated images with Route 11 are included at **Appendix H**. The journey is reviewed against each Healthy Streets indicator (please refer to **Figure 1** in Section 2) in Table 18.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	Trees line the entire route, and wide footways provide a safe space between pedestrians and traffic. Part of this route extends past Pymmes Brook green area. Entrances to the side roads and pedestrian crossings along the high street section may cause traffic to stop and wait.	There is no area for improvement
People feel safe	The entire route is lit. Pavement is of sufficient width keeping pedestrians an adequate distance away from traffic.	There is no area for improvement.
Not too noisy	Some levels of background noise associated with medium levels of traffic in an urban environment likely to be experienced during peak times.	There is no area for improvement.
Easy to cross	2 zebra crossings provided along the B1453 Osidge Lane. There is a formal uncontrolled crossing facility with dropped kerbs and tactile paving provided along the	There is no area for improvement.

	approach to the junction with Hampden Way and another opposite the Barnet Scout Group Building.	
Places to stop and rest	There is a bench located near to the junction with Beresford Avenue.	There is no area for improvement.
Shade and shelter	The entire route is tree lined, providing shade from the sun/weather. There are bus shelters/seating also provided along this route.	There is no area for improvement.
People feel relaxed	The footway is sufficiently wide and in good condition.	General maintenance of the footway and vegetation.
Things to see and do	This route benefits from significant active frontage, providing users with plenty to see and do.	There is no area for improvement.

Table 18 – Healthy Streets Analysis of Route 11

Route 12 – B1453 Church Hill Road

4.3.14. The associated images with Route 12 are included at **Appendix H**. The journey is reviewed against each Healthy Streets indicator (please refer to **Figure 1** in Section 2) in Table 19.

Healthy Streets Indicator	Observations	Areas for Improvement
Clean air	Trees line the entire route, and wide footways provide a safe space between pedestrians and traffic. Part of this route extends parallel to Oak Hill Park. Entrances to the side roads and pedestrian crossings along the high street section may cause traffic to stop and wait.	There is no area for improvement
People feel safe	The entire route is lit. Pavement is of sufficient width keeping pedestrians an adequate distance away from traffic.	There is no area for improvement.
Not too noisy	Some levels of background noise associated with medium levels of traffic in an urban environment likely to be experienced during peak times.	There is no area for improvement.
Easy to cross	There are several formal uncontrolled crossing facilities with dropped kerbs and tactile paving provided at key locations.	There is no area for improvement.
Places to stop and rest	There are no benches provided along this route. However, there are benches available within the nearby Oak Hill Park.	There is no area for improvement.
Shade and shelter	The entire route is tree lined, providing shade from the sun/weather. There are bus shelters/seating are also provided along this route.	There is no area for improvement.
People feel relaxed	The footway is sufficiently wide and in good condition.	General maintenance of the footway and vegetation.
Things to see and do	This route benefits from significant active frontage, providing users with plenty to see and do. Part of this route also extends along Oak Hill Park.	There is no area for improvement.

Table 19 – Healthy Streets Analysis of Route 12

4.4. ATZ Assessment Summary and Identified Improvements

Potential Improvements

4.4.1. As part of the Active Travel Zones Assessment, an audit and photographic surveys were carried out for the 12 routes identified in Tables 8 - 19.

4.4.2. The following areas of improvement were identified:

- Provide general maintenance to the footways along Routes 1,9,10,11 and 12 to remove vegetation and improve overall condition;
- Provide a pedestrian crossing facility along The Crescent to facilitate pedestrian movements to Friern School; and
- Provision of bus shelters and seating along Brunswick Park Road (Route 10) outside the eastern site access,

Improvements vs Mitigation

4.4.3. It is essential that any financial contributions sought towards mitigation of the proposed development are sought within the National Planning Policy Framework (2019) conditions. The NPPF states that "*planning obligations must only be sought where they meet all of the following tests:*

- *Necessary to make the development acceptable in planning terms;*
- *Directly related to the development; and*
- *Fairly reasonably related in scale and kind.*

5. Waste Management Strategy

5.1. Introduction

5.1.1. This Waste Management Strategy considers the potential impacts that may arise from waste generated during the operational phase with the overall aim of developing a strategy for legislative compliance and good practice in the separation, storage, collection, treatment and/or disposal of waste arisings.

5.2. Policy Review Summary

National Planning Policy for Waste – 2014

5.2.1. The Waste Management Plan for England sets out the Government's ambition to work towards a more sustainable and efficient approach to resource use and management.

5.2.2. This policy sates that *`Positive planning plays a pivotal role in delivering this country's waste ambitions through:*

- *ensuring that waste management is considered alongside other spatial planning concerns, such as housing and transport, recognising the positive contribution that waste management can make to the development of sustainable communities; and*
- *ensuring the design and layout of new residential and commercial development and other infrastructure (such as safe and reliable transport links) complements sustainable waste management, including the provision of appropriate storage and segregation facilities to facilitate high quality collections of waste.'*

5.2.3. When determining planning applications, local authorities should*: ensure that waste management facilities in themselves are well-designed, so that they contribute positively to the character and quality of the area in which they are located.':*

North London Waste Plan – January 2019

5.2.4. Once adopted, the North London Waste Plan (NLWP) will form part of the Development Plan for each of the respective 7 London Boroughs which comprises the London Plan and borough Local Plans.

5.2.5. The aim of the NLWP acknowledges that the NLWP is part of a wider but integrated approach that will help to deliver sustainable waste management in North London, alongside such measures as improved resource management, and waste prevention and reduction spanning strategies which influence but are outside of the planning framework.

5.2.6. The NLWP aim and objectives reference and integrate the Waste Hierarchy, which is shown in **Figure 12** below, which has been extracted from Figure 5 of the NLWP.

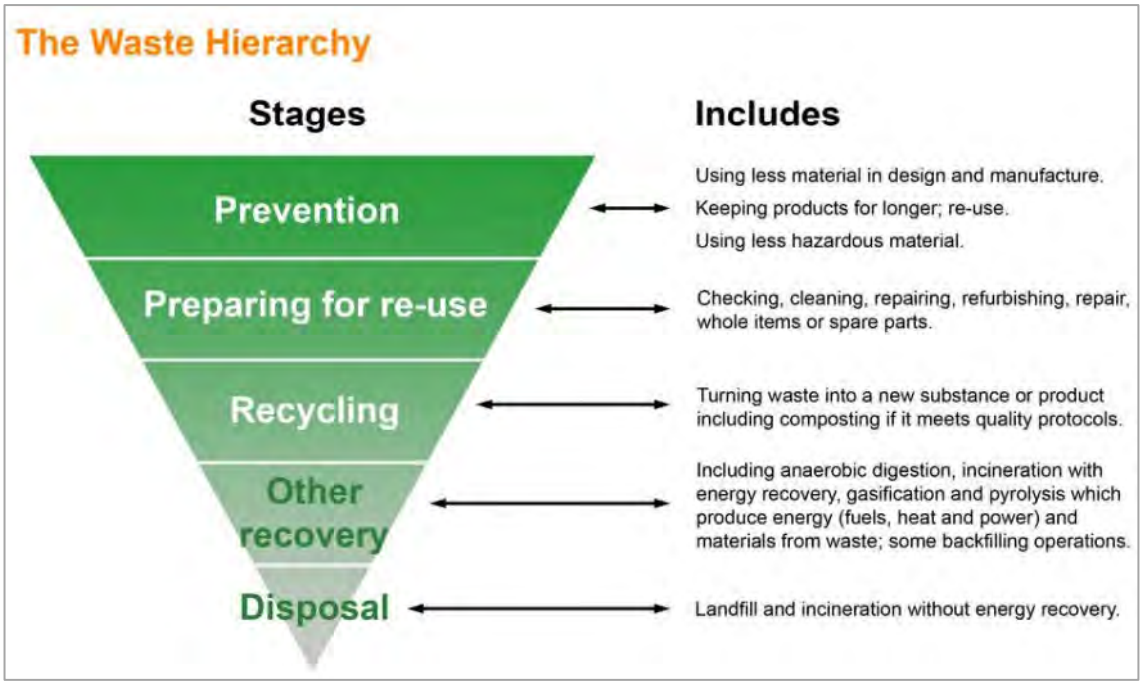


Figure 12 – Waste Hierarchy (extracted from Figure 5 of the NLWP)

London Borough Barnet`s Reduction and Recycling Plan 2018 – 2022

5.2.7. LBB are currently developing its Reduction and Recycling Plan (RRP) which will set out the Borough`s key actions for cutting waste and boosting recycling for the period 2018-2022.

5.2.8. The RRP will be used to drive and promote local activity that will also play an important role helping to achieve the Mayor's London-wide targets to cut food waste by 50% per person and achieve 65% municipal waste recycling by 2030.

London Borough Barnet`s Municipal Recycling and Waste Strategy and Future Delivery for Barnet – 2016 – 2031

5.2.9. The Municipal Recycling and Waste Strategy and Future Delivery for Barnet) sets out the following aims:

- *Provide services that help our rapidly growing community to manage its environmental impact;*
- *Manage the rising cost of waste collection and disposal by designing services that promote recycling and reuse and are integrated, intuitive and efficient.*
- *Encourage all Barnet's residents, businesses and visitors to take responsibility for the waste that they produce, but using enforcement where necessary; and.*

- *Embrace new technologies and ways of working that help us deliver services that respond better to the needs of our community':*

5.2.10. The Waste Strategy for the proposed development has been produced to accord with the aims and objects identified in the policies summarised above.

5.3. Generation of Household Waste

5.3.1. Household waste generation from the Comprehensive Development has been estimated using Gov.uk municipal waste statistics and London data. The Current data (2019/2020) states that the annual residual household waste per household is 0.53 tonnes for London which is derived from the Municipal Waste Management Statistics published by the Department for Environment, Food and Rural Affairs.

5.3.2. At this stage in the design process the figures can only be considered indicative as a variety of factors, such as the on-going promotion of waste minimisation and recycling, consumer habits and population changes will impact on waste generation rates in future years.

5.3.3. Barnet`s Municipal Recycling and Waste Strategy and Future Delivery for Barnet states current household recycling rate is 38%. This is outlined in Table 20. This average household waste generation rate was then used to provide an estimate of the waste arisings from the future residents of the proposed development.

No. Residential Units	Estimates Tonnes per Annum (assuming an average 0.53 tonnes per household) *	Estimated Tonnes per Week
2,500	835	16

Table 20 – Estimated Household Waste Arisings *assumes 38% of waste is recycled

5.3.4. At this stage, it is estimated that if current waste levels remain consistent, the proposed development could potentially generate up to 835 tonnes of household waste per annum (up to 16 tonnes per week) should all units be occupied.

General Requirements

5.3.5. LBB`s guidance sets out that the locations of a bin storage area should be designed to maximise efficiency of collections where:

- Larger communal containers must be presented within 10m of the property boundary. The walking distance for the crew to collect larger communal bins should

not exceed 10m from the collection point. For the avoidance of doubt the distance to wheel the bin from the bin store to the public highway which can be easily accessed by our collection vehicles must not exceed 10m; and

- Footpaths be built wide enough to accommodate bins of all sizes and dropped kerbs to be provided as necessary to ensure no (dropped) kerbs are within the 10m between the bin storage area and the collection vehicle.

5.4. Household Recycling and Residual Waste Storage Requirements

5.4.1. Household waste storage requirements for the proposed development have been quantified based on LBB`s `Information for developers and architects Provision of Household Recycling and Waste Service guidance (April 2019).'

5.4.2. The guidance states that for larger blocks of 6 or more flats the available bin sizes are 240 litres and 1100 litres. Each property within the block must be allocated a minimum of 100 litres of mixed recycling provision plus 70 additional litres of mixed recycling per bedroom beyond the first bedroom.

5.4.3. For residual waste, the guidance states that each property within the block must be allocated a maximum of 100 litres of residual waste provision plus 70 additional litres of residual waste per bedroom beyond the first bedroom.

5.4.4. Table 21 below details the overall waste provision for properties of varying sizes.

Number of Bedrooms	Mixed Recycling Provision
1	100 litres
2	170 litres
3	240 litres
4	310 litres

Table 21 – Recycling Provision for Large Blocks of Flats

5.4.5. Bin storage facilities will be provided in accordance with the standards described above throughout the residential element of the proposed development.

Collections of Household Waste

5.4.6. In accordance with LBB`s guidance, the aim will be for the distance from the curtilage of properties (or the agreed collection point for wheeled bins) to the refuse collection vehicle to not exceed 10m.

5.4.7. Where properties are located off the main and secondary collection routes (i.e., those with private driveways), residents will be required to take their wheeled bins to agreed collection points.

Collection of Commercial Waste

5.4.8. It is assumed at this stage that collection of commercial waste will be undertaken via external waste management contractors. It will be the responsibility of the commercial occupants to arrange for refuse and recycling to be collected from their premises. The type of collection will be dependent on the nature of the businesses.

5.4.9. Waste collection frequency will be dependent upon the volume of waste generated, the storage method (i.e., whether balers and waste compactors are used) and the schedule of the appointed waste contractor.

Storage of Commercial Waste

5.4.10. At this stage it is expected that the non-residential elements will be provided with their own/shared waste storage areas for refuse and recycling with ease of access for end users and by collection vehicles.

5.4.11. All waste storage areas will be clearly labelled to ensure cross contamination of refuse and recycling is minimised.

5.4.12. Floor surfaces will be of a smooth, continuous finish and free from steps or other obstacles. Any steps will incorporate a dropped kerb. Measures will be taken to ensure that access to the agreed collection point will not be restricted on collection day.

Summary

5.4.13. It is estimated that the proposed development could potentially generate up to 835 tonnes of household waste per annum (up to 16 tonnes per week) should all units be constructed and occupied.

5.4.14. Residential units will incorporate sufficient internal waste storage containers to promote the separation of recycling and compostable materials at source.

5.4.15. Externally, sufficient areas will be provided to enable waste containers to be stored in accordance with LBB's refuse and recycling collection arrangements.

5.4.16. The non-residential elements will be provided with their own/shared waste storage areas for refuse and recycling with ease of access for end users and by collection vehicles.

5.4.17. The proposals set out in this Strategy meet the requirements of relevant waste policy and follow applicable guidance.

6. Delivery and Servicing Management Plan

6.1.1. The purpose of this Delivery and Servicing Management Plan (DSMP), is to inform the authorities of the intent of the applicant in managing service vehicle trips to and from the development in order to minimise their impact on the surrounding public highway.

6.1.2. Refuse vehicle access to the site will be via the widened extent of carriageway at the eastern access from Brunswick Park Road.

6.1.3. The swept path of a 10m refuse vehicle (10m in length and 2.5m in width as per LBB requirements) is shown on Drawing ST-3013-12, provided in **Appendix I**. Deliveries to the development will be controlled by site management and trolleyed to the commercial building entrances.

6.2. Proposed Development Deliveries Trip Generation

6.2.1. The number of servicing vehicle trips for the residential use for the daily, AM, PM peaks has been derived using the TRICS database, as summarised in Table 22 below. Details of the TRICS data is contained in **Appendix J** for reference.

Peak	LGV Trips (2-Way)	HGV Trips (2-way)	Total Trips (2-way)
Daily (0700 – 1900)	105	23	128
AM Peak (0800 – 0900)	6	1	7
PM Peak (1700 – 1800)	14	1	15

Table 22 – Proposed Residential Servicing Trips (1,150 Units)

6.2.2. Table 23 below provides an hourly breakdown of the servicing profile.

Peak	LGV Trips (2-Way)	HGV Trips (2-way)	Total Trips (2-way)
0700 – 0800	8	0	8
0800 – 0900	6	1	7
0900 – 1000	9	0	10
1000 – 1100	8	0	8
1100 – 1200	12	0	12
1200 – 1300	10	0	10
1300 – 1400	9	0	9
1400 – 1500	6	0	6
1500 – 1600	8	0	8

1600 – 1700	8	21	30
1700 – 1800	14	1	15
1800 – 1900	7	0	7

Table 23 – Proposed Residential Servicing Profile (1,150 Units)

6.2.3. Residents will be encouraged by the management company to arrange for as many deliveries as possible after 1000hrs. The majority of deliveries will be delivered directly to the concierge and therefore the delivery time will be minimal.

6.3. Objectives

This Delivery and Servicing Management Plan will therefore seek to achieve the following objectives:

- Demonstrate that goods and services can be delivered, and waste removed, in a safe, efficient and environmentally friendly way;
- Identify deliveries that could be reduced, re-timed or even consolidated, particularly during busy periods;
- Improve the reliability of deliveries to the site;
- Reduce the operating costs of building occupants and freight companies; and
- Reduce the impact of freight activity on local residents and the environment.

6.4. Measures

This Section outlines the overarching measures and initiatives included within the Delivery and Servicing Management Plan which are applicable to the development site. This Delivery and Servicing Management Plan will specifically aim to ensure that servicing of the development can be carried out efficiently, whilst minimising any effects on the local highway network, residents and commercial occupiers within and surrounding the site, and the environment.

Commercial Refuse Collection

6.4.1. Refuse collection will be undertaken outside of the peak hours where possible, with the specific collection times being arranged with the local authority or private waste contractor to minimise impacts upon the operation of the site.

Servicing Facilities

6.4.2. The proposed development has been designed to ensure that all servicing activities are undertaken within designated areas in order to ensure that traffic flows on the surrounding highway network are unaffected by the operation of the site.

6.4.3. Any special deliveries to the site will need to be pre-arranged with site management by telephone or through an online booking system. Special deliveries are defined as unusually large items which would arrive on an infrequent basis. The delivery time and duration will be negotiated with the site management office to minimise the impact upon the routine daily servicing requirements of the development.

6.4.4. Out of peak time deliveries will be encouraged for such instances where possible. The management agents will regularly contact residents through newsletters and emails advising them of the necessary arrangements for large deliveries.

Operational Efficiency

6.4.5. Peak hour deliveries will be discouraged through consultation with occupiers of the buildings by the site managers. On the basis that the AM peak is often the busiest hour for servicing, the operation of the development would spread deliveries throughout the day using a computer/web-based vehicle booking system.

6.4.6. Residents will be encouraged by the management company to arrange for as many deliveries as possible after 1000. The majority of deliveries will be delivered directly to the concierge and therefore the delivery time will be minimal.

6.4.7. The appointed site management company will be responsible for providing funding and time resources for all of their site-based staff to receive appropriate training relating to the processes and procedures in operation on the development site. On-going training requirements will be identified through annual Personal Development Reviews (or equivalent internal review process).

Enforcement

6.4.8. The contents of this Delivery and Servicing Management Plan have been prepared in order to inform the planning authority of the developer's intent for the planning application for this site. Therefore, it must be complied with unless otherwise agreed in writing with the planning authority.

7. Phase 1 Parking Strategy

7.1.1. This Section sets out the aims to assist the management parking needs for residents, seeking to promote an appropriate balance between parking supply and demand, whilst meeting the objective of the emerging Local Plan and the London Plan which seek to reduce levels of car parking within London.

7.2. Car, Motorcycle and Cycle Parking Provision

7.2.1. Planning policy promotes sustainable modes (walking, cycling and public transport), and the Mayor's Transport Strategy sets a target of 75% sustainable travel mode share for Outer London by 2040. In light of this, it is proposed to provide car parking within Phase 1 at a ratio of approximately 0.08 spaces per dwelling resulting in a total of 367 vehicle spaces, with 10% (37 spaces) being allocated for disabled provision.

7.2.2. A total of 901 cycle parking spaces will be provided which equates to 1 space per bedroom which is in accordance with the guidance set out within the London Plan.

7.2.3. The cycle parking will be provided within locked, sheltered enclosures, with sliding gates provided to enable residents to access their bicycle easily. The parking will be provided at ground level within each individual building and the quantum within each store will correspond directly with the requirements relating to the specific blocks of flats that the store serves.

7.2.4. The cycle parking implementation considers:

- Layout – all parking is conveniently located and laid out to ensure that users can comfortably manoeuvre in and out of cycle stands;
- Signage – signage will be provided on and near the site directing users to cycle parking facilities;
- Attractive – cycle parking facilities will be maintained to a good condition to ensure it is inviting to use;
- Secure – to be located in areas where they have high levels of passive surveillance and where this is not possible, security lighting will be implemented to further reduce the risk of bike theft;
- Covered – future residents will benefit from cycle parking that is sheltered and protected from the elements; and

- Type of stand – Sheffield / Camden type stands will be used. Front wheel locking stands will not be considered.

7.2.5. A small element of cycle parking will also be provided for the commercial/retail units. This again will be provided in line with the London Plan requirements. Short-stay cycle parking will be incorporated into the public realm, strategically located in order to increase exposure.

7.2.6. The cycle parking utilisation will be monitored, and the design will consider re-allocation of the spaces as per the needs of the development if spaces are underutilised.

7.2.7. The car parking spaces will be provided in the podiums of the blocks. A total of 52 motorcycle parking spaces will be provided within Phase 1. The allocation of the car, motorcycle and cycle parking spaces in the car parks is detailed in Table 24 below.

Block	Car Parking Spaces	Motorcycle Spaces	Cycle Parking Spaces
Block C & D	262	28	656
Block E	56	13	108
Block F	49	11	137
Total	**367**	**52**	**901**

Table 24 – Phase 1 Residential Car, Motorcycle and Cycle Parking Provision

7.2.8. Swept path analysis has been undertaken for the proposed car parking layouts, as shown in **Appendix K.** The swept path analysis demonstrates that cars will have sufficient space to manoeuvre in and around the car parks.

7.2.9. A report on residential parking in new developments was produced by Transport for London (TfL) in 2012 and examines the relationship between parking, car ownership and car use amongst residents of new developments in Greater London. Key findings from the report were:

- There is a strong relationship between public transport and household car ownership – as public transport accessibility increases, car ownership in new developments falls;

- The more parking provided by a new development, the more attractive it becomes to car owning households: people choose housing that meets their needs;

- The more parking provided by a new development, the higher the household car ownership level. Where there is more parking, there are more cars. This was true for all groups and in all areas studied;

- Developments with more parking produce more car travel. People who own cars use them: driving their cars frequently at all times of day, including the busiest peak periods; and

- The level of car parking provided in new developments therefore has a substantial impact on the level of car use generated by that development.

7.2.10. The report demonstrates that where parking is not made available for prospective residents of the proposed development, it will attract people who do not require a car; indeed, this will in turn mean that car travel will subsequently be lower at the development. In addition to this, a number of measures such as a financial contribution towards improved local bus services, the provision of on-site car club bays, and cycle maintenance/repair kits available (further details of this are contained in the accompanying Travel Plan document) are proposed within the development to encourage sustainable travel.

7.2.11. Furthermore, a study undertaken by LBB in 2019 stated the following:

`During the 10-year period between census data collections the number of households with no vehicles registered increased by 15.1%, which is more than double the percentage increase in the total number of households. These figures demonstrate that there is an increasing number of households that do not own a vehicle'.

7.2.12. Based on the sustainable measures to be implemented, and TfL aspirations, a provision of 0.08 spaces per dwelling is considered appropriate for this development.

7.2.13. In accordance with the London Plan standards, 20% of the spaces will be for electric vehicles ('active' provision) with the remaining 80% of spaces having passive provision for electric vehicles in the future.

7.2.14. Disabled parking will be in line with the London Plan standards, with a provision of 37 spaces. These bays will all be provided at ground level in close proximity to the accessible units within each of the Blocks. Demand for accessible bays will be monitored and if not used could be allocated to family units if required.

7.3. Car Club

7.3.1. 7 car club bays will also be provided at the development. This will provide residents who do not own a car with an opportunity to use one when they require. The car club cars will also be available for use by the wider local community.

7.3.2. Initial discussions with the car club operator ZipCar suggest that the development at full build out could support 8 car club cars. 2 spaces will be provided within Phase 1, located along the site access road from Brunswick Park Road. If there is a high demand for Car Sharing vehicles, then the provision of additional spaces within the later Phases will be reviewed.

7.3.3. The location of the car club bays will maximise exposure and ensures the bays are conveniently located regardless of which block future residents reside in. The 7 bays will be located appropriately to maximise visibility for both those residing within the development and others in the wider local community.

7.3.4. The chosen car club operator will be marketed at the development through:

- Bespoke marketing material;
- Advertisement within the development; and
- Car club ambassadors.

7.3.5. It is recognised that the best time to influence travel behaviour is when residents first move into or utilised a new development. The car club will therefore be in place and operational prior to occupation of the first dwelling.

7.3.6. The benefits of the car clubs will be highlighted to future residents, including:

- Cheaper – owning a car has the added cost of insurance, tax, service and maintenance and depreciation;
- Greener – generally those involved in the scheme choose walking, cycling and public transport as their mode of travel, using the car club only when it is the best option; and
- Convenient – you can book with a minute's notice and be on your way in a clean, well looked after car, which you use only for as long as you need it.

7.4. Parking Management

Residential Permit Parking Scheme and Allocation

7.4.1. A Resident Permit Parking Scheme (RPPS) will operate and be enforced within the site, through appropriate signage, road markings and patrolling. Enforcement Officers (EOs) will actively patrol the site to monitor on-street parking operations and move drivers on or issue Penalty Charge Notices (PCNs) if required. This will be enforced by the on-site management team.

7.4.2. Parking operations will be monitored and managed by the same on-site management team, with the use of vehicle clamps to aid enforcement as required. Car parks will be accessible by way of a secure gate with residents granted access by way of a security key fob.

7.4.3. A total 23 visitor parking bays will be provided on-street.

7.4.4. In order to ensure all leased parking spaces located on the site are being utilised and are not being left vacant, individual parking spaces in the secure car parks will be allocated to a specific residential unit and space usage will be regularly monitored by the on-site facilities management team.

7.4.5. 8 regular bays will be for use by tradespeople visiting the development for servicing purposes. These spaces will need to be booked in advance through the concierge.

7.4.6. Spaces which are restricted to use by Blue Badge holders only will be identified through the introduction of appropriate signage. All parking is restricted for Blue Badge holders except for any agreed visitor parking. The management company will ensure that the number of spaces are restricted to use by Blue Badge holders only and with tenants that are registered Blue Badge holders at all times.

7.5. Electric Vehicle Charging

7.5.1. To encourage sustainable travel, electric vehicle charging points will be provided in line with the London Plan. The London Plan demands that 20% of residential parking spaces across the development have electric vehicle charging points, with the remaining bays featuring passive provision for future conversion into electric charging bays.

7.5.2. It is proposed as part of this development that 20% of bays have electric vehicle charging points, and the remaining 80% have capability for future conversion.

7.5.3. These proposals ensure that:

- All electric vehicle parking spaces are clearly signed and located in prominent, convenient and accessible locations in the car parks e.g., close to the entrance of facilities;

- They meet the appropriate technical standards for the type of development;

- A full cabling network will be installed in the car parking area to support all active and passive charging points (32 Amp rated to ensure flexibility);

- The default socket type to install at 'active' charge points will be Type 2 IEC62196-2 connector; and

- The car club parking spaces will be prioritised for the provision of Electric Vehicle Charging points, especially with regard to the provision of passive charging infrastructure that would cover all car club parking spaces.

7.6. On-Site Delivery and Servicing

7.6.1. A number of measures will be introduced to manage the delivery and servicing activities on the site associated with the residential and commercial uses. These will include the following:

- Contractors associated with deliveries to the site will be made aware of the delivery access restrictions and be required to adhere to these restrictions in writing. It is envisaged that development security staff will be familiar with the details of all delivery vehicles;

- Any other occasional delivery companies who do not normally deliver to the development will also be provided with delivery restrictions by on-site management and directed to the appropriate loading/unloading facilities;

- If a driver does not comply with the delivery access restrictions (as witnessed by the on-site management or reported via local residents), the supplier will be informed of the vehicle registration/driver not complying with the contracted conditions. Non-compliance with the delivery restrictions will then be used as a deciding factor in the appointment of future contracts associated with the development; and

- Recommended delivery timings will be defined by the site management in order to minimise the number of service vehicle trips during the busiest times on the surrounding road network (such as the weekday morning and evening peak periods).

8. Appraising the Impact of the Proposed Development

8.1. Assessment Criteria

8.1.1. The proposed development is for the regeneration of North London Business Park to provide a mixed-use development of up to 2,500 dwellings, 1,162sq.m retail space, 1,010sq.m community space and a 1,050-pupil capacity secondary school.

8.1.2. As agreed with TfL as part of the scoping exercise, only the development above and beyond the extant 1,350 dwellings and 3,125sq. m of commercial space permitted in 2020 will need to be assessed within the revised TA. This equates to a total of 1,150 dwellings that will need to be assessed within this TA.

8.1.3. This appraisal is based on three key assessments as follows:

- The suitability of the **site access(es)** to accommodate proposed development access demands;
- The ability to access the site via **sustainable modes** of transport; and
- The impact of the proposed development on off-site transport infrastructure and services.

8.1.4. It is important to note that the general direction of national and local policy seeks to locate development sites in sustainable locations in order to enable future residents to take advantage of sustainable modes of travel.

8.1.5. Alongside this there is also a general understanding that increasing highway capacity to meet predicted demand is neither desirable nor achievable as it will not promote use of sustainable modes.

8.1.6. Experience also indicates that sites in urban areas are likely to require access via junctions that may be at or close to capacity with limited scope for increasing capacity. This represents the ‘trade off’ between sustainable locations and potentially constrained access.

8.1.7. Furthermore, land is not likely to be available in urban areas to increase capacities at junctions in line with previous assessment methodology. Where there is competition for space between highway capacity and providing sustainable transport infrastructure policy clearly requires the latter to take priority.

8.2. Construction Traffic

8.2.1. Construction traffic routing may be a concern for residents and businesses. The issue is not considered in detail in this assessment other than to appraise any highway conditions that may affect the routing of construction traffic.

8.2.2. The site is located close to the strategic road network and adjacent to roads used to taking significant volumes of industrial traffic, so we do not anticipate any construction traffic routing issues.

8.2.3. We anticipate that a Construction Traffic Management Plan will be required by planning condition that will include consideration of traffic routing in more detail.

8.3. Base Year Traffic Flows

8.3.1. The observed traffic counts undertaken in May 2021 have been used to inform the Base Year assessment.

8.3.2. Further details of the locations of observed traffic counts are shown in Table 4 shown previously in Section 2.14.

8.4. Assessment Periods and Assessment Years

8.4.1. The typical weekday peak periods on the highway network will be assessed as they are likely to be the most capacity constrained. Based on data extracted from traffic counts, peak times (and especially PM peaks) vary so the widely used traditional network peak periods have been used for this assessment as follows:

- 0800 – 0900 (AM network peak); and
- 1700 – 1800 (PM network peak).

8.4.2. The following assessment scenarios are to be undertaken as part of this TA, as agreed with TfL. However, due to delays in obtaining data from TfL, the assessments will be undertaken and reported in an addendum to this TA in due course.

- 2021 Opening Year baseline flows;
- 2021 Opening Year baseline flows + development;
- 2021 Opening Year baseline flows + development + committed developments;
- 2031 Future Year baseline flows;

- 2031 Future Year baseline flows + development; and
- 2031 Future Year baseline flows + development + committed developments.

8.4.3. Base Year 2021 Observed Traffic Flow diagrams are shown in **Appendix D.**

8.5. Vehicular Trip Generation - Proposed Development

8.5.1. Reference has been made to the TRICS database under the land-use category 'Residential' and the sub-category 'flats privately owned' to specifically identify peak hour person-trips generated by the proposed development ("Total People" trip rate per dwelling). For this assessment, sites outside of London have been excluded, as requested by TfL.

8.5.2. The TRICS outputs are summarised in Table 25 and the original TRICS database information can be found in full in **Appendix J.**

Peak Period	Residential - 'Total People' Trip Generation					
	Inbound		Outbound		Two-Way	
	Rate	Trips	Rate	Trips	Rate	Trips
AM Peak (0800 to 0900)	0.061	70	0.423	486	0.484	557
PM Peak (1700 to 1800)	0.280	322	0.139	160	0.419	482

Table 25 Trip Rates per Dwelling (TRICS residential –flats privately owned – based on 1,150 units)

8.5.3. Based on the person trip rates summarised in Table 25, the proposed development of up 1,150 dwellings would be expected to generate in the region of 557 movements during the AM peak and 482 movements in the PM peak hour.

8.6. Mode Shift

8.6.1. In order derive the baseline mode share for the proposed development, Census data for the Middle Super Output Area (MSOA) of Barnet 010 `Travel to Work' has been which is a good measure of travel habits and is considered to be a robust measure of travel demand to and from the site.

8.6.2. The baseline mode share is summarised below in Table 26 below, alongside the respective development trips.

Method	Development Trips (AM Peak 2-way)	%
Works mainly at or from home	57	10.3%
London Underground	126	22.7%
Train	40	7.2%
Bus, minibus or coach	57	10.3%
Taxi	3	0.5%
Motorcycle, scooter of moped	7	1.3%
Driving a car or van	223	40.1%
Passenger in a car or van	11	2.0%
Bicycle	5	1.0%
Foot	23	4.1%
Other	3	0.6%
Total	**557**	**100.0%**

Table 26 – Baseline Mode of Travel to Work – Census 2011

8.6.3. The information in Table 26 above demonstrates that 40.1% of journeys to work are via single occupancy car vehicle, and 57.6% via sustainable modes (including home working).

8.6.4. Planning policy promotes sustainable modes (walking, cycling and public transport), and the Mayor's Transport Strategy sets a target of 75% sustainable travel mode share for Outer London by 2040.

8.6.5. A minimum mode shift target of 55% via sustainable modes (inclusive of home working) by year 2026 has been adopted as part of this assessment. Longer term, by 2031 the objective target of 60% is anticipated in order to progress to the 75% target set out in the London Plan by 2041. Further details of the proposed mode shift are summarised in Table 27 below.

Method	Year 1 Development Trips (AM Peak 2-way)	%	Year 5 Development Trips (AM Peak 2-way)	%	Year 10 Development Trips (AM Peak 2-way	%
Works mainly at or from home	57	10.3%	60	12.0%	71	13.0%
London Underground	126	22.7%	130	26.9%	140	26.0%
Train	40	7.2%	40	8.0%	40	7.2%
Bus, minibus or coach	57	10.3%	60	12.6%	75	13.5%
Taxi	3	0.5%	3	0.5%	5	0.9%
Motorcycle, scooter of moped	7	1.3%	7	1.3%	7	1.3%
Driving a car or van	223	40.1%	210	30.2%	153	26.7%
Passenger in a car or van	11	2.0%	11	2.0%	16	2.9%
Bicycle	5	1.0%	8	1.4%	14	2.5%
Foot	23	4.1%	25	4.5%	32	5.5%
Other	3	0.6%	3	0.6%	3	0.6%
Total	**557**	**100.0%**	**557**	**100.0%**	**557**	**100.0%**

Table 27 – Mode Shift Targets

8.6.6. The targets shown in Table 26 reflect where the main Travel Plan measures are to be applied. Further detail on the proposed targets is set out in the accompanying Travel Plan.

8.6.7. To provide a robust worst-case assessment in this TA, the above mode shift targets have not been taken into account in assessing the likely impact of the development.

8.7. Traffic Distribution

8.7.1. Census 2011 data showing usual place of work of residents for the Middle Super Output Area (MSOA) of Barnet 010 has been analysed to identify likely distribution of traffic during peak hours. Online journey planning mapping has been used to identify likely traffic routing at peak times. Some judgement has been made on routing based on highway layout and other matters, such as where route choice is marginal in journey time.

8.7.2. The site is located close to the strategic road network and the majority of external destinations (and therefore peak time vehicle trips) are likely to be to the north and west of the site. The assignment of traffic will reflect this, and will be tested by using online journey planning at peak times.

8.7.3. It is recognised that 'local knowledge' may influence traffic routing. The assessment of development traffic impact will be based on the data, method and assumptions summarised above. The findings of the assessment will be checked to ensure they are robust and, where reasonable any 'local refinement' considered before concluding.

8.8. Traffic Impact Assessment

8.8.1. This Section provided an assessment of the overall traffic impact of the proposed development on the local highway network.

8.9. Junction Assessments

8.9.1. At the time of preparing this report, Stomor are awaiting data from TfL in order to undertake junction capacity assessments. Therefore, a separate addendum will be prepared to accompany this Transport Assessment, focussing on the trip generation, distribution and junction capacities.

8.10. Access by Large Vehicles

8.10.1. It is expected that the vast majority of vehicles associated with the site would be private cars of typical dimensions. A refuse vehicle would collect from the site once a week. The improvements to the main access roads will improve accessibility for larger vehicles due to the increased width and kerb radii provided.

8.10.2. The site has been designed to accommodate visits by waste, emergency and commercial delivery/servicing vehicles. These are likely to be the largest vehicles accessing the site, albeit infrequently by waste and emergency vehicles.

8.10.3. Coaches will visit the school on a weekday basis and the site accesses have been designed to accommodate these vehicles.

8.10.4. Swept path analysis of an 10m waste vehicle has been undertaken for the main site access roads. Drawing ST-3013-10 (see **Appendix F**) demonstrates that a vehicle of this size can access the site and leave in either direction in forward gear without need to change the site access. Further Swept Path Analysis will be undertaken for other phase as they come forward via reserved matters planning applications.

8.10.5. The construction period of the proposed development will also require access by large vehicles, albeit over a relatively short timescale for each individual phase. The site access has been designed to accommodate the turning movements of construction traffic vehicles.

8.10.6. A Construction Traffic Management Plan (CTMP) would normally be required via Planning Condition when more is known about the construction programme. At this stage our assessment

9. Sustainable Travel Impact Overview

9.1. Introduction

9.1.1. Current national and local policy clearly seeks to promote less travel and, where necessary, more travel by sustainable modes.

9.1.2. In addition to the physical measures set out below, a Travel Plan (TP) will be used to promote and manage sustainable travel to and from the site on an ongoing basis. The TP will focus on promoting a range of measures over time to ensure walking, cycling, scooting, bus and car sharing become the preferred mode of travel for the site.

9.1.3. The sustainable transport package and TP will effectively reduce the impact of private vehicle trips. Census mode share data indicates that private car use is currently relatively low in Barnet 010 (reflecting car ownership levels and the good public transport network).

9.1.4. Given the sustainable location of the site and the package of measures set out below, the Travel Plans for the site would seek to reduce private car usage to below 30% of mode share.

9.1.5. Achieving this mode share target would have positive effects on the core junction modelling results, bringing impacts closer to the 'Without Development' scenarios in 20 and 2031. Where residual 'With Development' impacts would remain higher than the 'Without Development' scenario, it is considered that this would be sufficient to justify additional capacity provision.

9.2. Sustainable Transport

9.2.1. The development proposals provide a suite of public benefits in addition to much needed new homes. The site includes a variety of land uses in order that residents can live and work within the site or adjoining area, which is within walking and cycling distance. This is a great example of a new sustainable masterplanned community and therefore by its very nature will increase use of sustainable modes of travel.

9.2.2. The public parkland and facilities provided within the development will encourage future residents to stay within the site for leisure activities. There will be convenience shopping facilities provided on-site as part of the commercial development. Furthermore, there are food and shopping facilities located adjacent to the site (along the B1453 Russell Lane and A109 Oakleigh Road North) which also allows future residents and employees to access key destinations on foot or by bicycle.

9.2.3. The mix of uses on site and proximity of key services to the site will help reduce the need to travel to and from the site as well as enable positive choices regarding use of sustainable modes of travel.

9.2.4. We have appraised the existing transport infrastructure and services in the context of potential demand alongside promoting access by sustainable modes as a priority.

9.2.5. The site is very well located in terms of sustainable transport, with local employment, retail, education and bus stops within easy walking and cycling distance of all parts of the site. New pedestrian/cycle links and crossings will be provided to promote sustainable access to the wider network, alongside upgrades to existing infrastructure.

9.3. Pedestrian and Cycle Access Strategy

9.3.1. The site layout will be characterised by the creation of a comprehensive network of inter-connected streets and spaces that allow efficient movement on foot and by bicycle, promoting a permeable network within the site with strong links to the surrounding employment, retail and residential areas.

9.3.2. The provision of direct and convenient routes for pedestrians and cyclists will encourage residents to use more sustainable travel options by reducing walk/cycle journey times.

9.3.3. The pedestrian/cycle access strategy is designed to make travel on foot or by bicycle the preferred mode of travel within the site and to immediately adjacent destinations.

9.3.4. To improve connectivity and promote walking and cycling the following strategy is to be implemented within and adjacent to the proposed development;

- Provision of crossing facilities on all arms of the new signalised Eastern Access providing a connection to the bus stops and the wider footway network along Brunswick Park Road;

- Provision of a comprehensive on-site footway network based on key desire lines which prioritises pedestrians over vehicular traffic. This will include the delivery of links to off-site pedestrian and cycle connections;

- From the early phases of the development onwards, combined footway/cycleways will be provided along with site access points solely for pedestrians and cyclists and speed control measures (such as speed tables and shared surfaces) to reduce traffic speed and promote safe access on foot/by bicycle; and

- Provision of signage to direct pedestrians and cyclists to the key locations on- and off-site. This signage will be delivered on a phase-by phase basis dependent upon the facilities delivered within each respective phase.

9.3.5. The provision of a comprehensive footway/cycleway network and additional crossings/links off site will also mean travel to and through the site is also a viable option on foot/by bicycle.

9.4. Public Transport Strategy

9.4.1. The demand for bus services at the development is intrinsically linked to the levels of development occupancy across each of the respective phases Therefore, a flexible approach to the delivery of these services is paramount when:

- Responding to the needs of the occupiers of the proposed development;
- Balancing costs with anticipated demand / revenue responding to the needs of the occupiers of the development; and
- Ensuring value for money in the expenditure of any developer contributions.

9.4.2. As part of the scoping discussions, TfL stated that they do not wish to divert any of the existing bus services through the development site. As part of the extant 2020 permission, a financial contribution of sum of £825,000 was secured as part of the S106 to provide an additional bus service on the 382 bus route.

9.4.3. Given that it will not be feasible to divert any existing TfL bus services through the site, and that the 382 route is an excellent to local destinations, it is proposed that the financial contribution sum is increased to reflect to uplift in the residential development 91,150 units).

9.4.4. Furthermore, Comer Homes will provide an on-site shuttle bus service which will provide an `on-demand` service to key destinations such as local commercial and health centres and also to key public transport interchange hubs.

9.5. Home and Remote Working

9.5.1. Census 2011 data indicates a significant number of people will work at or from home in the proposed development. We would expect this figure to have grown by the time of the next Census, and any increase reflected in the proposed development where new dwellings have the potential to be served by high-speed broadband and improved mobile communications networks.

9.5.2. Increases in home working will reduce demand to travel to and from the site, especially at peak times.

9.5.3. Remote working from local facilities equipped with broadband may also change some demand for peak time travel from journeys to external destinations to shorter distance journeys to locations within Basildon that can be undertaken on foot or by bicycle.

9.6. Car Sharing and Car Clubs

9.6.1. Car Clubs are increasingly popular for people who wish to have occasional access to a car without owning one (i.e., for occasional work or leisure purposes). This may help some residents live without the need for owning a car for regular and, therefore, peak time use.

9.6.2. Further details of the proposed Car Club strategy at the proposed development are outlined in Section 7.3.

9.6.3. Promoting use of sustainable modes as well as Car Sharing and Car Clubs via a Travel Plan would help reduce demand for motor vehicle travel and have a positive impact on peak time travel especially.

9.6.4. Given the scale of development proposed, and the length of time over which it will be implemented, this overall strategy can ensure both that the transport impact of proposed development can be minimised, but also that the principles of “places first” can deliver a high-quality sustainable development.

9.6.5. However, where this assessment indicates that there is likely to be an impact on highway capacity resulting from the proposed development, the proposed sustainable transport ‘package’ set out in this assessment is considered the most appropriate way of mitigating this impact.

9.6.6. Improving highway capacity is not considered to be a cost-effective way of delivering a sustainable development and promoting sustainable access. It is also possible that where congestion/delay already exists or is predicted, provision of improved walking, cycling and public transport will encourage more use of these modes.

9.7. Home shopping and delivery

9.7.1. The growth of online shopping and increase in capacity of home delivery services (both convenience and comparison goods) suggests that fewer trips will be made to retail and takeaway food establishments in future years.

9.7.2. The use of ‘multi-drop’ delivery services could effectively replace multiple car journeys. Whilst it is likely that this will be mainly ‘off-peak’ for the purposes of this assessment, there is potential for home delivery services to reduce some peak time traffic to and from the site.

10. Road Safety Audit

10.1.1. A Stage 1 Road Safety Audit will be carried out based upon on the Access Strategy drawings ST-3013-700 and 701. The audit will be carried out by an independent Safety Auditor. Should the auditors provide appropriate recommendations, a Designer's Response will be prepared which addresses recommendations and proposes the necessary measures to address issues at the detailed design stage.

11. Travel Plan

11.1.1. A Travel Plan (TP) will be prepared for the proposed development. The TP will ensure residents and visitors of the development have access to information on how to travel to and from the site via sustainable transport modes (i.e., routes and journey times to key destinations).

11.1.2. In addition, information will be provided with information on journey planning by various modes of travel as well as information on car sharing.

11.1.3. The overall objective would be to promote a culture of sustainable travel from the outset as there are a range of services and facilities than can be accessed by sustainable modes of travel.

11.1.4. The TP will set out a range of ‘soft’ measures and initiatives to promote and encourage the use of sustainable travel alongside the ‘hard’ infrastructure and services provided by the development.

11.1.5. The TP will be managed and monitored and flexible enough to adapt and change as requirements of the site may change.

12. Conclusions

12.1.1. Stomor Ltd. has been commissioned by Comer Homes Group to prepare a Transport Assessment (TA) in support of a Hybrid Planning Application for the regeneration of the North London Business Park to provide a mixed-use development of up to 2,428 dwellings, 2,353sq.m of workspace, 3,835 sqm flexible non-residential floorspace, which could be used for community use, medical use, retail, offices, cafes etc. and a and a new 5FE school building with an anticipated 1,050-pupil capacity.

12.1.2. The site measures 16.37ha, of which approximately 13ha is currently undeveloped, comprising areas of disused open space and car parking. The site is bounded by the East Coast Mainline railway along the entire western boundary, with residential development and Brunswick Park Road adjacent to the eastern boundary.

12.1.3. The site benefits from planning permission for wholesale redevelopment. The original application was submitted in hybrid form and planning permission was granted at appeal in February 2020 for:

"the phased comprehensive redevelopment of the North London Business Park to deliver a residential led mixed-use development. The detailed element comprises 360 residential units in five blocks reaching eight storeys, the provision of a 5 Form Entry Secondary School, a gymnasium, a multi-use sports pitch and associated changing facilities, and improvements to open space and transport infrastructure, including improvements to the access from Brunswick Park Road, and; the outline element comprises up to 990 additional residential units in buildings ranging from two to nine storeys, up to 5,177 sqm of non-residential floor space (Use Classes A1-A4, B1 and D1) and 2.54haof public open space. Associated site preparation/enabling works, transport infrastructure and junction works, landscaping and car parking."

12.1.4. The main site accesses for all vehicles will be taken from the existing access points on Brunswick Park Road (Eastern Access) and the A109 Oakleigh Road North (Southern Access).

12.1.5. A new pedestrian/cycle access will be provided to the north of the site to link with the residential street, Ashbourne Avenue.

12.1.6. The existing Eastern Access onto Brunswick Park Road will be upgraded from its current crossroads arrangement to a new signalised junction. The junction will incorporate pedestrian/cycle signal phases in signals.

12.1.7. The site layout has been designed to promote low traffic speeds, with a 30mph design speed on the main site access roads and 20mph on all cul-de-sacs and shared surfaces serving parcels of development. The layout will be checked to ensure visibility at internal junctions and around bends complies with the required standard.

12.1.8. Swept path analysis has been undertaken for the site accesses to demonstrate that the site can accommodate the largest vehicle likely to use the site.

12.1.9. The site will be designed to promote access by sustainable modes of transport using the following strategy:

- Providing a mix of land uses on site to encourage people to live, work and use school and leisure facilities this promoting walking and cycling within the site:
- Locating a significant volume of housing within easy walking and cycling distance of local employment and retail facilities as well as on a bus route to key areas and rail connections;
- Providing additional employment and education services within walking and cycling distance of existing residential development and on an existing bus route;
- Providing pedestrian and cycle links to existing footway and cycleway infrastructure as well as pedestrian and cycle routes and crossings within the site to provide good connectivity to and permeability within the site;
- Providing new bus stop facilities on the A109 Oakleigh Road North and Brunswick Park Road;
- Providing fair and justifiable financial contribution towards off-site improvements to sustainable transport infrastructure;
- Providing a Travel Plan to help promote sustainable travel to, from and within the site, managed and monitored over time with evolving measures as circumstances change; and
- Enabling home working and access to online retail and home deliveries by providing access to broadband services for residents, businesses and pupils.

12.1.10. A Stage 1 Road Safety Audit will be undertaken of the proposed site accesses, and any design issues identified will be addressed at detailed design stage.

12.1.11. Vehicle and cycle parking provision will be in accordance with London standards with care taken not to over-provide vehicle parking. Cycle parking will be provided to ensure safe and secure storage of bicycles as part of the overall package of sustainable transport improvements.

12.1.12. Electric vehicle charging infrastructure will be accommodated in accordance with London standards.

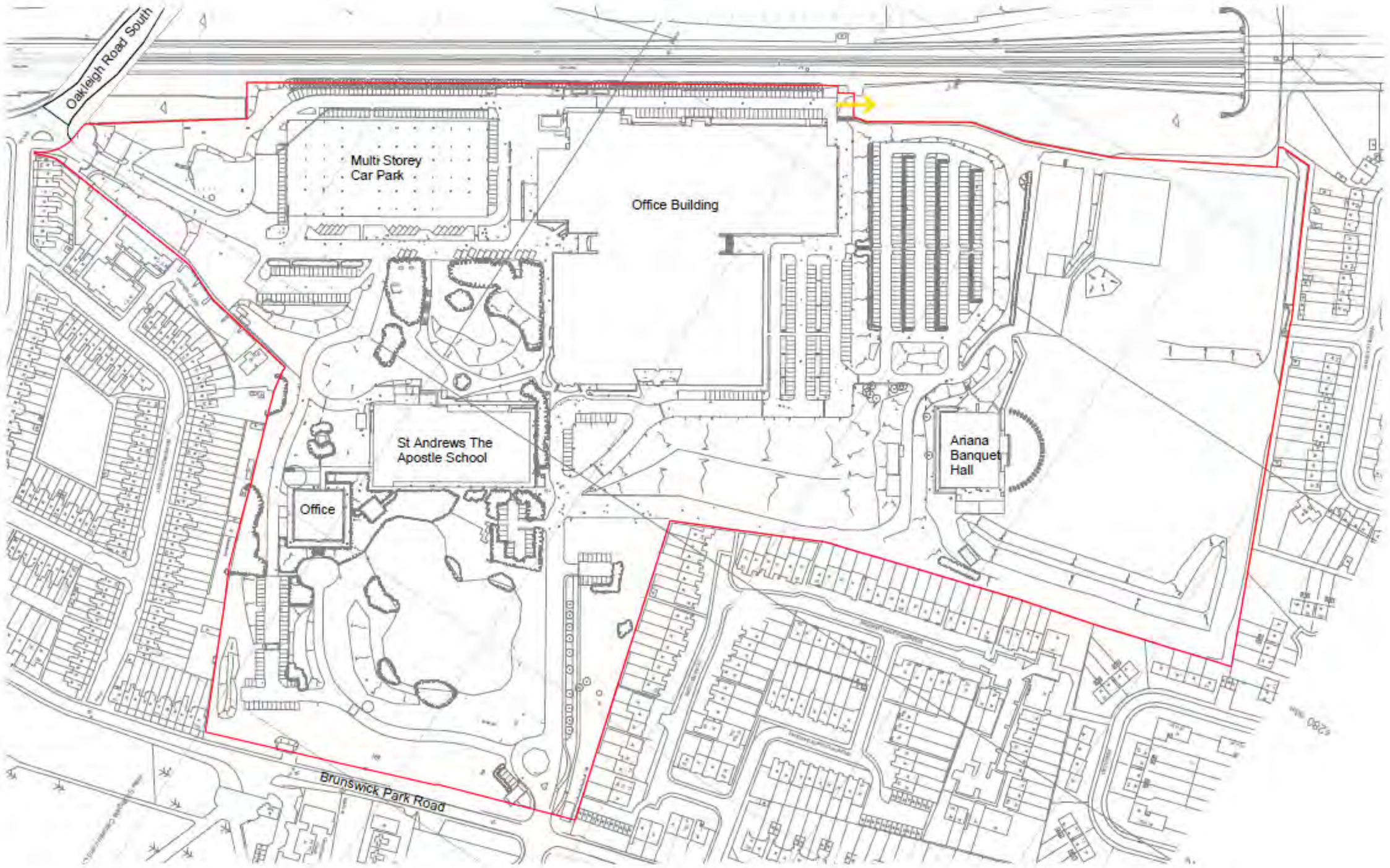
12.1.13. The proposals will result in an increase in traffic during peak hours which will have an impact on junctions in the vicinity of the site and wider area. At the time pf preparing this report, Stomor are awaiting data from TfL in order to undertake junction capacity assessments. Therefore, a separate Addendum will be prepared in due course to address these assessments.

12.1.14. The access strategy for the proposed development is based on providing safe and convenient access at the site accesses. The over-arching priority is to promote sustainable access, either via retaining trips internally or promoting sustainable modes of travel.

12.1.15. The strategy set out above (including financial contribution) is considered the most policy compliant approach and would mitigate the impact of the proposed development. Capacity improvements to existing junctions are not the preferred approach due to the limitations on physical options in some locations, the limited long-term benefit of capacity improvements and the potential negative impact on sustainable transport infrastructure.

12.1.16. Any contribution would need to be fair, reasonable and justifiable in scale to the impact of the proposed development, taking into consideration the proposed infrastructure and services to be provided by the development.

12.1.17. Given the scale of the development and anticipated impact, with reference to paragraph 109 of the of the National Planning Policy Framework (NPPF), the likely residual cumulative impact of the development, taking into account the potential reduction in trips associated with the travel demand management measures, is not considered to be ‘severe’.



General Notes

1. Developmentment Zones (within which development can occur) and public open spaces are identified on drawing number 211_WS_02_01
2. Access and circulation routes are identified on Drawing number 211_WS_02_02
3. Landscape treatments are identified on drawing number 211_WS_02_03
4. Allowable uses at ground floor frontages are identified on Drawing number 211_WS_02_04
5. Allowable horizontal limits of deviations are identified on Drawing number 211_WS_02_05
6. Proposed site ground levels and allowable vertical deviations are identified on Drawing number 211_WS_02_06
7. Heights and allowable vertical deviations are identified on Drawing number 211_WS_02_07
8. Basement extents and allowable horizontal and vertical deviation are identified on drawing number 211_WS_02_08

NOT TO SCALE IN REPORT APPENDICES

Legend

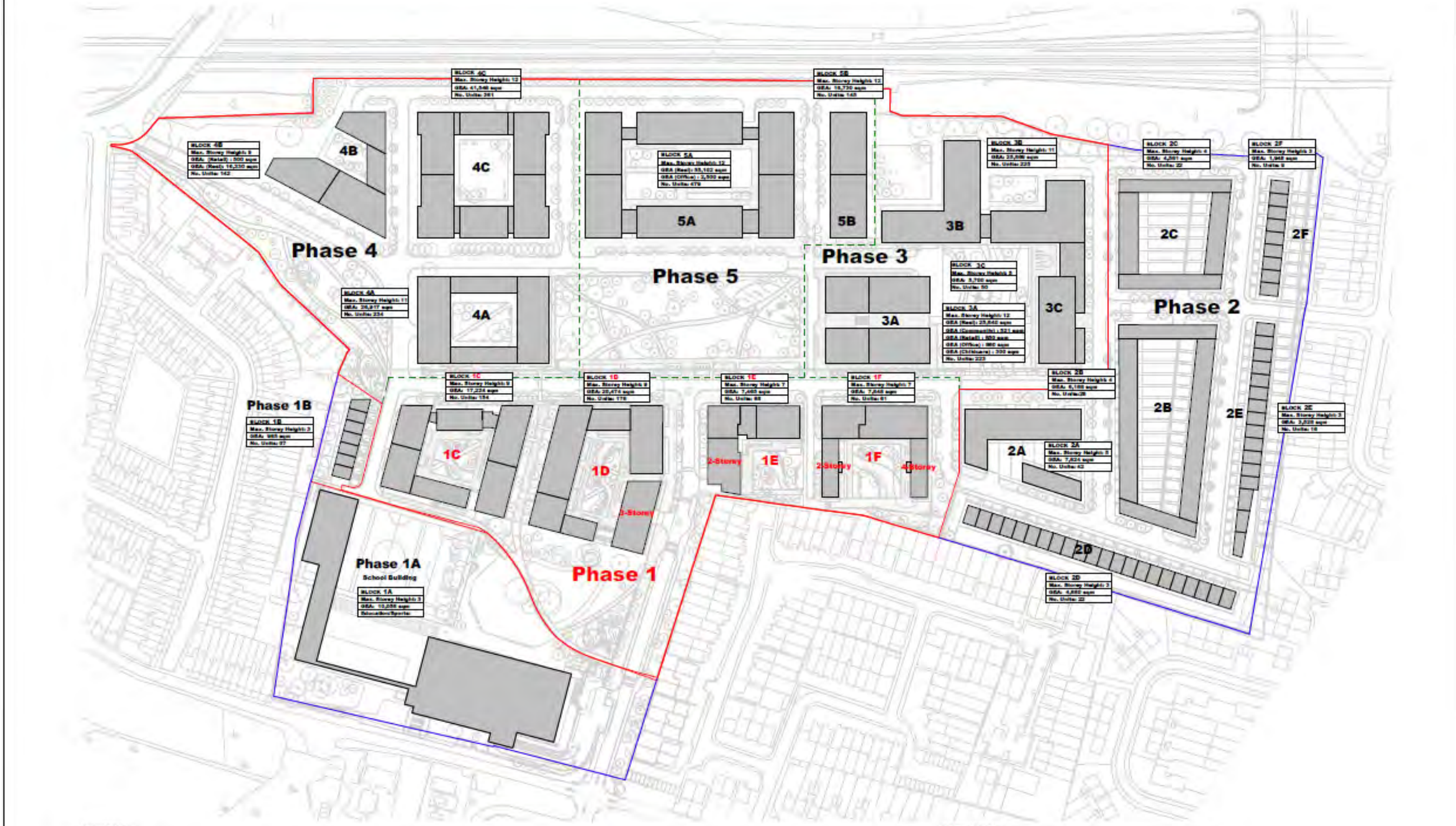
Planning Application Boundary

Land Owned by Applicant

REV.	DATE	DETAILS	INITIALS

PLUS ARCHITECTURE

PROJECT: North London Business Park	PROJECT NO.: 211	DATE: 31/05/2021
CLIENT: The Crown Group	DRAWING NO.: 211_WS_02_00	REVISION NO.:
TITLE: Red Line Boundary Plan	DRAWN BY: JG	SCALE AT A1: 1 : 1000
DESCRIPTION: Planning	CHECKED BY: DT	SCALE AT A3: 1 : 2000



General Notes

1. Developmentmant Zones (within which development can occur) and public open spaces are identified on drawing number 211_WS_02_01
2. Access and circulation routes are identified on Drawing number 211_WS_02_02
3. Landscape treatments are identified on drawing number 211_WS_02_03
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7. Heights and allowable vertical deviations are identified on Drawing number 211_WS_02_07
8. Basement extents and allowable horizontal and vertical deviation are identified on drawing number 211_WS_02_08

Additional Notes

1. Refer to Section 5 of the Design Principles Document for further guidance on the Development Zone.
2. Refer to section 4 of the Design Principles Document for further guidance on the Public Open Space Zones, access routes typologies , and landscaping treatments of streets and spaces.
3. Refer to section 3 of the Design Principles Document for further guidance on the streets and circulation routes.

NOT TO SCALE IN REPORT APPENDICES

REV.	DATE	DETAILS	INITIALS

Legend

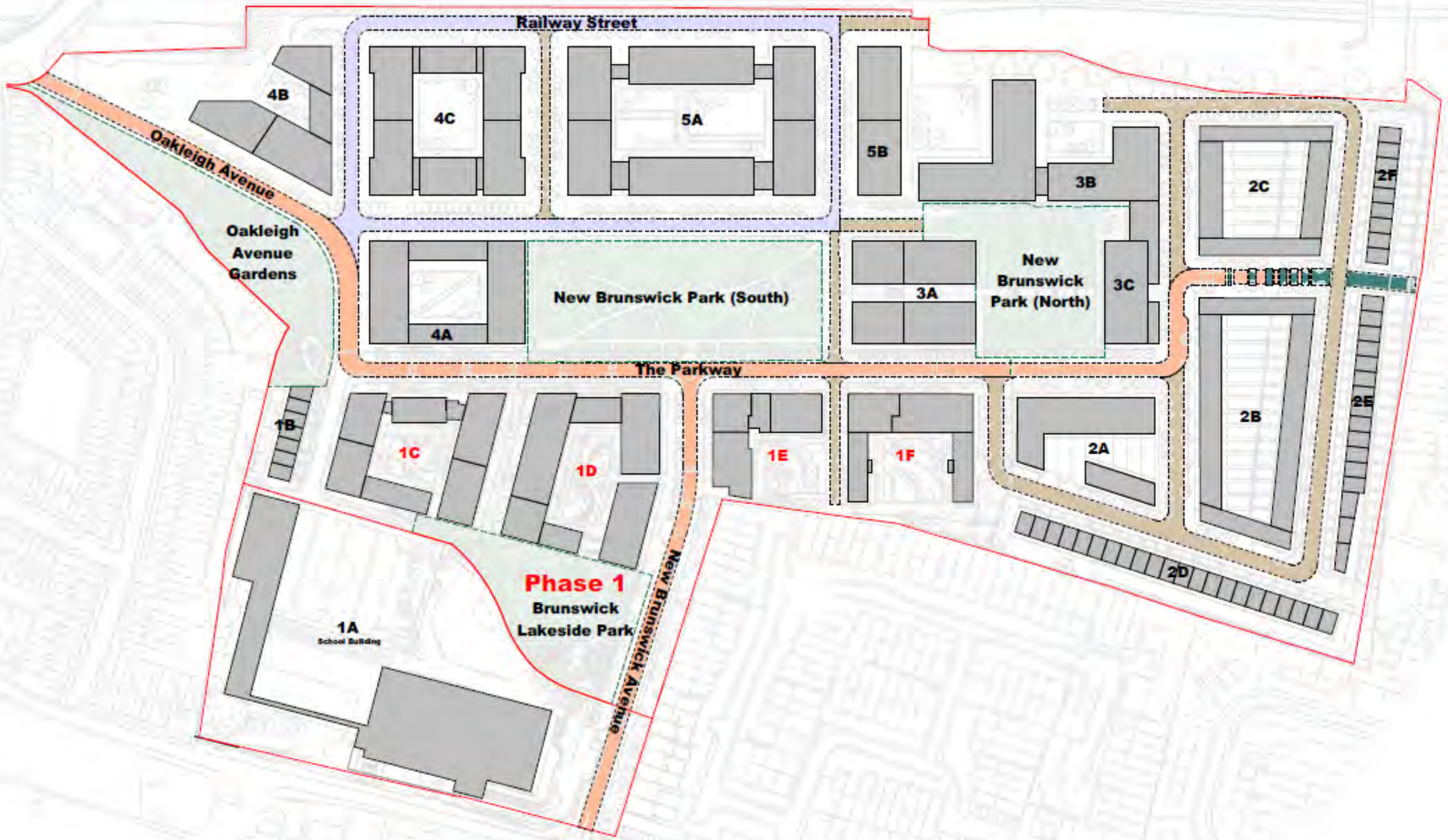
- Planning Application Boundary
- Public Open Space
- Detailed Application Zone Blocks
- Phase 1 — Detailed Application Zone Reference
- 1A — Detailed Application Zone Block Reference
- + 57.00 — Proposed Site Basement Level (AOD) Limit of Deviation +/- 2.0m
- Phasing of Outline Component of Application

NORTH POINT

KEY PLAN

PLUS ARCHITECTURE

PROJECT: North London Business Park	PROJECT: 211	DATE: 31/05/2021
CLIENT: The Crown Group	DRAWING NO.: 211_WS_02_01	REVISION NO.:
TITLE: Proposed Development Zone Plan	DRAWN BY: JB	SCALE AT A1: 1:1000
ISSUE TYPE: Planning	CHECKED BY: PP	SCALE AT A3: 1:2000



General Notes

1. Developmentment Zones (within which development can occur) and public open spaces are identified on drawing number 211_WS_02_01
2. Access and circulation routes are identified on Drawing number 211_WS_02_02.
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4. Allowable uses at ground floor frontages are identified on Drawing number 211_WS_02_04
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6. Proposed site ground levels and allowable vertical deviations are identified on Drawing number 211_WS_02_06
7. Heights and allowable vertical deviations are identified on Drawing number 211_WS_02_07
8. Basement extents and allowable horizontal and vertical deviation are identified on drawing number 211_WS_02_06

Legend Minimum Street Widths

-Primary Streets-
Oakleigh Avenue to Site Boundary - 30m
The Parkway - 24m
New Brunswick Avenue - 25m
-Secondary Streets-
SST.02 - 20m
Railway Street -25m
-Tertiary Street
SST.03 - 21m

Weirdale Link-20m

Additional Notes

1. Plan shows the route typologies proposed between blocks. The exact location of routes can move horizontally to reflect the block frontage deviations in drawing number 211_WS_02_05.
2. All routes are subject to the minimum street widths identified on drawing number 211_WS_02_05.
3. Refer to Section 2 of the Design Principles Document for additional principle on access and circulation.

NOT TO SCALE IN REPORT APPENDICES

NOTES	REV.	DATE	DETAILS	INITIALS

Legend

- Planning Application Boundary
- Public Open Space
- Detailed application Zone Blocks
- Phase 1 — Detailed Application Zone Reference
- 1A — Detailed Application Block Reference
- Primary Route
- Secondary Route
- Tertiary Route
- Weirdale Link

NORTH POINT:

KEY PLAN:

PLUS ARCHITECTURE

PROJECT: North London Waste Authority		PROJECT NO.: 211	DATE: 31/08/2021
CLIENT: The Comer Group		DRAWING NO.: 211_WS_02_03	REVISION NO.:
TITLE: Access & Circulation Plan		DRAWN BY: JS	SCALE AT A1: 1 : 1000
ISSUE TYPE: Planning		CHECKED BY: DT	SCALE AT A3: 1 : 2000

From: Rentzos, Costi
To: Paula Cullen
Subject: RE: North London Business Park - TRICS
Date: Monday, May 24, 2021 2:28:34 PM
Attachments: image001.jpg
image002.jpg

Hi Paula,

Yes, let's go with Melvyn's recommendation.

Kind regards
Costi

From: Paula Cullen <p.cullen@stomor.com>
Sent: 24 May 2021 13:54
To: Rentzos, Costi <Costi.Rentzos@Barnet.gov.uk>
Subject: FW: North London Business Park - TRICS

Hi Costi,

Would you like us to exclude TRICS sites outside of London as part of our assessment also?

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

Suite 2 | First Floor | Portmill House | Portmill Lane | Hitchin | Hertfordshire | SG5 1DJ
www.stomor.com

From: Dresner Melvyn (ST) <Melvyn.Dresner@tfl.gov.uk>
Sent: Monday, May 24, 2021 12:39 PM
To: Paula Cullen <p.cullen@stomor.com>; Rentzos, Costi <Costi.Rentzos@Barnet.gov.uk>
Cc: Simon Young <s.young@stomor.com>; Michael Holloway <MHolloway@danielwatney.co.uk>
Subject: RE: North London Business Park - TRICS [Filed 24 May 2021 12:43]

Thanks Paula,
If you can send me a technical note setting out your base and future trip assumptions then we comment in detail. As well as proposed methodology, this should include the data use (including observed data), how it applies to your site, person trip assumptions by land use and phase, and initial mode assumptions. Mode assumptions include main mode and access mode

On the TRICS outputs you provided, I would exclude sites from outside London and data older than 5 years.

I'm unclear why we forecasting office/ business park use as I thought this is residential scheme? Maybe the note can explain this aspect.

Most large developments in Barnet are residential or residential led. However, my most recent mixed use assessment in Barnet was undertaken for the rephasing application at Brent Cross. You can find the application on Barnet's website under reference: 19/5493/OUT. It's the May 2020 Transport Report (page 133 most useful) that sets out the details and set out a first principles approach adopted for employment.

For example of recent residential schemes, the nearest sites seemed to be refused e.g. Victoria Quarter or the Homebase at North Finchley. In both vases, TfL accepted the trip methodology.

For recent approvals, I would reference Silk Park on Hyde Estate Road, Grahame Park, Beaufort Park or Colindale Gardens. Again, we were ok with trip assumptions. I accept the approach to your site maybe different…

Regards
Melvyn

From: Paula Cullen <p.cullen@stomor.com>
Sent: 24 May 2021 11:28
To: Rentzos, Costi <Costi.Rentzos@Barnet.gov.uk>; Dresner Melvyn (ST) <Melvyn.Dresner@tfl.gov.uk>
Cc: Simon Young <s.young@stomor.com>; Michael Holloway <MHolloway@danielwatney.co.uk>
Subject: FW: North London Business Park - TRICS

Good morning Costi/Melvyn,

We have obtained the attached trip rates which we propose to utilise to inform our assessment.

Having spoken with TRICS, given the scale of density of development, there are limited sites within their database which are reflective of the development proposals. As such, some of the sites TRICS we have been provided are outside of London and with higher PTAL scores that the North London Business Park.

Can you please confirm if you are in agreement with the sites selected, or if there are any other sites you would like us to consider?

Given the time pressure we are under, I would be really grateful if you could confirm this by end of play today, if that's at all possible.

Please do give me a call if you wish to discuss.

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

Suite 2 | First Floor | Portmill House | Portmill Lane | Hitchin | Hertfordshire | SG5 1DJ
www.stomor.com

From: Info | TRICS <info@trics.org>
Sent: Friday, May 21, 2021 3:40 PM
To: Paula Cullen <p.cullen@stomor.com>
Cc: Simon Young <s.young@stomor.com>
Subject: RE: North London Business Park - TRICS [Filed 24 May 2021 11:11]

Hi, Paula

Please find the requested three Enhanced Site lists attached.

The first is for the 02/A Office land use category. I've applied quite wide filters at this stage to try to include as many surveys as possible. Still, you'll see the survey sample remains relatively small, at five. I've looked for multi-modal surveys between 1,000m² and 10,000m² GFA, from 01/01/2010 in Suburban Area, Edge of Town and Neighbourhood Centre locations. I've set a minimum local public transport provision of at least 200 buses or trains between 07:00-19:00 on a weekday.

The second is for the 02/B Business Park land use category and I've applied exactly the same filters as above. This leaves six surveys in the sample.

The third is for the 03/A Flats Privately Owned category. The official definition for this land use is as follows. Housing developments where at least 75% of households are privately owned. Of the total number of units, 75% must also be flats (sum of flats in blocks and "split" houses), with no more than 25% of the total units being "non-split" houses. The TRICS definition of a privately owned dwelling is a dwelling at which residents have any degree of equity, or a dwelling that is owned by a private landlord and rented at market rates. I've set a minimum number of dwelling of 200 but the date range, location types and public transport provision filters are all set exactly the same as the other two. This leaves a survey sample of eight.

Please let me know your thoughts on all of the above and let me know if you have any questions!

Kind regards

Owen

Owen Edwards
Assistant Manager
TRICS Consortium Ltd

10 Ashdon House
Moon Lane
Barnet EN5 5YL
020 3657 2187
07765 383 630
owen.edwards@trics.org

From: Paula Cullen <p.cullen@stomor.com>
Sent: 21 May 2021 12:36
To: Info | TRICS <info@trics.org>
Subject: RE: North London Business Park - TRICS

Hi Owen,

OK not a problem – sorry to bother you!

Speak soon.

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

Suite 2 | First Floor | Portmill House | Portmill Lane | Hitchin | Hertfordshire | SG5 1DJ
www.stomor.com

From: Info | TRICS <info@trics.org>
Sent: Friday, May 21, 2021 12:35 PM
To: Paula Cullen <p.cullen@stomor.com>
Cc: Simon Young <s.young@stomor.com>
Subject: RE: North London Business Park - TRICS

Hi, Paula

I have an internet engineer at my house at the moment, hopefully he won't be too long. Once he's done, I'll give you a call back about this bureau service request.

Apologies for the delay.

Kind regards

Owen

Owen Edwards
Assistant Manager
TRICS Consortium Ltd

10 Ashdon House
Moon Lane
Barnet EN5 5YL
020 3657 2187
07765 383 630
owen.edwards@trics.org

From: Paula Cullen <p.cullen@stomor.com>
Sent: 21 May 2021 12:18
To: Owen Edwards | TRICS <owen.edwards@trics.org>
Cc: Info | TRICS <info@trics.org>; Simon Young <s.young@stomor.com>
Subject: FW: North London Business Park - TRICS

Hi Owen,

Are you able to give me a call when you can if that's OK?

07468566114

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

Suite 2 | First Floor | Portmill House | Portmill Lane | Hitchin | Hertfordshire | SG5 1DJ
www.stomor.com

From: Paula Cullen
Sent: Friday, May 21, 2021 9:50 AM
To: Info | TRICS <info@trics.org>
Subject: RE: North London Business Park - TRICS

Hi Owen,

Sorry can I update my request?

We actually need trip rates for apartments/flats not houses. Mixed ownership but majority private. We also need to make sure we're not relying on sites that may have higher car ownership.

Hope that's OK?

Could I see a list of the sites if that's OK too?

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

Suite 2 | First Floor | Portmill House | Portmill Lane | Hitchin | Hertfordshire | SG5 1DJ
www.stomor.com

From: Info | TRICS <info@trics.org>
Sent: Thursday, May 20, 2021 6:00 PM
To: Paula Cullen <p.cullen@stomor.com>
Cc: Simon Young <s.young@stomor.com>
Subject: RE: North London Business Park - TRICS

Hi, Paula

To respond to this e-mail, each multi-modal trip rates calculation report would cost £460 plus VAT, a total of £920 plus VAT.

Kind regards

Owen

Owen Edwards
Assistant Manager
TRICS Consortium Ltd

10 Ashdon House
Moon Lane
Barnet EN5 5YL
020 3657 2187
07765 383 630
owen.edwards@trics.org

From: Paula Cullen <p.cullen@stomor.com>
Sent: 20 May 2021 09:50
To: Owen Edwards | TRICS <owen.edwards@trics.org>; Info | TRICS <info@trics.org>
Cc: Simon Young <s.young@stomor.com>
Subject: FW: North London Business Park - TRICS
Importance: High

Good morning,

Further to my email below, can we please have a quotation for circa 4000m2 of B1 office at the same site?

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

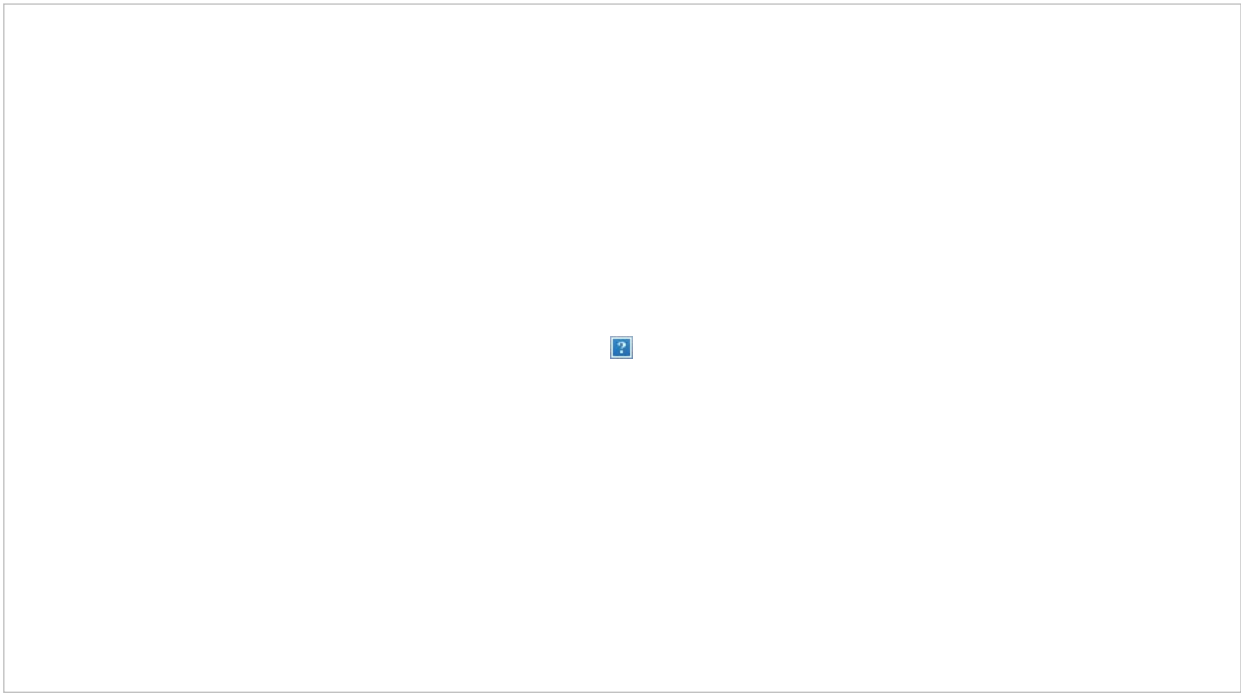
Suite 2 | First Floor | Portmill House | Portmill Lane | Hitchin | Hertfordshire | SG5 1DJ
www.stomor.com

From: Paula Cullen
Sent: Wednesday, May 19, 2021 3:26 PM
To: owen.edwards@trics.org; Info | TRICS <info@trics.org>
Cc: Simon Young <s.young@stomor.com>
Subject: North London Business Park - TRICS

Good afternoon,

May I obtain a quotation for the latest multi-modal trip rates for a site located in the London Borough of Barnet. It is a mix of houses and flats, assume privately owned.

The site is located below:



We need this info ASAP if that's possible?

The sit e

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

Suite 2 | First Floor | Portmill House | Portmill Lane | Hitchin | Hertfordshire | SG5 1DJ
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From: Hawkins Phil
To: Paula Cullen
Cc: Simon Young; Dresner Melvyn (ST)
Subject: RE: Model Date
Date: Thursday, June 10, 2021 1:03:37 PM
Attachments: image001.jpg

Hi Paula

I'm afraid that the information on planned homes and jobs increases is not included in the requested output. I think it may be something that needs to be agreed with Melvyn, but I would suggest that if the other development is planned and consented, it could be considered to be included in the London Plan growth included in the model already. i.e, you just need to add in your development trips. That would save you a lot of work and expense trying to decipher the model planning inputs.

We've quoted 3 days officer time to collate the data and I have already asked them to proceed – I would hope therefore you would have outputs next week.

We'll need a PO to cover the amount, and then I believe we invoice you (and that will contain payment details)

Cheers
Phil

From: Paula Cullen <p.cullen@stomor.com>
Sent: 10 June 2021 09:00
To: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Cc: Simon Young <s.young@stomor.com>
Subject: RE: Model Date

Hi Phil,

Thanks for clarifying. I presume all that info will be available as part of the model outputs we will receive?

Also, can I have TfL`s BACS details, as we will arrange payment for the data today?

Once this has been paid, do you know approx. how long it will take to receive the data?

Sorry more questions!

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

Suite 2 | First Floor | Portmill House | Portmill Lane | Hitchin | Hertfordshire | SG5 1DJ
www.stomor.com

From: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Sent: Thursday, June 10, 2021 8:44 AM
To: Paula Cullen <p.cullen@stomor.com>
Subject: RE: Model Date

Hi Paula

You would need to delve into the planning assumptions in the demand model to determine that one. Basically though the model uses London Plan levels of jobs and homes growth across London distributed via borough SHLAA for homes and a GLA employment sites database.

Phil

From: Paula Cullen <p.cullen@stomor.com>
Sent: 09 June 2021 16:27
To: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Subject: RE: Model Date

Hi Phil,

Sorry I forgot to ask earlier, do you or does anyone in the modeling team know if the extant scheme is included within the model?

We have assumed that the extant permission for the 1,350 dwellings is already included within the background traffic related to the strategic model for the forecast years. As such, we will assess the net increase of the additional 1,150 dwellings as part of our development for highway and public transport impact.

I will have sign off from the client this evening regarding the modelling fee.

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

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From: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Sent: Wednesday, June 9, 2021 3:16 PM
To: Paula Cullen <p.cullen@stomor.com>
Subject: RE: Model Date [Filed 09 Jun 2021 15:34]

Thanks Paula

I have the quotes from the teams, but please remember these will be taken from:

1. 2021 Reference Case
2. 2031 Reference Case
3. 2041 Reference Case

For this analysis -the fees will be

Highway – 3 officer days @ £874 per day = £2622

PT – 3 officer days @ £874 per day = £2622

Total = **£5244**

You will then need to add in your development manually and carry out the usual impact analysis.

Please can I ask you to amend the analysis request form to reflect the data will be taken from the above scenarios- 1, 2 and 3 – i.e. replace the below specification:

- *2021 Opening year baseline flows;*
- *2021 Opening year baseline flows + development;*
- *2021 Opening year baseline flows + development + committed developments;*
- *2031 Future year baseline;*
- *2031 Future year baseline + development;*

- *2031 Future year baseline + development + committed developments.*
- *2041 Future year baseline;*
- *2041 Future year baseline + development;*
- *2041 Future year baseline + development + committed developments.*

Thanks

Phil

From: Paula Cullen <p.cullen@stomor.com>
Sent: 09 June 2021 13:46
To: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Subject: RE: Model Date

Hi Phil,

Please see attached and below.

Company Name:Stomor Ltd
Trading Name:Stomor Ltd
Registered address: Suit 2,First Floor,Portmill House, Portmill Lane, Hitchin, Herts, SG5 1DJ
Trading / billing address: Suit 2,First Floor,Portmill House, Portmill Lane, Hitchin, Herts, SG5 1DJ
Company registration no: 06460779
Accounts payable name(s): Stomor
Telephone number(s): 01462 615433
Generic AP email address for invoice to be sent to: p.cullen@stomor.com
Alternative email address for key contact: j.taylor@stomor.com

I hope I have provided enough information?

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

Suite 2 | First Floor | Portmill House | Portmill Lane | Hitchin | Hertfordshire | SG5 1DJ
www.stomor.com

From: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Sent: Wednesday, June 9, 2021 11:26 AM
To: Paula Cullen <p.cullen@stomor.com>
Cc: Strategic Modelling <StrategicModelling@tfl.gov.uk>
Subject: Model Date [Filed 09 Jun 2021 13:15]

Hi Paula

I am getting some feedback from the teams now, so hopefully have the quote for you soon.

I should have asked you to fill in the attached – if you can do so now, that would be good. I have the specification, so you could just copy your original request email into that box. The rest is about caveats, model use and ownership etc.

For when we need to raise the invoice, we will need the following from you as well as the PO to cover the quote.

Company Name:
Trading Name:
Registered address:
Trading / billing address:
Company registration no:
Accounts payable name(s):
Telephone number(s):
Generic AP email address for invoice to be sent to:
Alternative email address for key contact:

Phil Hawkins
Public Transport Analysis
City Planning
Transport for London

From:	Dresner Melvyn (ST)
To:	Paula Cullen; Hawkins Phil
Cc:	Erin Zhang; Jonathan Mart; Simon Young; Michael Holloway; Jack O"Brien
Subject:	RE: Model Date [Filed 14 Jun 2021 12:28]
Date:	Monday, June 14, 2021 12:13:56 PM

Hi Paula,

My approach would be as follows:

For land uses that relatively small scale they can be excluded. Though assumptions should set out in the TA.

For commercial specifically, as already in the extant it can be excluded, unless there is a transport related change.

For the consented 1350 residential development, doesn't the car parking ratio change for some or all of this development with this application?

So the TA should assess the gross effect on the residential uplift.

For the consented residential, we should assess any marginal change either by looking at any net change from previous assumptions or indirectly, assuming mode shift effect treating consent trips as withing the background growth.

Or you may argue in the TA that you don't expect mode shift effect on the consented residential but expect a strong or stronger mode shift within the uplifted residential.

I trust this makes sense.

Regards
Melvyn

From: Paula Cullen <p.cullen@stomor.com>
Sent: 14 June 2021 10:08
To: Dresner Melvyn (ST) <Melvyn.Dresner@tfl.gov.uk>; Hawkins Phil <PhilHawkins@tfl.gov.uk>
Cc: Erin Zhang <EZhang@rsk.co.uk>; Jonathan Mart <JMart@rsk.co.uk>; Simon Young <s.young@stomor.com>; Michael Holloway <MHolloway@danielwatney.co.uk>; Jack O'Brien <jack@comerhomes.co.uk>
Subject: FW: Model Date

Good morning,

I hope you had a nice weekend in the sun!

Are you able to please provide an update on the below at all?

In addition to the consented 1,350 dwellings, we would also propose to exclude the commercial aspect from our assessment as this will also be included as part of the extant permission covered as part of the London

Growth.

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

stomor
CIVIL ENGINEERING CONSULTANTS

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From: Paula Cullen
Sent: Thursday, June 10, 2021 2:37 PM
To: Dresner Melvyn (ST) <Melvyn.Dresner@tfl.gov.uk>; Hawkins Phil <PhilHawkins@tfl.gov.uk>
Cc: Erin Zhang <EZhang@rsk.co.uk>; Jonathan Mart <JMart@rsk.co.uk>; Simon Young <s.young@stomor.com>; Michael Holloway <MHolloway@danielwatney.co.uk>
Subject: RE: Model Date

Hi Melvyn/Phil,

Please see attached revised development trip generation and assignment for both vehicles and also London Underground. We have amended this to account for the extant trips associated with the 1,350 dwellings in the approved scheme, as these will be included within the London growth.

For the Air Quality and Noise assessments the following scenarios need to be covered off:

2019 Base (for the Air Quality assessment)
2046 (for the Noise assessment)

For the 2019 data we propose to obtain a 2019- 2021 growth factor and reduce the 2021 base by this amount for the Noise assessment calculations

For the 2046 scenario required for the Noise assessment, can we assume the same growth as the 2041 data, or will we need separate 2046 data only for the Noise assessment?

Furthermore, the data we have obtained from TfL for the SRN A406 does not include any HGV information. Can you please advise how we should derive this, or is there any factors that TfL hold that we can apply to this link?

Please do give me a call if that's easier.

Kind regards

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From: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Sent: Thursday, June 10, 2021 1:03 PM
To: Paula Cullen <p.cullen@stomor.com>
Cc: Simon Young <s.young@stomor.com>; Dresner Melvyn (ST) <Melvyn.Dresner@tfl.gov.uk>
Subject: RE: Model Date [Filed 10 Jun 2021 13:27]

Hi Paula

I'm afraid that the information on planned homes and jobs increases is not included in the requested output. I think it may be something that needs to be agreed with Melvyn, but I would suggest that if the other development is planned and consented, it could be considered to be included in the London Plan growth included in the model already. i.e, you just need to add in your development trips. That would save you a lot of work and expense trying to decipher the model planning inputs.

We've quoted 3 days officer time to collate the data and I have already asked them to proceed – I would hope therefore you would have outputs next week.

We'll need a PO to cover the amount, and then I believe we invoice you (and that will contain payment details)

Cheers
Phil

From: Paula Cullen <p.cullen@stomor.com>
Sent: 10 June 2021 09:00
To: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Cc: Simon Young <s.young@stomor.com>

Subject: RE: Model Date

Hi Phil,

Thanks for clarifying. I presume all that info will be available as part of the model outputs we will receive?

Also, can I have TfL`s BACS details, as we will arrange payment for the data today?

Once this has been paid, do you know approx. how long it will take to receive the data?

Sorry more questions!

Kind regards

Paula Cullen
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Office: 01462 615433

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From: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Sent: Thursday, June 10, 2021 8:44 AM
To: Paula Cullen <p.cullen@stomor.com>
Subject: RE: Model Date

Hi Paula

You would need to delve into the planning assumptions in the demand model to determine that one. Basically though the model uses London Plan levels of jobs and homes growth across London distributed via borough SHLAA for homes and a GLA employment sites database.

Phil

From: Paula Cullen <p.cullen@stomor.com>
Sent: 09 June 2021 16:27
To: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Subject: RE: Model Date

Hi Phil,

Sorry I forgot to ask earlier, do you or does anyone in the modeling team know if the extant scheme is included within the model?

We have assumed that the extant permission for the 1,350 dwellings is already included within the background traffic related to the strategic model for the forecast years. As such, we will assess the net increase of the additional 1,150 dwellings as part of our development for highway and public transport impact.

I will have sign off from the client this evening regarding the modelling fee.

Kind regards

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Office: 01462 615433

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From: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Sent: Wednesday, June 9, 2021 3:16 PM
To: Paula Cullen <p.cullen@stomor.com>
Subject: RE: Model Date [Filed 09 Jun 2021 15:34]

Thanks Paula

I have the quotes from the teams, but please remember these will be taken from:

1. 2021 Reference Case
2. 2031 Reference Case
3. 2041 Reference Case

For this analysis -the fees will be

Highway – 3 officer days @ £874 per day = £2622

PT – 3 officer days @ £874 per day = £2622

Total = **£5244**

You will then need to add in your development manually and carry out the usual impact analysis.

Please can I ask you to amend the analysis request form to reflect the data will be taken from the above scenarios- 1, 2 and 3 – i.e. replace the below specification:

- *2021 Opening year baseline flows;*
- *2021 Opening year baseline flows + development;*
- *2021 Opening year baseline flows + development + committed developments;*
- *2031 Future year baseline;*
- *2031 Future year baseline + development;*
- *2031 Future year baseline + development + committed developments.*
- *2041 Future year baseline;*
- *2041 Future year baseline + development;*
- *2041 Future year baseline + development + committed developments.*

Thanks

Phil

From: Paula Cullen <p.cullen@stomor.com>
Sent: 09 June 2021 13:46
To: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Subject: RE: Model Date

Hi Phil,

Please see attached and below.

Company Name:Stomor Ltd
Trading Name:Stomor Ltd
Registered address: Suit 2,First Floor,Portmill House, Portmill Lane, Hitchin, Herts, SG5 1DJ
Trading / billing address: Suit 2,First Floor,Portmill House, Portmill Lane, Hitchin, Herts, SG5 1DJ
Company registration no: 06460779
Accounts payable name(s): Stomor
Telephone number(s): 01462 615433

Generic AP email address for invoice to be sent to: p.cullen@stomor.com
Alternative email address for key contact: j.taylor@stomor.com

I hope I have provided enough information?

Kind regards

Paula Cullen
Transport Planning Consultant
p.cullen@stomor.com
Direct line: 01462 342141
Office: 01462 615433

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www.stomor.com

From: Hawkins Phil <PhilHawkins@tfl.gov.uk>
Sent: Wednesday, June 9, 2021 11:26 AM
To: Paula Cullen <p.cullen@stomor.com>
Cc: Strategic Modelling <StrategicModelling@tfl.gov.uk>
Subject: Model Date [Filed 09 Jun 2021 13:15]

Hi Paula

I am getting some feedback from the teams now, so hopefully have the quote for you soon.

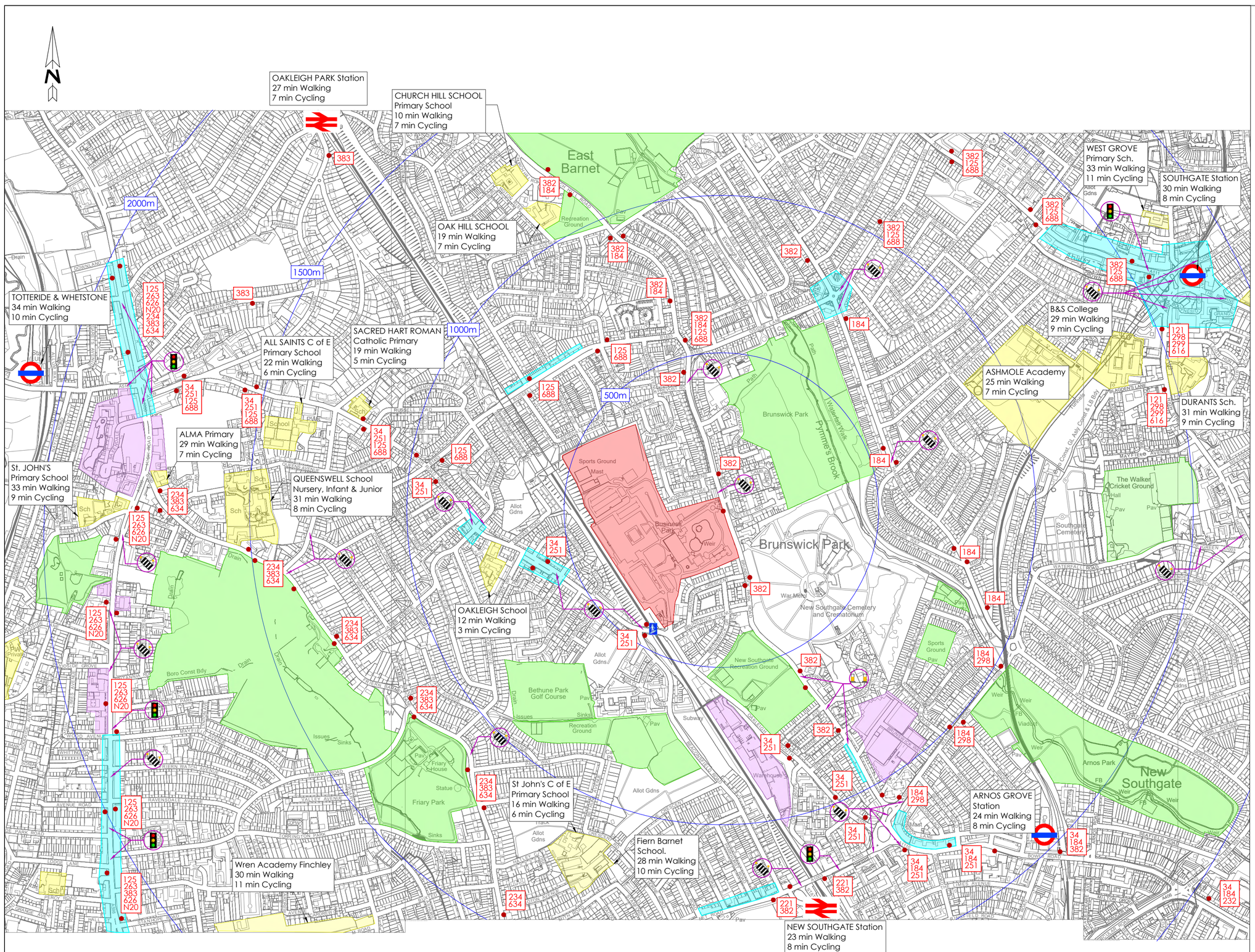
I should have asked you to fill in the attached – if you can do so now, that would be good. I have the specification, so you could just copy your original request email into that box. The rest is about caveats, model use and ownership etc.

For when we need to raise the invoice, we will need the following from you as well as the PO to cover the quote.

Company Name:
Trading Name:
Registered address:
Trading / billing address:
Company registration no:
Accounts payable name(s):
Telephone number(s):
Generic AP email address for invoice to be sent to:

Alternative email address for key contact:

Phil Hawkins
Public Transport Analysis
City Planning
Transport for London



KEY

- SITE
- SCHOOLS/COLLEGES
- EMPLOYMENT AREAS
- RECREATIONAL FACILITIES
- SHOPS/RETAIL OUTLETS
- BUS STOP
- BUS SERVICES
- UNDERGROUND STATION
- RAILWAY STATION
- ZEBRA CROSSING
- UNCONTROLLED CROSSING
- SIGNALISED CROSSING
- ELEVATED CROSSING

ALL DISTANCES AS MEASURED FROM THE CENTRE OF THE SITE

Rev	Description	Date	Drawn	Checked	Apvd.

Project

New Southgate, Royal Brunswick Park
London

Drawing Description

Accessibility Plan

Project Number	Drawing Number
ST-3013	02

Scale	Date	Drawn	Checked	Approved
NTS@A2	22.03.21	LGM	PLC	XXX

Client

Architect

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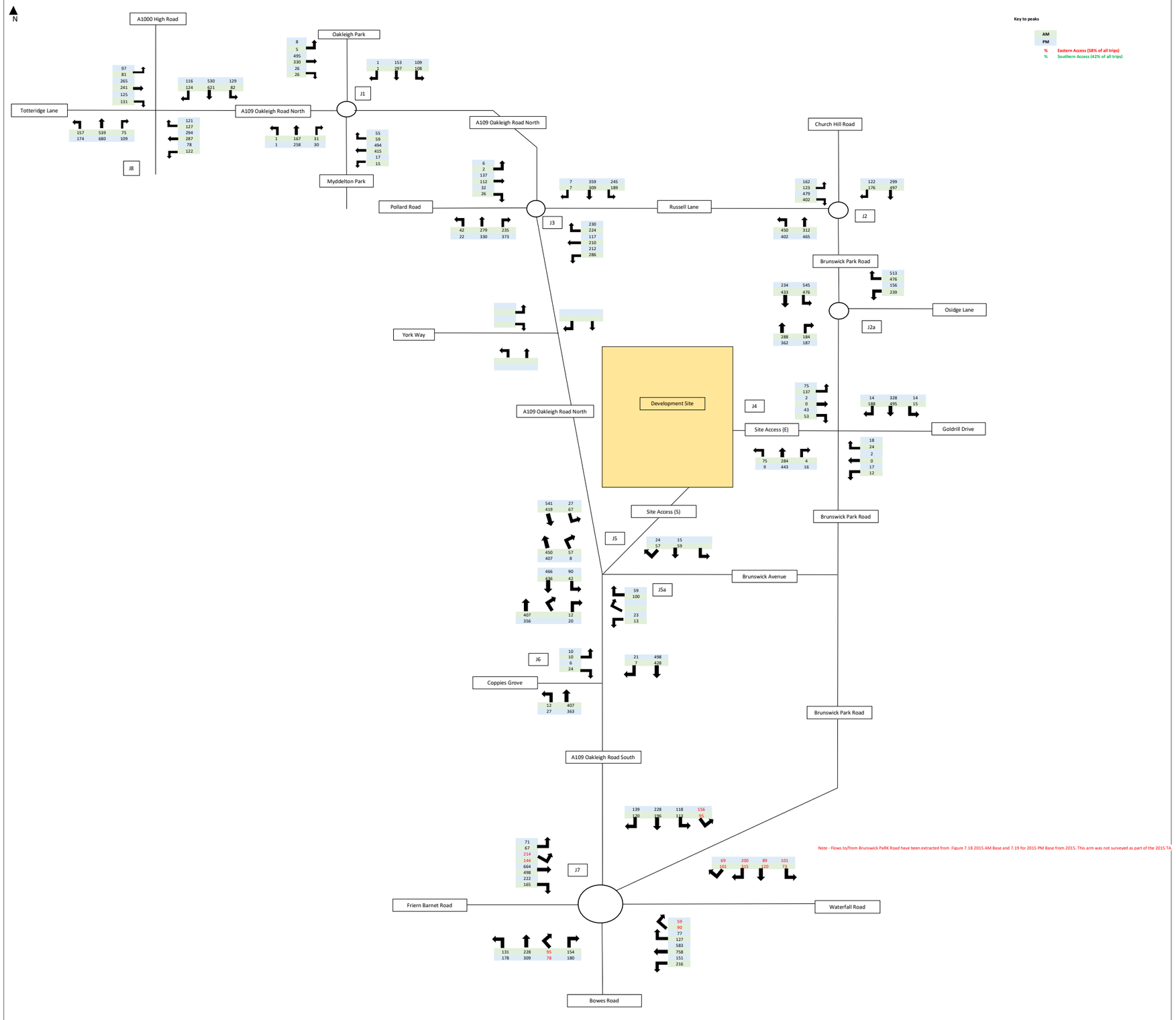
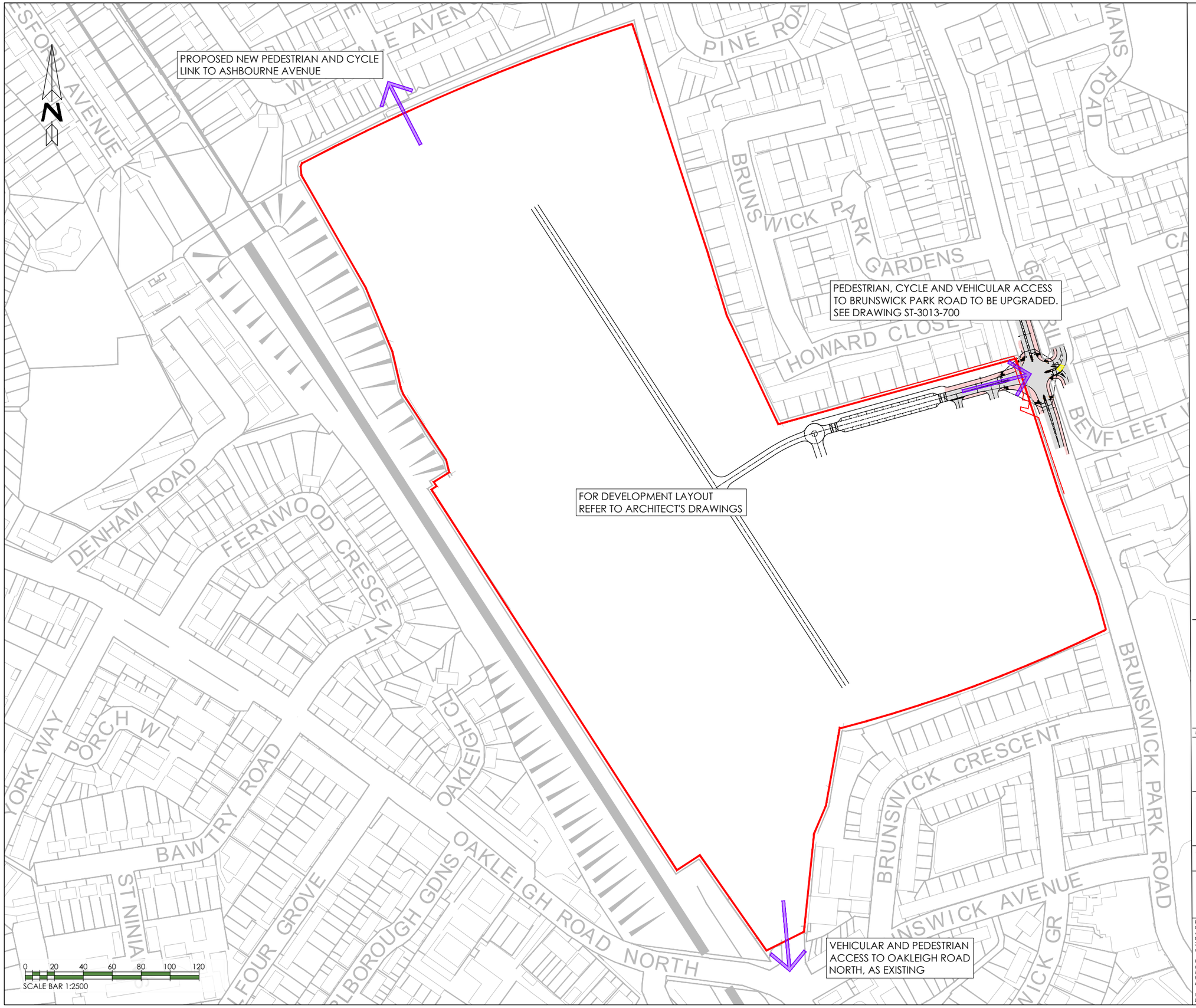
2021	Observed Traffic Flows





Rev	Description	Date	Drawn	Checked	Apvd.

Project

New Southgate, Royal Brunswick Park
London

Drawing Description

Access Strategy

Drawing Number	Scale	Date	Drawn	Checked	Approved
ST-3013-701	1:2500@A3	30.06.21	NJM	SB	TW

Client

Architect

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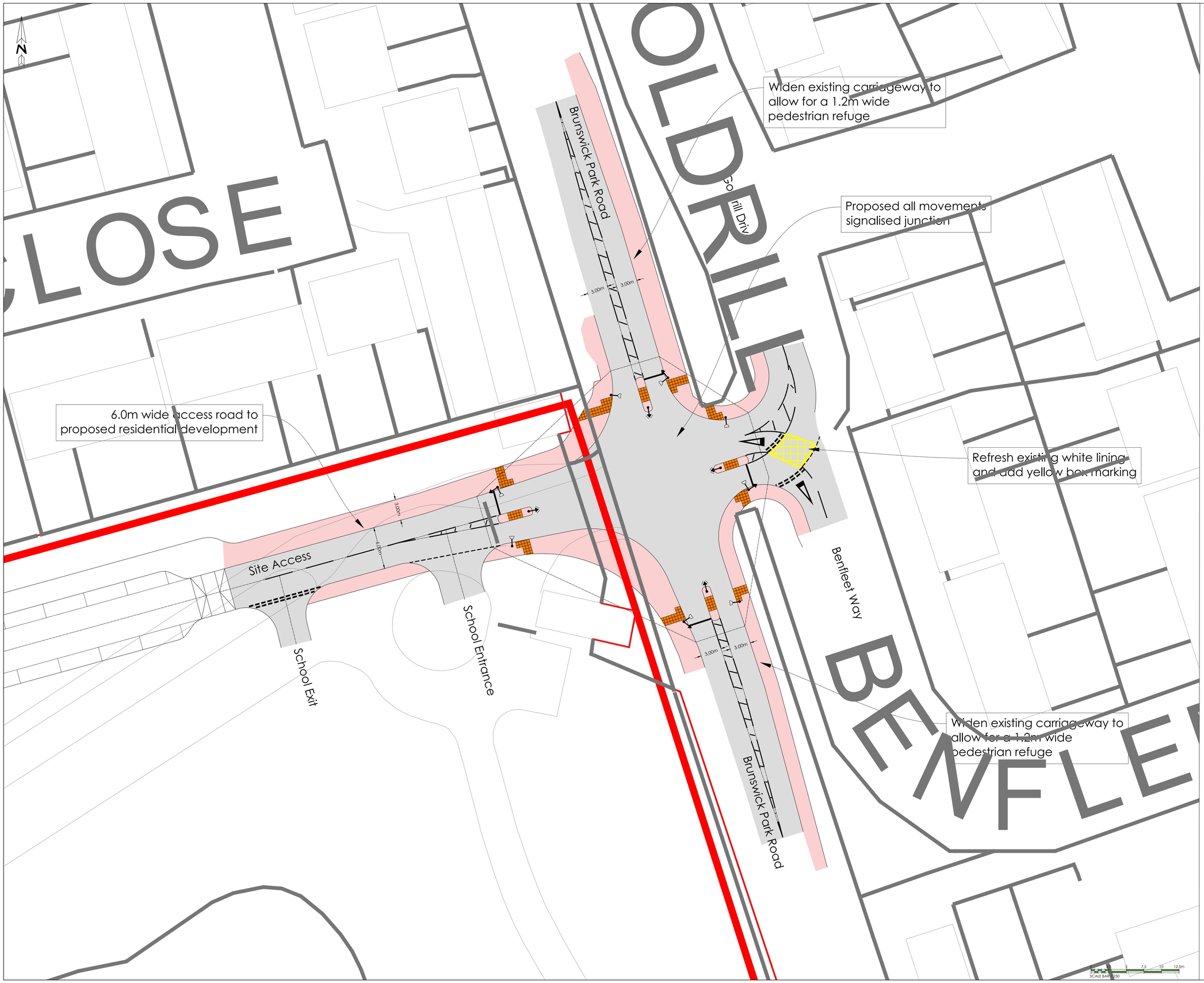
www.stomor.com | 01462 615433 | info@stomor.com



KEY

- SITE BOUNDARY
- EXTENT OF HIGHWAY MAINTAINABLE LAND
- PROPOSED FOOTWAY
- PROPOSED VEHICULAR ACCESS
- VEHICULAR VISION SPLAY
- PEDESTRIAN/CYCLE VISION SPLAY
- PROPOSED TACTILE PAVING

THIS IS AN INDICATIVE MEANS OF ACCESS PLAN AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.

Rev	Description	Date	Drawn	Checked	Apvd.

Project

New Southgate, Royal Brunswick Park
London

Drawing Description

Means of Access
Brunswick Park Road

Drawing Number	Scale	Date	Drawn	Checked	Approved
ST-3013-700	1:250@A1	08.06.21	TJW	SY	NJM

Client

Architect

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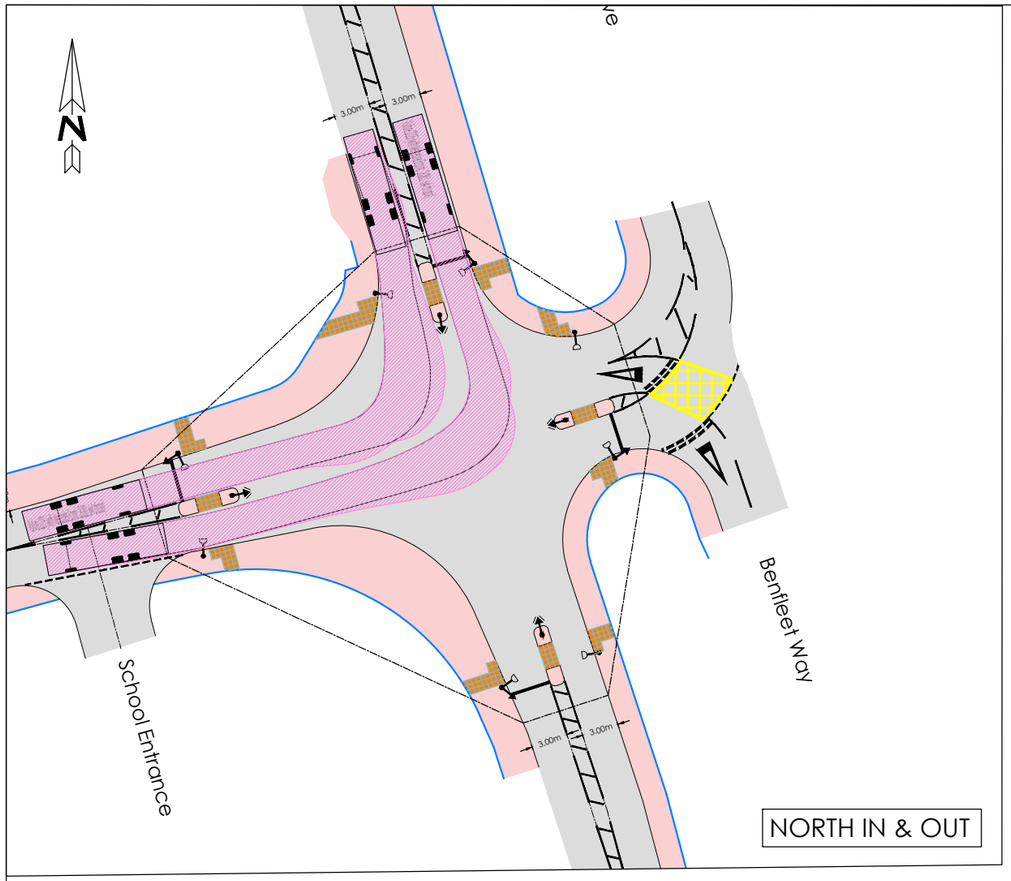
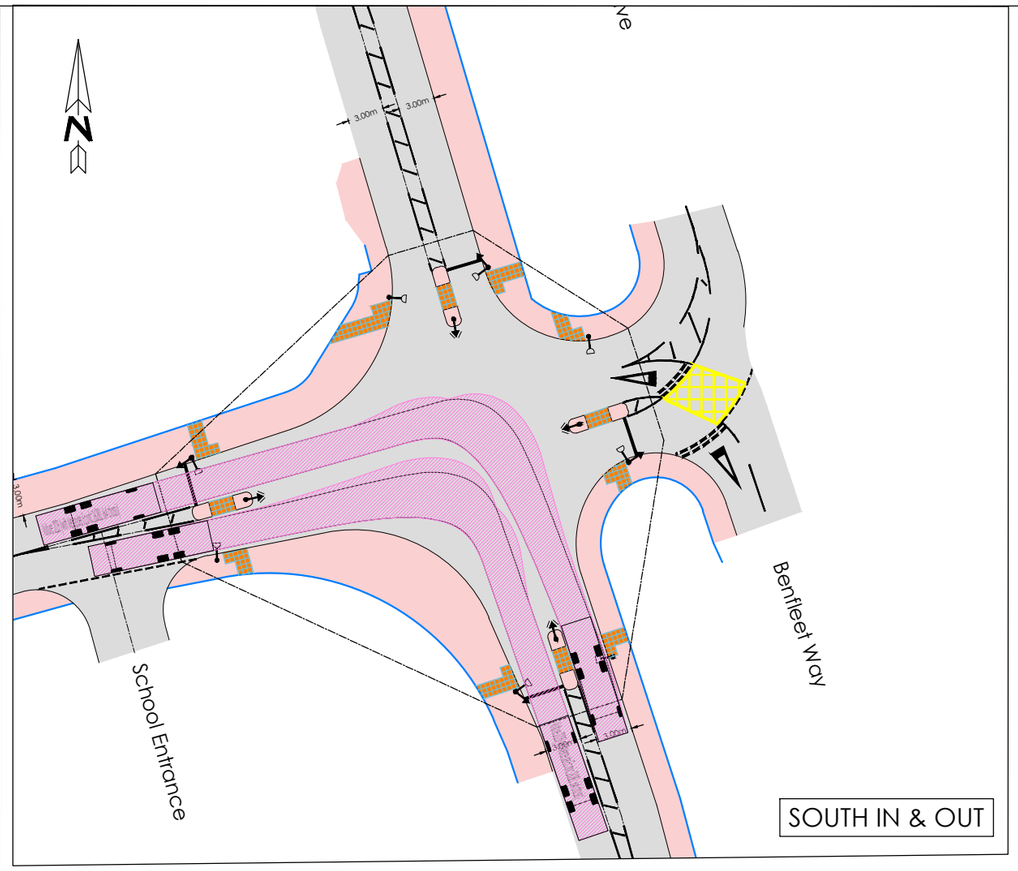
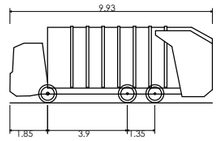
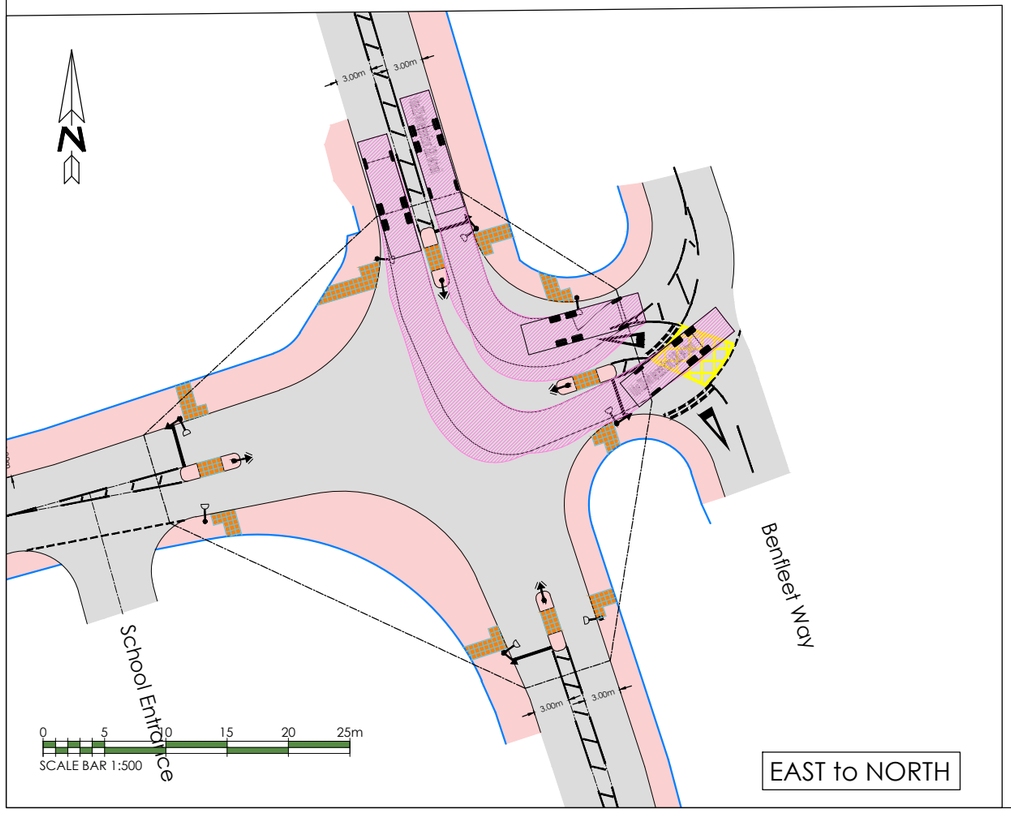


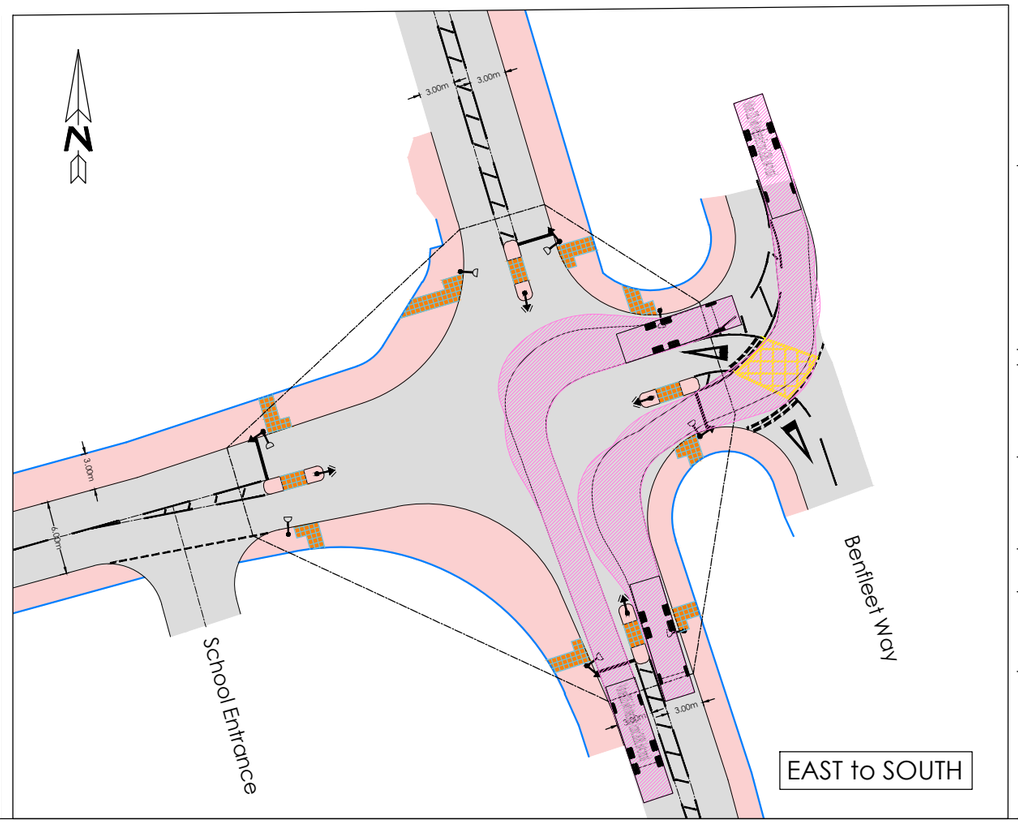




Vulture 2225 (with Mercedes Econic 2628LL 6x4 chassis)

Overall Length	9.930m
Overall Width	2.490m
Overall Body Height	3.749m
Min Body Ground Clearance	0.302m
Track Width	2.490m
Lock to lock time	4.00s
Wall to Wall Turning Radius	9.100m





Rev	Description	Date	Drawn	Checked	Apvd.

Project

New Southgate, Royal Brunswick Park
London

Drawing Description

Swept Path Analysis
Refuse Vehicle

Drawing Number	Scale	Date	Drawn	Checked	Approved
ST-3013-10	1:500@A3	10.06.21	LGM	PLC	TJW

Client

Architect

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Suite 2, First Floor, Portmill House,
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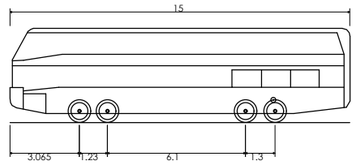
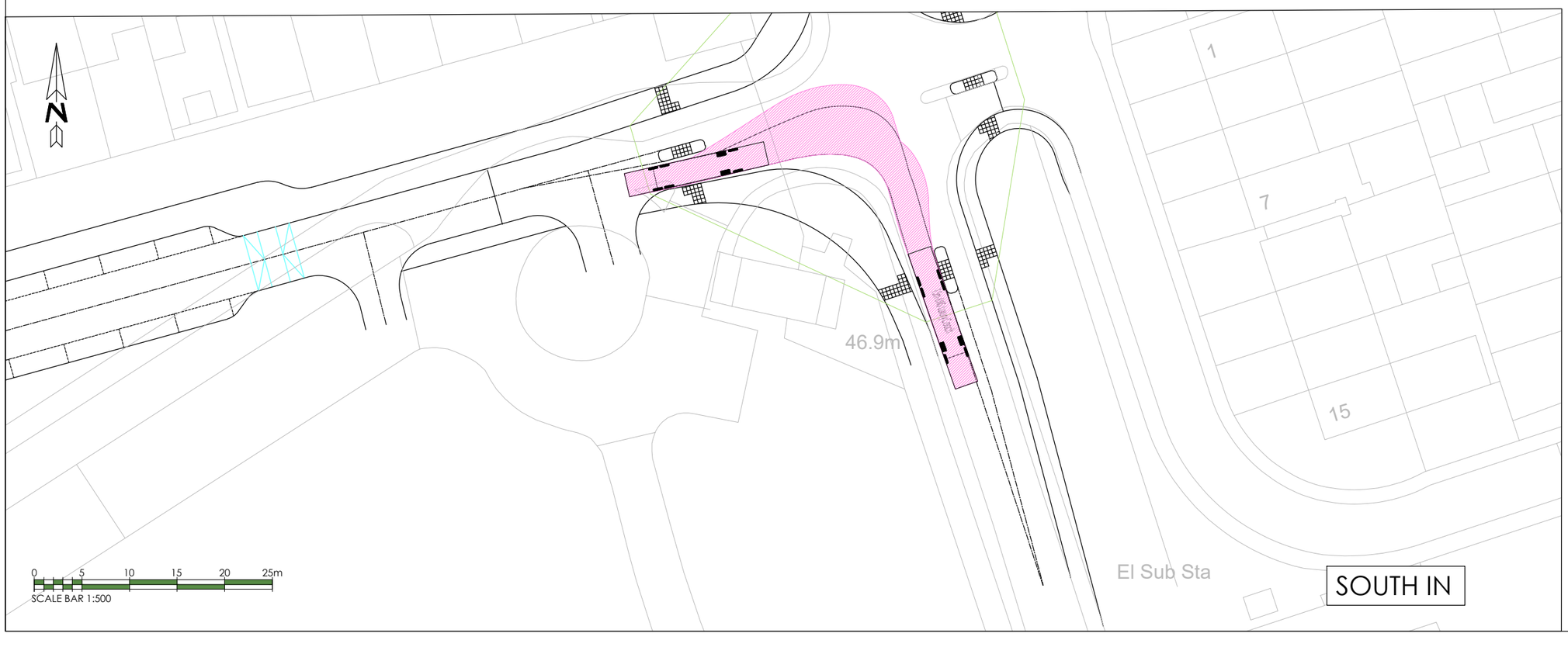


15m 6WS Luxury Coach

Overall Length	15.000m
Overall Width	2.500m
Overall Body Height	4.157m
Min Body Ground Clearance	0.397m
Track Width	2.500m
Lock to lock time	5.00s
Wall to Wall Turning Radius	12.490m



Rev	Description	Date	Drawn	Checked	Apvd.

Project

New Southgate, Royal Brunswick Park
London

Drawing Description

Swept Path Analysis
15m Coach

Drawing Number	Scale	Date	Drawn	Checked	Approved
ST-3013-07	1:500@A3	14.06.21	LGM	TJW	NJM

Client

COMER HOMES GROUP

Architect

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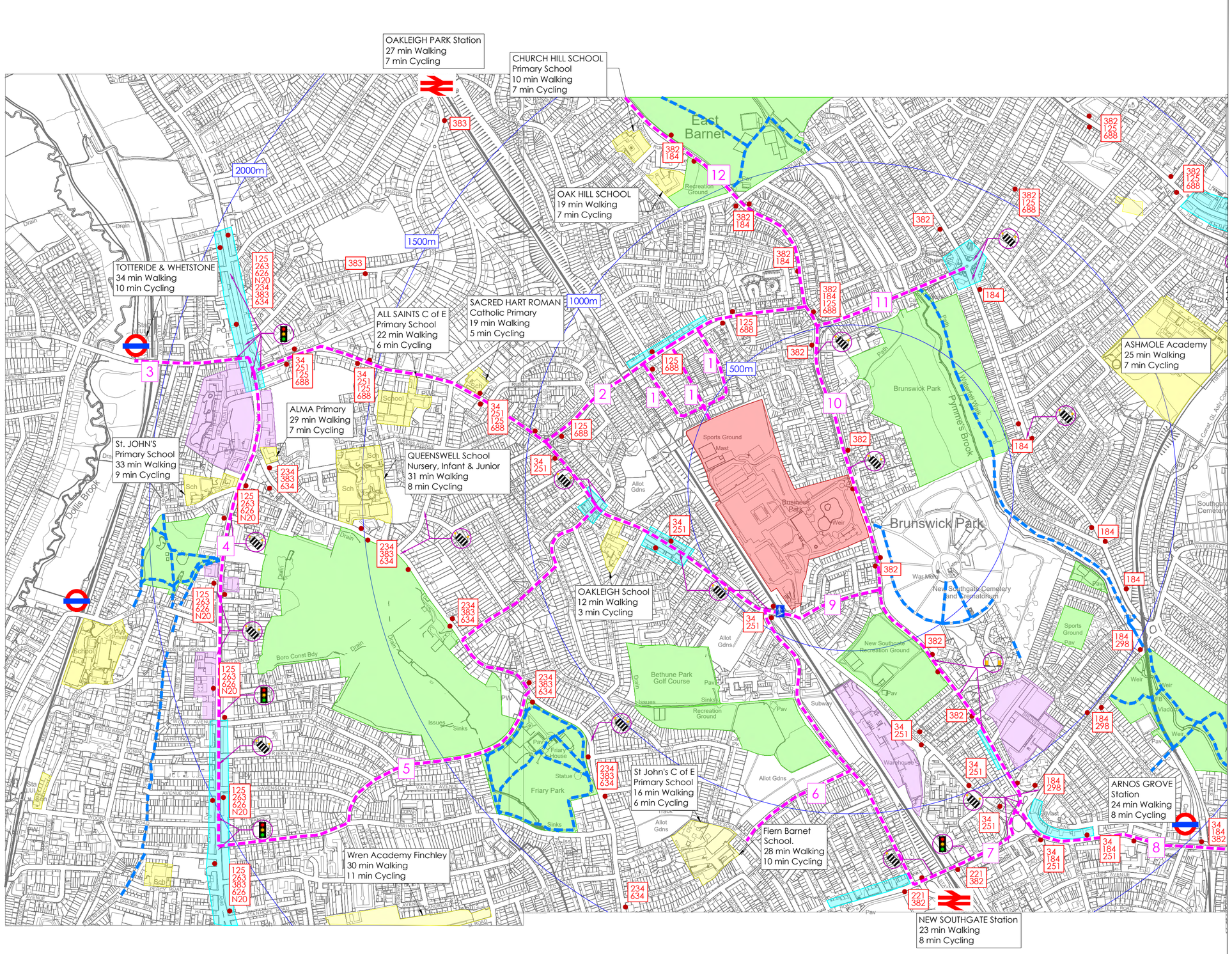

KEY

- SITE
- SCHOOLS/COLLEGES
- EMPLOYMENT AREAS
- RECREATIONAL FACILITIES
- SHOPS/RETAIL OUTLETS
- BUS STOP
- BUS SERVICES
- UNDERGROUND STATION
- RAILWAY STATION
- ZEBRA CROSSING
- UNCONTROLLED CROSSING
- SIGNALISED CROSSING
- ELEVATED CROSSING
- ROUTES FOR ASSESSMENT
- CYCLE ROUTES

ALL DISTANCES AS MEASURED FROM THE CENTRE OF THE SITE

Rev	Description	Date	Drawn	Checked	Apvd.

Project

New Southgate, Royal Brunswick Park
London

Drawing Description

Active Travel Zone Routes

Project Number	Drawing Number
ST-3013	06

Scale	Date	Drawn	Checked	Approved
NTS@A2	01.06.21	LGM	PLC	-

Client

Architect

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Route 1 – Ashbourne Avenue

Route 1 – Wierdale Avenue

Route 2 – Russell Lane (east towards Church Hill Road/ Brunswick Park Road)

Route 2 – Russell Lane

Route 2 – Russell Lane (west towards A109 Oakleigh Road North)

Route 3 – A109 Oakleigh Road North

Route 3 – A109 Oakleigh Road North/A1000 High Road

Route 3 – Totteridge Lane (Totteridge and Whetstone London Underground

Route 4 – A1000 High Road

Route 4 – A1000 High Road (local centre)

Route 5 – A109 Oakleigh Road

Route 5 – Manor Drive

Route 5 – B550 Friern Barnet Lane

Route 5 – B550 Friary Road

Route 5 – Torrington Park

Route 6 – Beaconsfield Road

Route 7 – A109 Oakleigh Road South

Route 7 – A109 Oakleigh Road South (approach to Betstyle Circus)

Route 7 – A1003 Friern Barnet Road (approach to Betstyle Circus)

Route 7 – Station Road

Route 7 – Station Road and New Southgate Rail Station

Route 8 – A110 Bowes Road (approach to Betsyle Circus)

Route 8 – A110 Bowes Road and Arnos Grove Underground Station

Route 9 – Brunswick Avenue

Route 10 – Brunswick Park Road (south of Eastern Site Access)

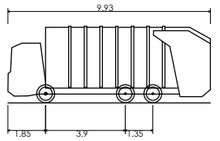
Route 10 – Brunswick Park Road (north of Eastern Site Access)

Route 10 – Brunswick Park Road (south of Osidge Lane)

Route 11 – Osidge Lane

Route 12 – Church Hill Road

Route 12 – Church Hill Road (adjacent to Oak Hill Park)



Vulture 2225 (with Mercedes Econic 2628LL 6x4 chassis)

Overall Length	9.930m
Overall Width	2.490m
Overall Body Height	3.749m
Min Body Ground Clearance	0.302m
Track Width	2.490m
Lock to lock time	4.00s
Wall to Wall Turning Radius	9.100m

Rev	Description	Date	Drawn	Checked	Apvd.

Project

New Southgate, Royal Brunswick Park
London

Drawing Description

Internal Swept Path Analysis
Refuse Vehicle

Drawing Number	Scale	Date	Drawn	Checked	Approved
ST-3013-12	1:2000@A3	10.06.21	LGM	PLC	SJB

Client

Architect

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Filtering Summary

Land Use	02/A	EMPLOYMENT/OFFICE
Selected Trip Rate Calculation Parameter Range	1000-10000 sqm GFA	
Actual Trip Rate Calculation Parameter Range	2255-7049 sqm GFA	
Date Range	Minimum: 01/01/10	Maximum: 05/11/19
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday	1
	Tuesday	1
	Wednesday	1
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	1
	Neighbourhood Centre (PPS6 Local Centre)	2
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	25,001 to 50,000	1
	100,001 or More	2
Population <5 Mile ranges selected	500,001 or More	3
Car Ownership <5 Mile ranges selected	0.5 or Less	1
	0.6 to 1.0	2
PTAL Rating	5 Very Good	2
	6b (High) Excellent	1
Filter by Site Operations Breakdown	All Surveys Included	

Calculation Reference: AUDIT-700101-210615-0620

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	BT	BRENT	1 days
	KN	KENSINGTON AND CHELSEA	1 days
	TH	TOWER HAMLETS	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	2255 to 7049 (units: sqm)
Range Selected by User:	1000 to 10000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by:	Monday-Friday 0700-1900
Include days where PT not known:	Yes
Range:	200 to 6836

Date Range: 01/01/10 to 05/11/19

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

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
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:

Built-Up Zone	2
High Street	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:

Not Known	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®.

Filter by Site Operations Breakdown:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 500m Range:
All Surveys Included

Population within 1 mile:

25,001 to 50,000	1 days
100,001 or More	2 days

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

Population within 5 miles:

500,001 or More	3 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	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:

Yes	1 days
No	2 days

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

PTAL Rating:

5 Very Good	2 days
6b (High) Excellent	1 days

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

LIST OF SITES relevant to selection parameters

Site(1):	BT-02-A-02	Gross floor area:	4750 sqm
Development Name:	OFFICE		
Location:	WEMBLEY		
Postcode:	HA9 8AD	No of Employees:	450
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	22/06/10
Sub-Location Type:	Built-Up Zone	Survey Day:	Tuesday
PTAL:	5 Very Good	Parking Spaces:	43
Site(2):	KN-02-A-01	Gross floor area:	2255 sqm
Development Name:	FRUIT DRINKS COMPANY		
Location:	KENSAL GREEN		
Postcode:	W10 5BU	No of Employees:	300
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	17/06/19
Sub-Location Type:	Built-Up Zone	Survey Day:	Monday
PTAL:	5 Very Good	Parking Spaces:	15
Site(3):	TH-02-A-01	Gross floor area:	7049 sqm
Development Name:	OFFICE SPACE FOR RENT		
Location:	BETHNAL GREEN		
Postcode:	E2 9DA	No of Employees:	0
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	06/03/19
Sub-Location Type:	High Street	Survey Day:	Wednesday
PTAL:	6b (High) Excellent	Parking Spaces:	

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
TW-02-A-08	Against TRICS Good Practice, removed as outside Greater London
WY-02-A-03	Against TRICS Good Practice, removed as outside Greater London

Trip Rates for Key Periods		Trips per 100 sqm GFA	
Period	Inbound	Outbound	Total
0800-0900	0.370	0.072	0.442
1700-1800	0.099	0.321	0.420

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	4685	0.036	3	4685	0.007	3	4685	0.043
07:30 - 08:00	3	4685	0.157	3	4685	0.014	3	4685	0.171
08:00 - 08:30	3	4685	0.206	3	4685	0.036	3	4685	0.242
08:30 - 09:00	3	4685	0.164	3	4685	0.036	3	4685	0.200
09:00 - 09:30	3	4685	0.178	3	4685	0.071	3	4685	0.249
09:30 - 10:00	3	4685	0.185	3	4685	0.071	3	4685	0.256
10:00 - 10:30	3	4685	0.192	3	4685	0.071	3	4685	0.263
10:30 - 11:00	3	4685	0.093	3	4685	0.078	3	4685	0.171
11:00 - 11:30	3	4685	0.100	3	4685	0.128	3	4685	0.228
11:30 - 12:00	3	4685	0.085	3	4685	0.050	3	4685	0.135
12:00 - 12:30	3	4685	0.085	3	4685	0.114	3	4685	0.199
12:30 - 13:00	3	4685	0.121	3	4685	0.128	3	4685	0.249
13:00 - 13:30	3	4685	0.050	3	4685	0.078	3	4685	0.128
13:30 - 14:00	3	4685	0.064	3	4685	0.057	3	4685	0.121
14:00 - 14:30	3	4685	0.085	3	4685	0.078	3	4685	0.163
14:30 - 15:00	3	4685	0.071	3	4685	0.050	3	4685	0.121
15:00 - 15:30	3	4685	0.057	3	4685	0.085	3	4685	0.142
15:30 - 16:00	3	4685	0.078	3	4685	0.064	3	4685	0.142
16:00 - 16:30	3	4685	0.050	3	4685	0.178	3	4685	0.228
16:30 - 17:00	3	4685	0.057	3	4685	0.157	3	4685	0.214
17:00 - 17:30	3	4685	0.071	3	4685	0.221	3	4685	0.292
17:30 - 18:00	3	4685	0.028	3	4685	0.100	3	4685	0.128
18:00 - 18:30	3	4685	0.028	3	4685	0.135	3	4685	0.163
18:30 - 19:00	3	4685	0.000	3	4685	0.057	3	4685	0.057
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.241			2.064			4.305

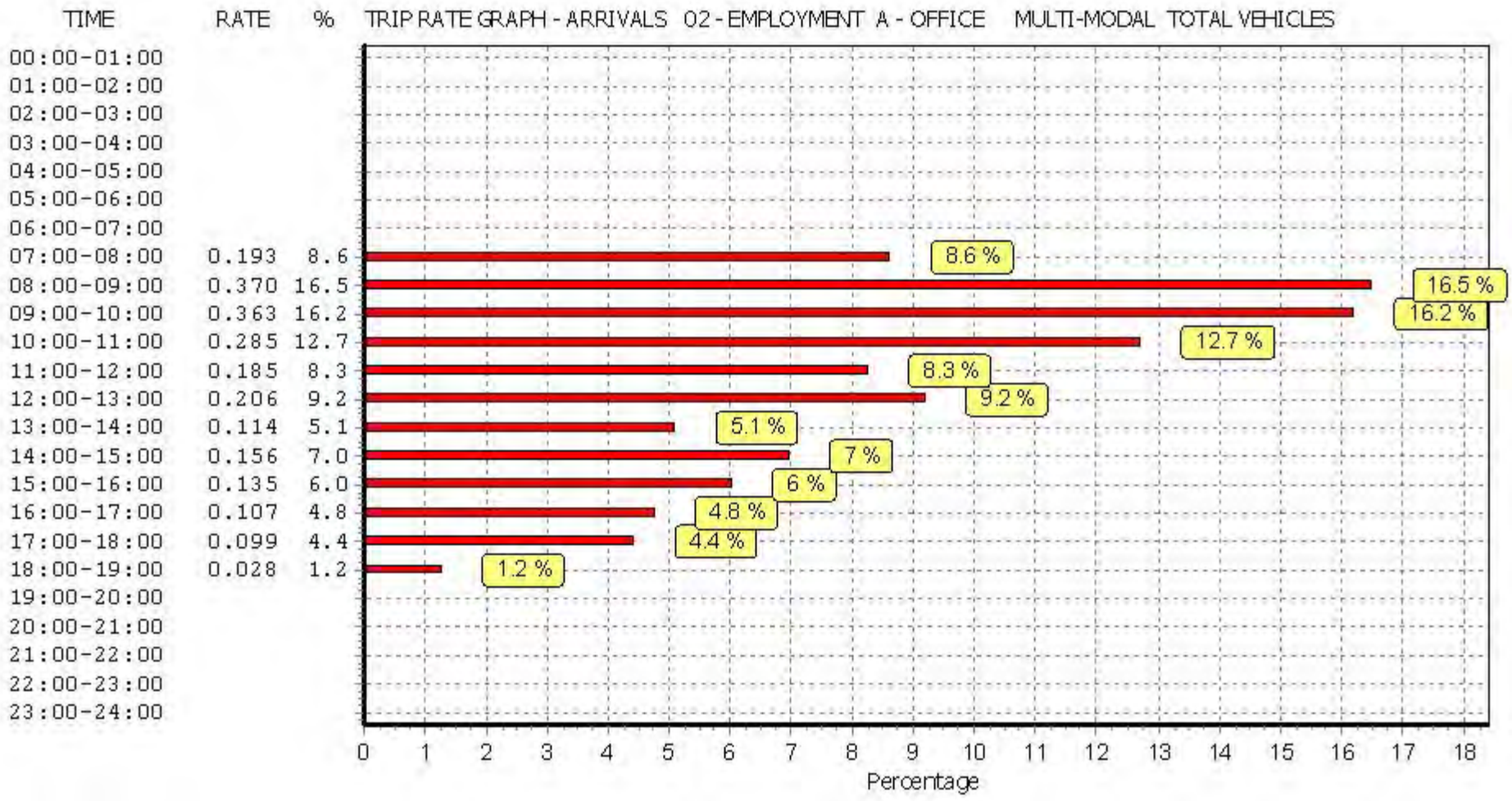
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are 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:	2255 - 7049 (units: sqm)
Survey date date range:	01/01/10 - 05/11/19
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	2

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



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

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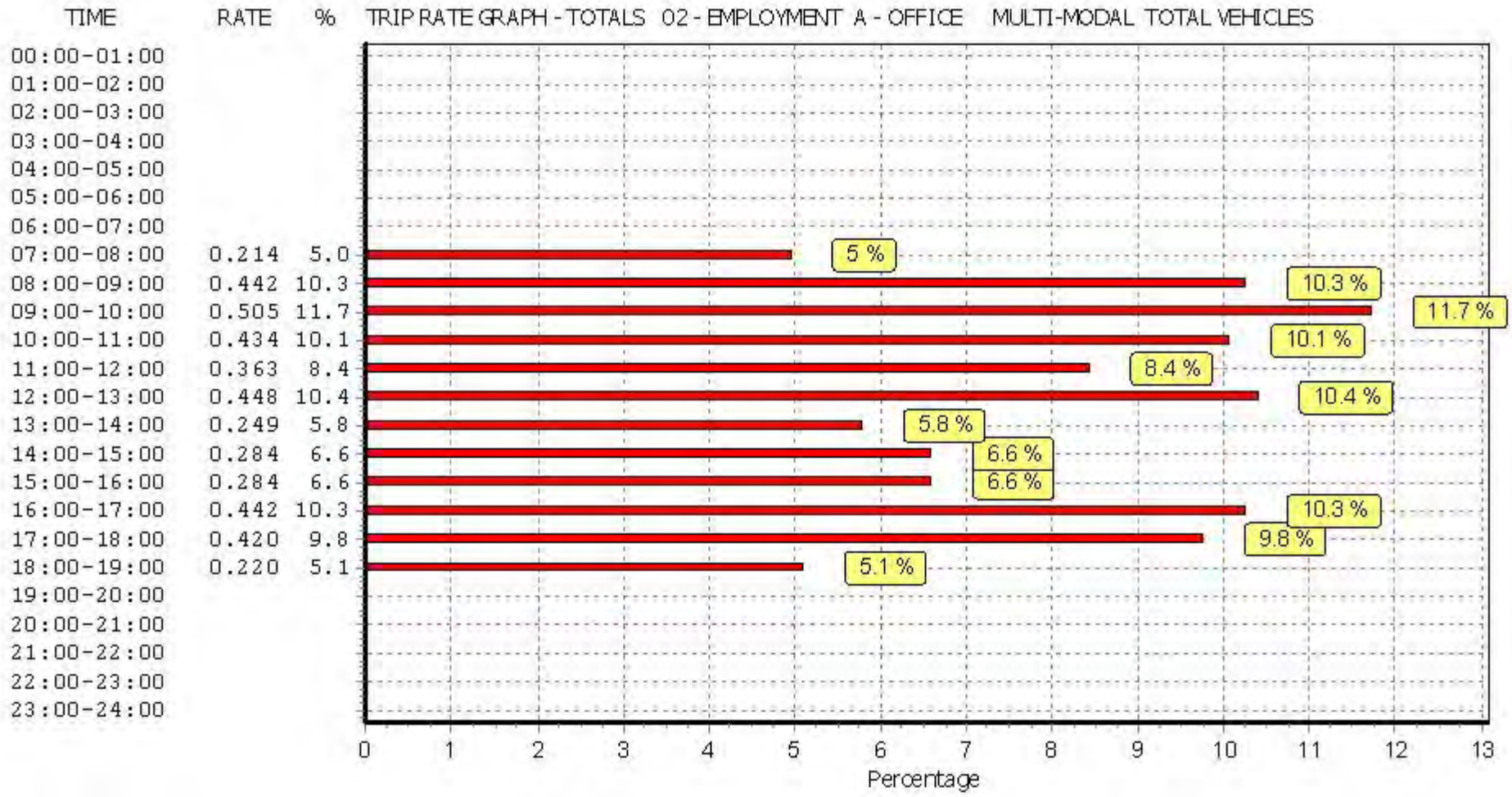

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TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
07:30 - 08:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
08:00 - 08:30	3	4685	0.007	3	4685	0.007	3	4685	0.014
08:30 - 09:00	3	4685	0.007	3	4685	0.007	3	4685	0.014
09:00 - 09:30	3	4685	0.007	3	4685	0.007	3	4685	0.014
09:30 - 10:00	3	4685	0.007	3	4685	0.007	3	4685	0.014
10:00 - 10:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
10:30 - 11:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
11:00 - 11:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
11:30 - 12:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
12:00 - 12:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
12:30 - 13:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
13:00 - 13:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
13:30 - 14:00	3	4685	0.007	3	4685	0.007	3	4685	0.014
14:00 - 14:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
14:30 - 15:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
15:00 - 15:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
15:30 - 16:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
16:00 - 16:30	3	4685	0.007	3	4685	0.007	3	4685	0.014
16:30 - 17:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
17:00 - 17:30	3	4685	0.007	3	4685	0.007	3	4685	0.014
17:30 - 18:00	3	4685	0.007	3	4685	0.007	3	4685	0.014
18:00 - 18:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
18:30 - 19:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.056			0.056			0.112

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

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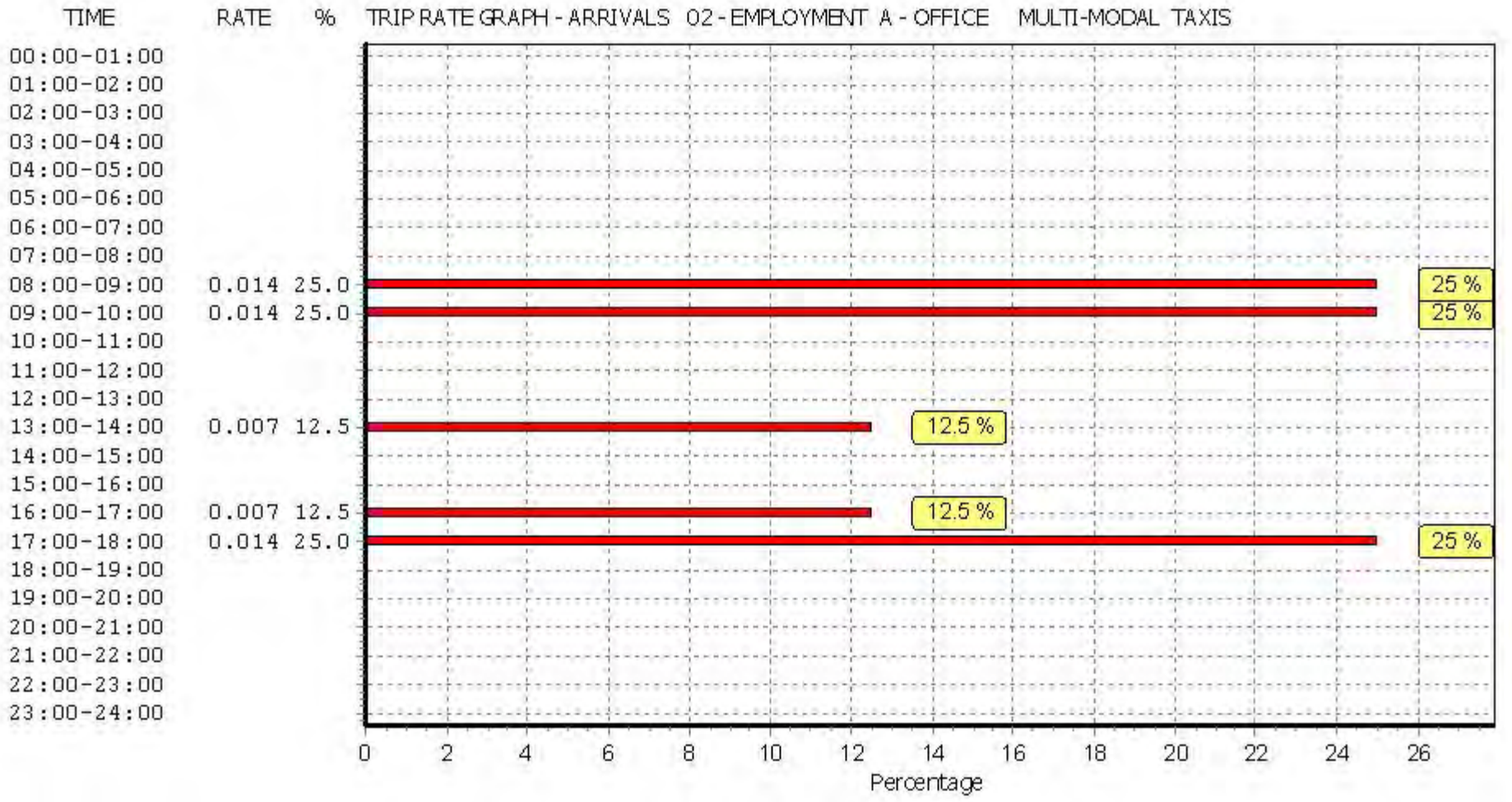
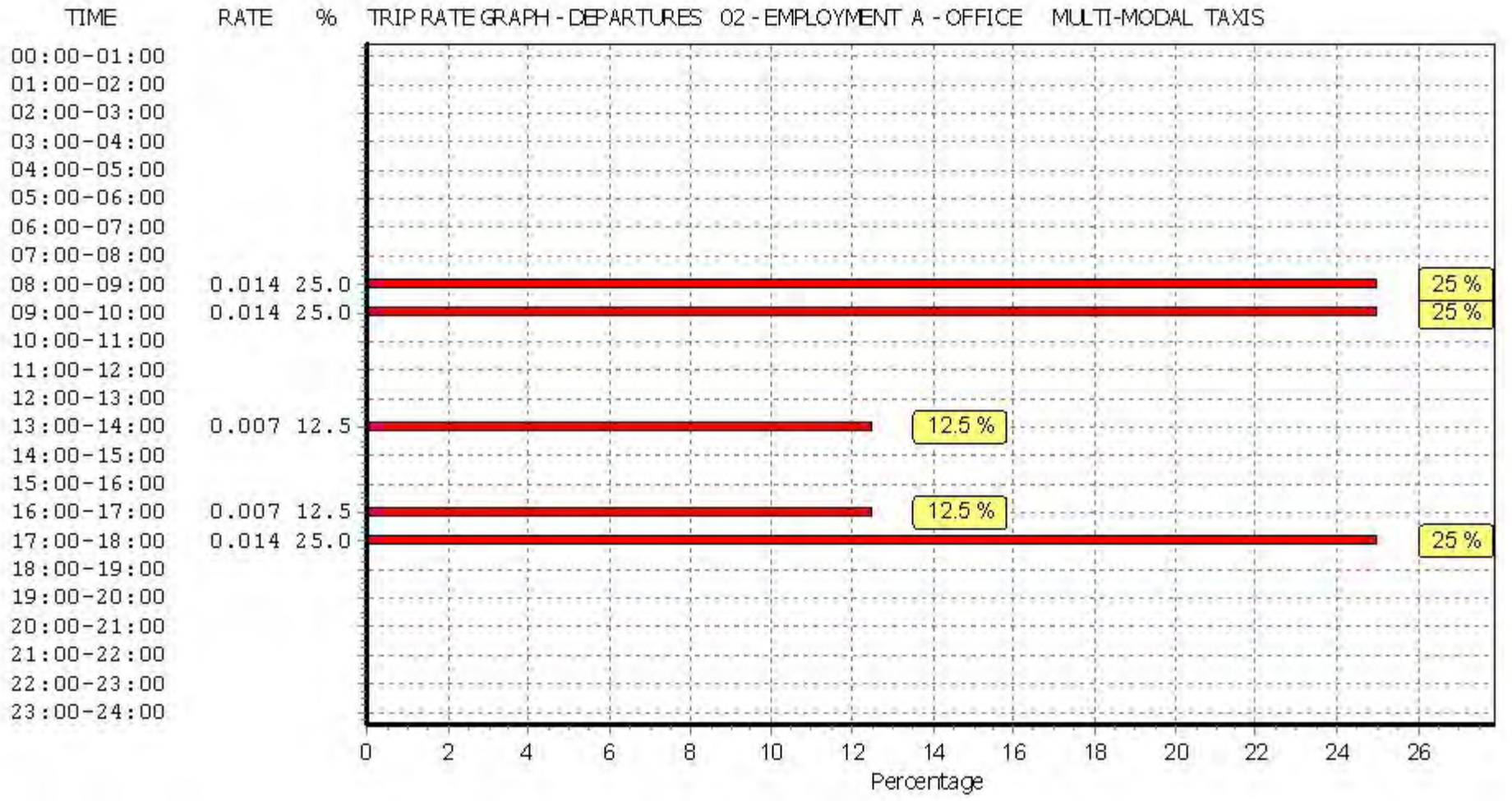


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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



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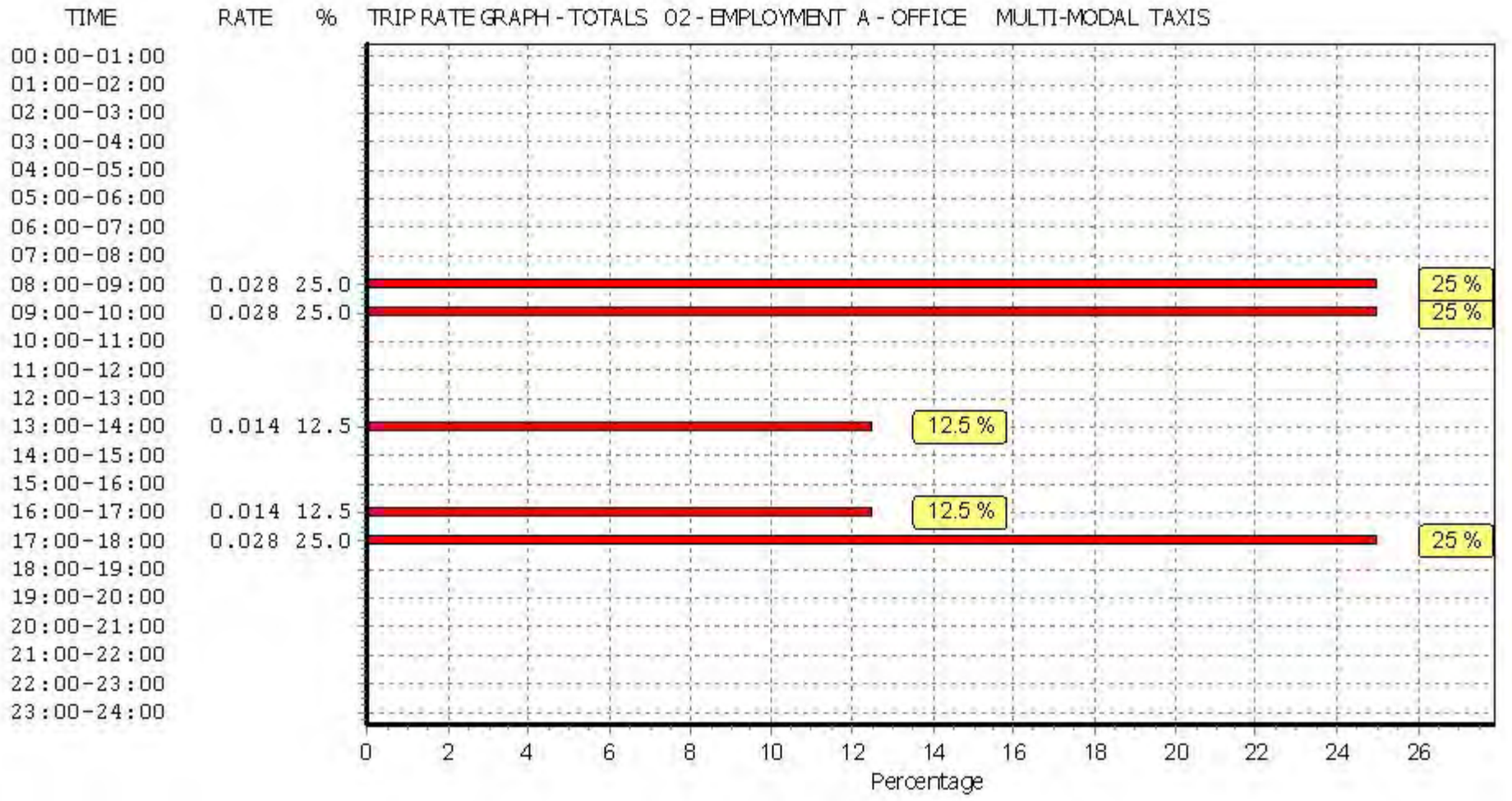

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TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
07:30 - 08:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
08:00 - 08:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
08:30 - 09:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
09:00 - 09:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
09:30 - 10:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
10:00 - 10:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
10:30 - 11:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
11:00 - 11:30	3	4685	0.007	3	4685	0.000	3	4685	0.007
11:30 - 12:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
12:00 - 12:30	3	4685	0.000	3	4685	0.007	3	4685	0.007
12:30 - 13:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
13:00 - 13:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
13:30 - 14:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
14:00 - 14:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
14:30 - 15:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
15:00 - 15:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
15:30 - 16:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
16:00 - 16:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
16:30 - 17:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
17:00 - 17:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
17:30 - 18:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
18:00 - 18:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
18:30 - 19:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.007			0.007			0.014

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

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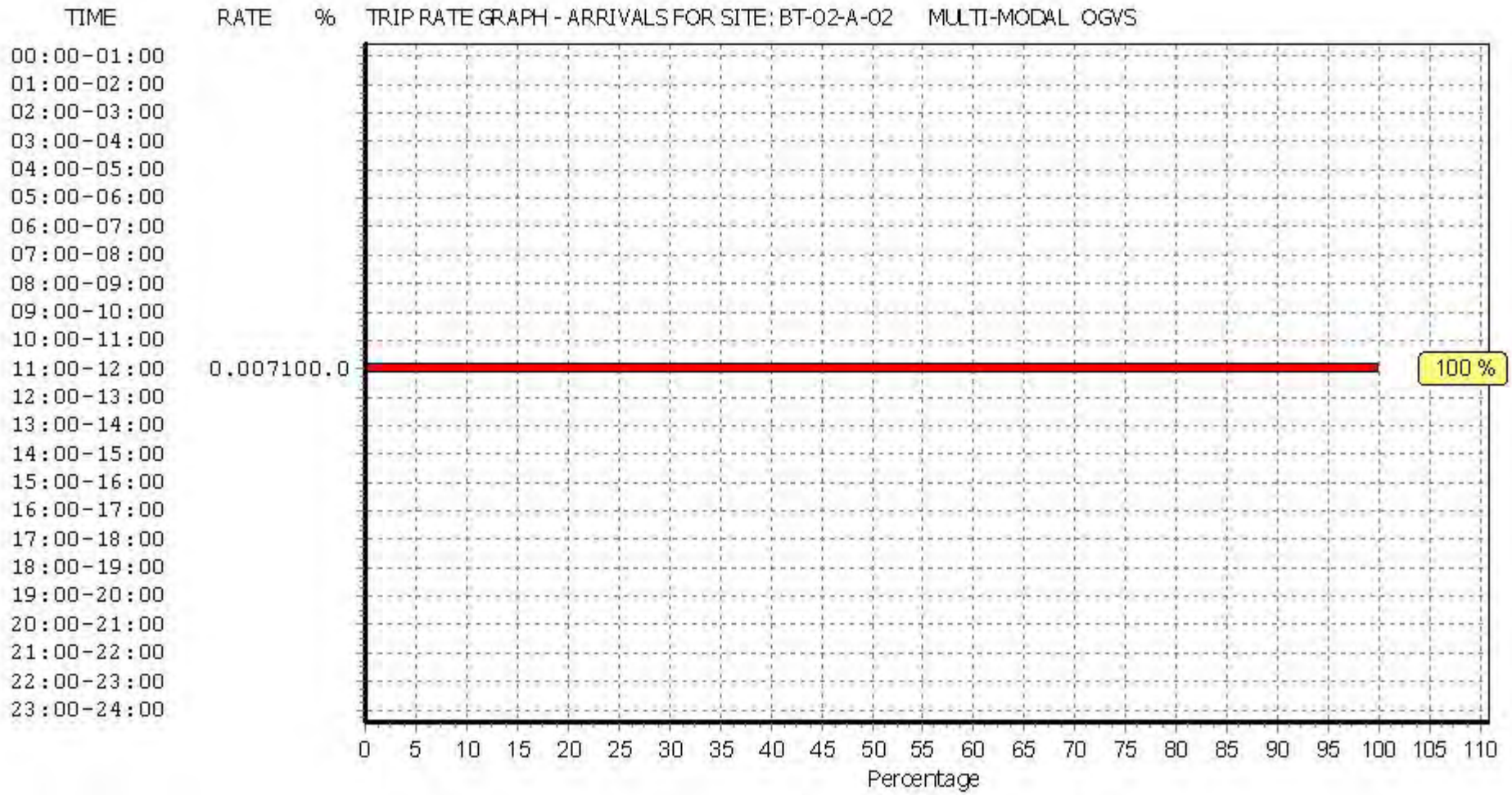

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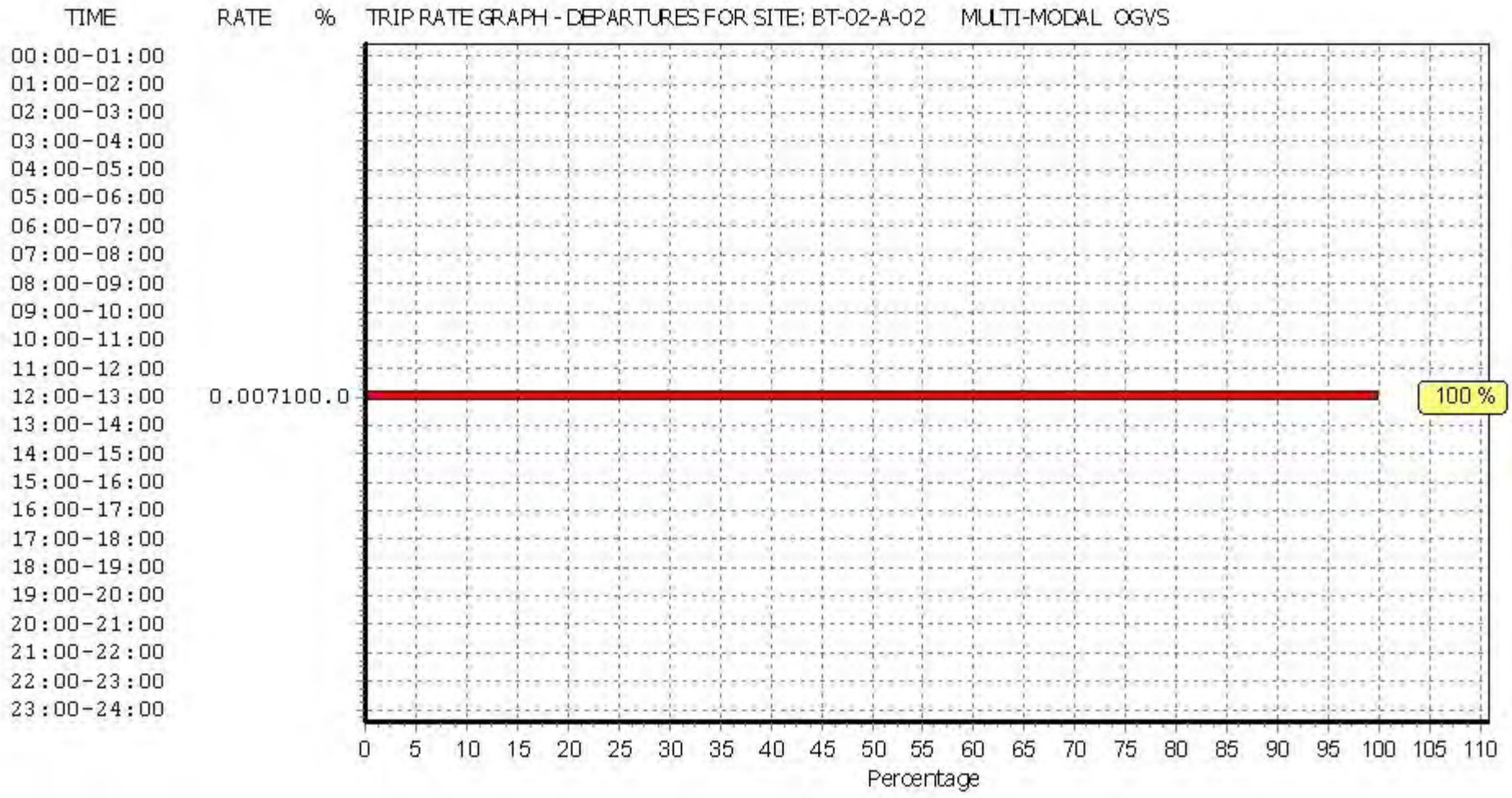

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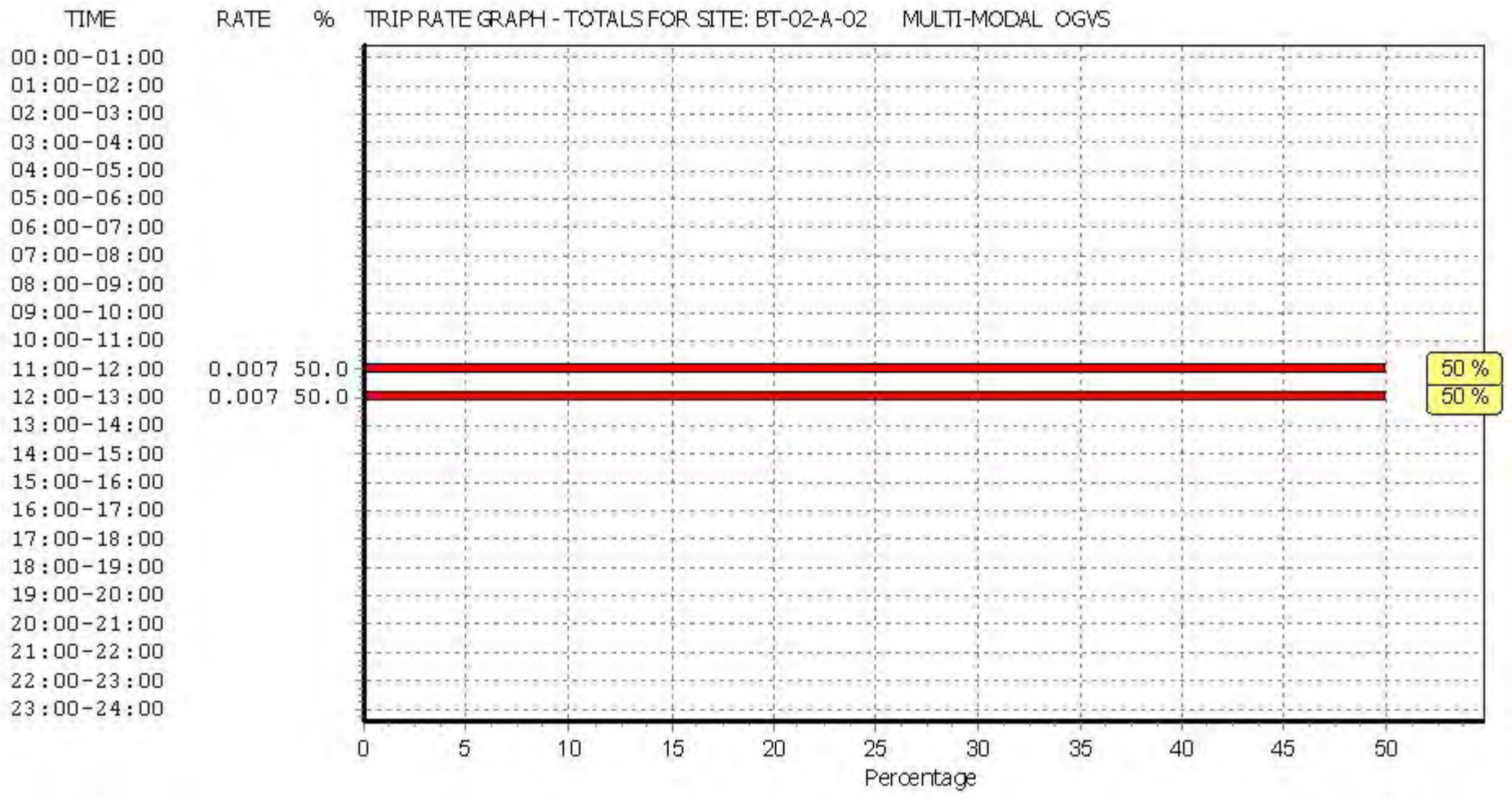

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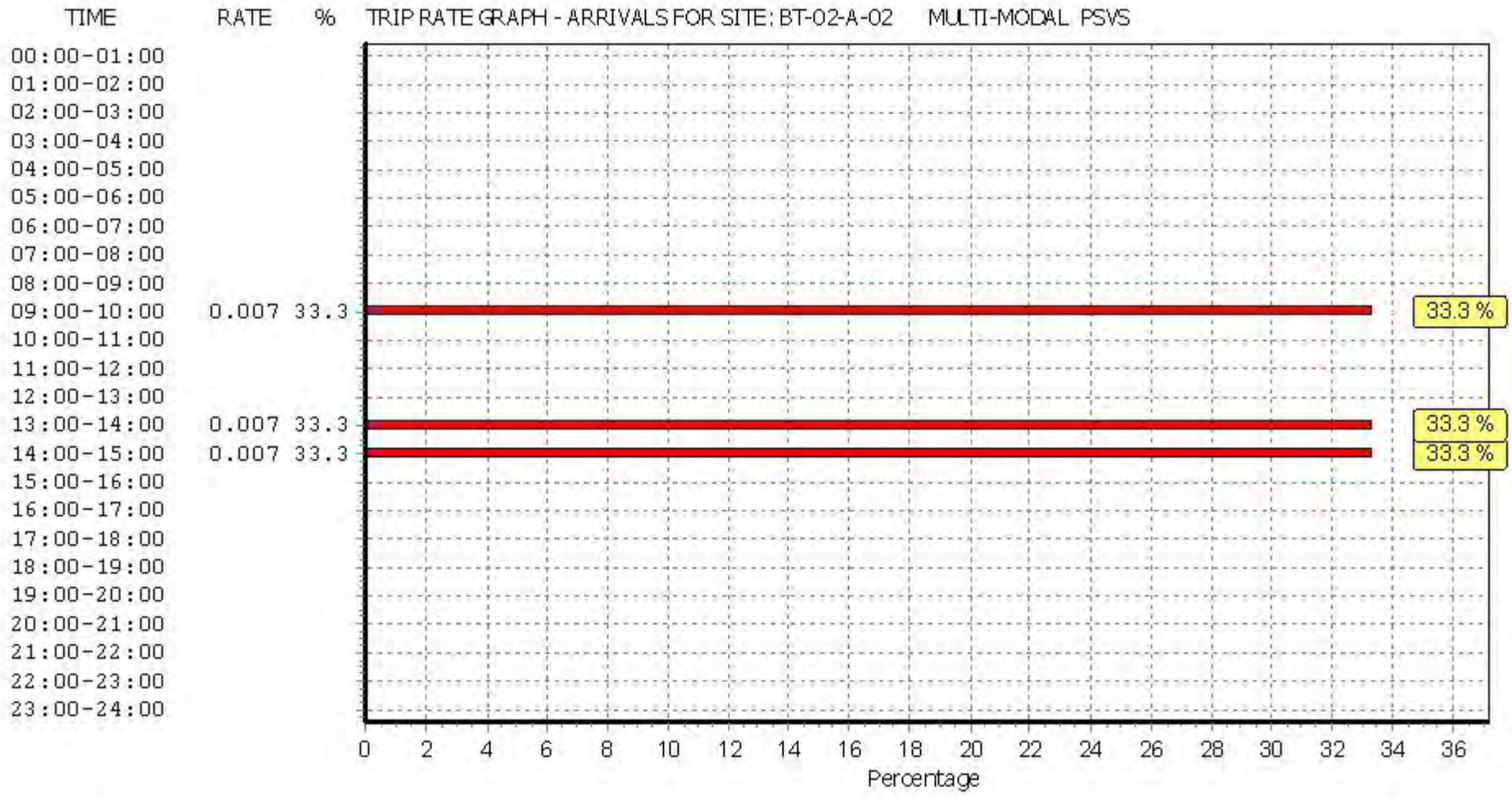
TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

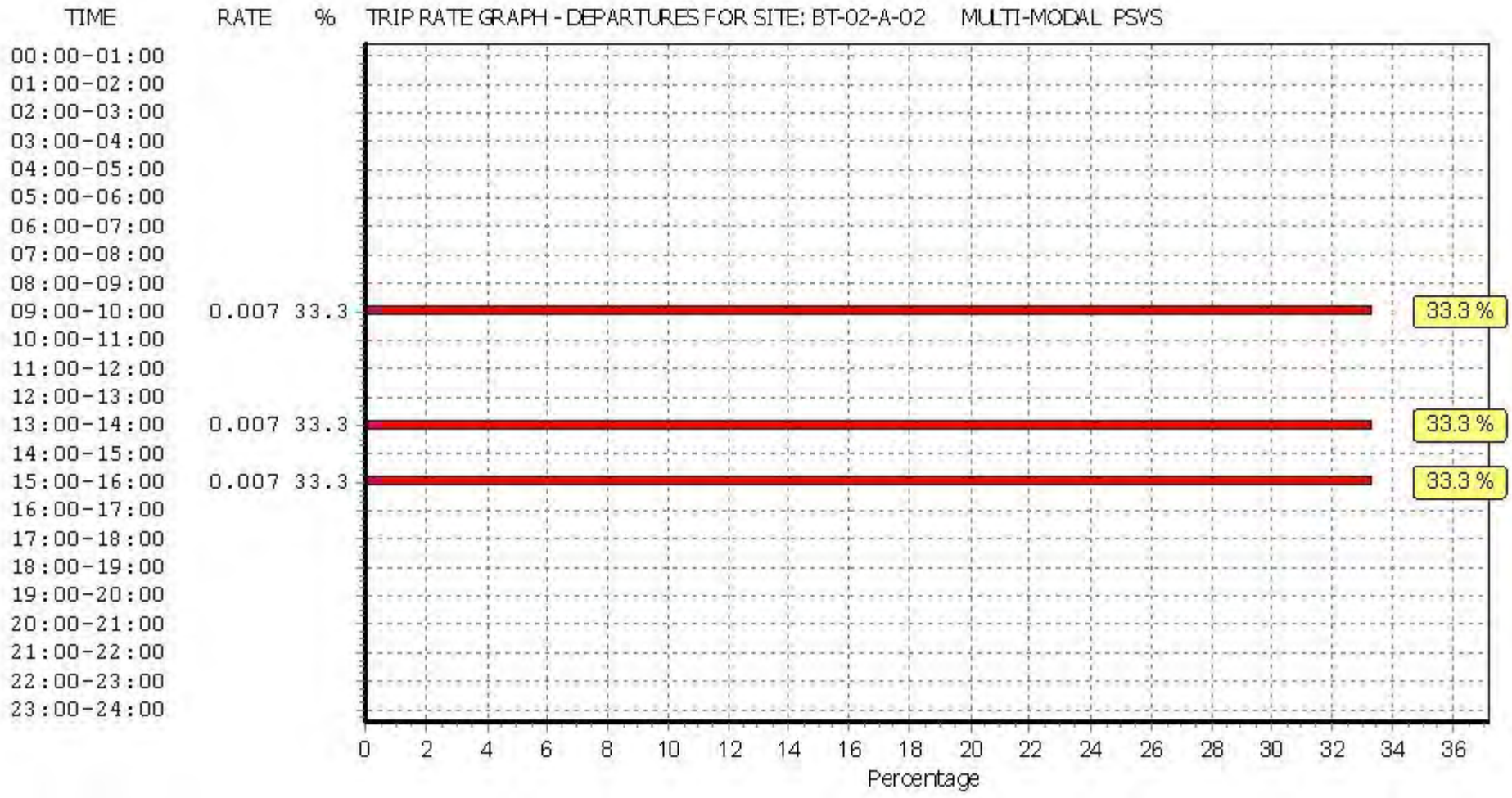
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
07:30 - 08:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
08:00 - 08:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
08:30 - 09:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
09:00 - 09:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
09:30 - 10:00	3	4685	0.007	3	4685	0.007	3	4685	0.014
10:00 - 10:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
10:30 - 11:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
11:00 - 11:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
11:30 - 12:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
12:00 - 12:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
12:30 - 13:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
13:00 - 13:30	3	4685	0.007	3	4685	0.007	3	4685	0.014
13:30 - 14:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
14:00 - 14:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
14:30 - 15:00	3	4685	0.007	3	4685	0.000	3	4685	0.007
15:00 - 15:30	3	4685	0.000	3	4685	0.007	3	4685	0.007
15:30 - 16:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
16:00 - 16:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
16:30 - 17:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
17:00 - 17:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
17:30 - 18:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
18:00 - 18:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
18:30 - 19:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.021			0.021			0.042

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

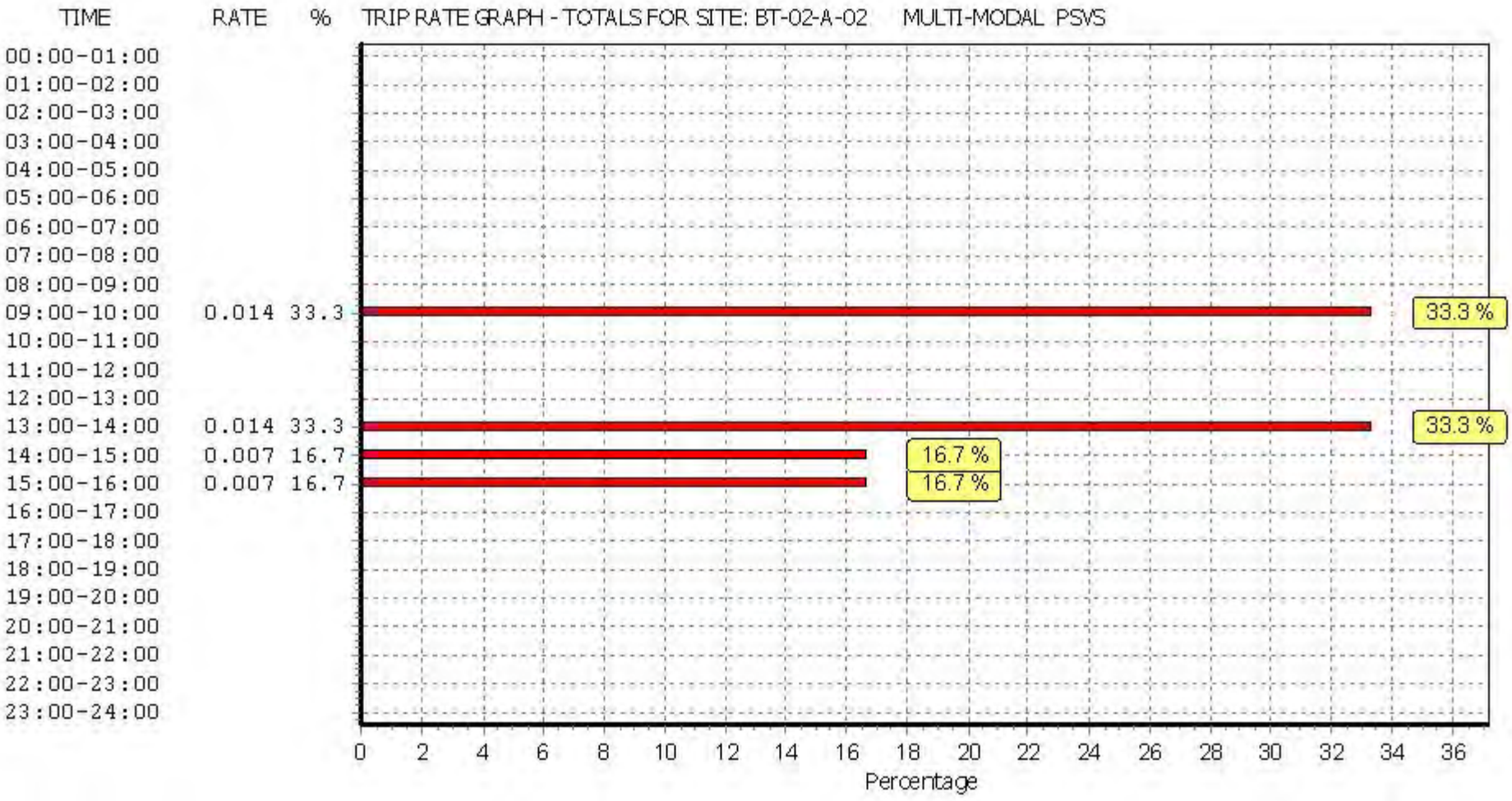
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



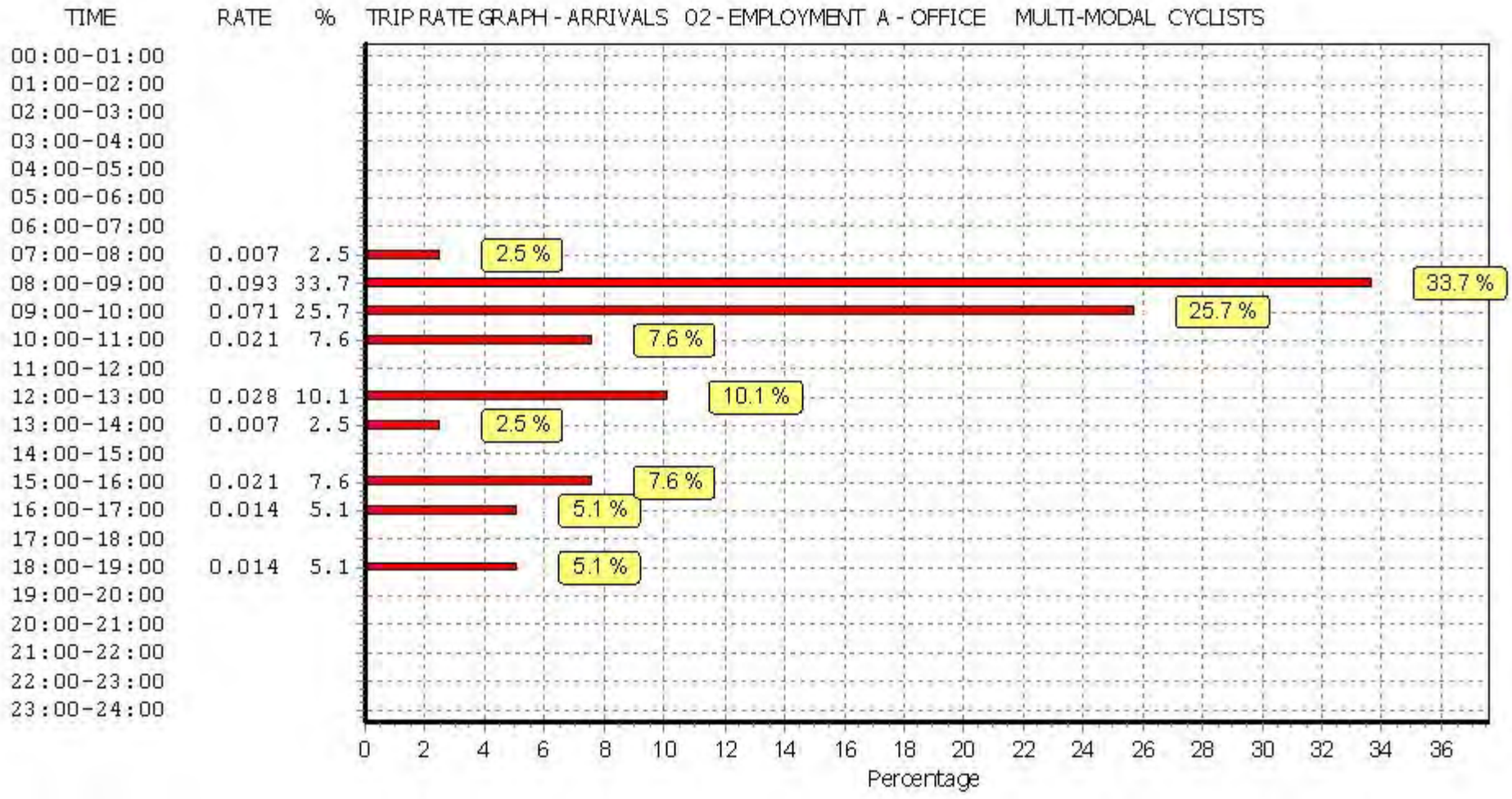
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

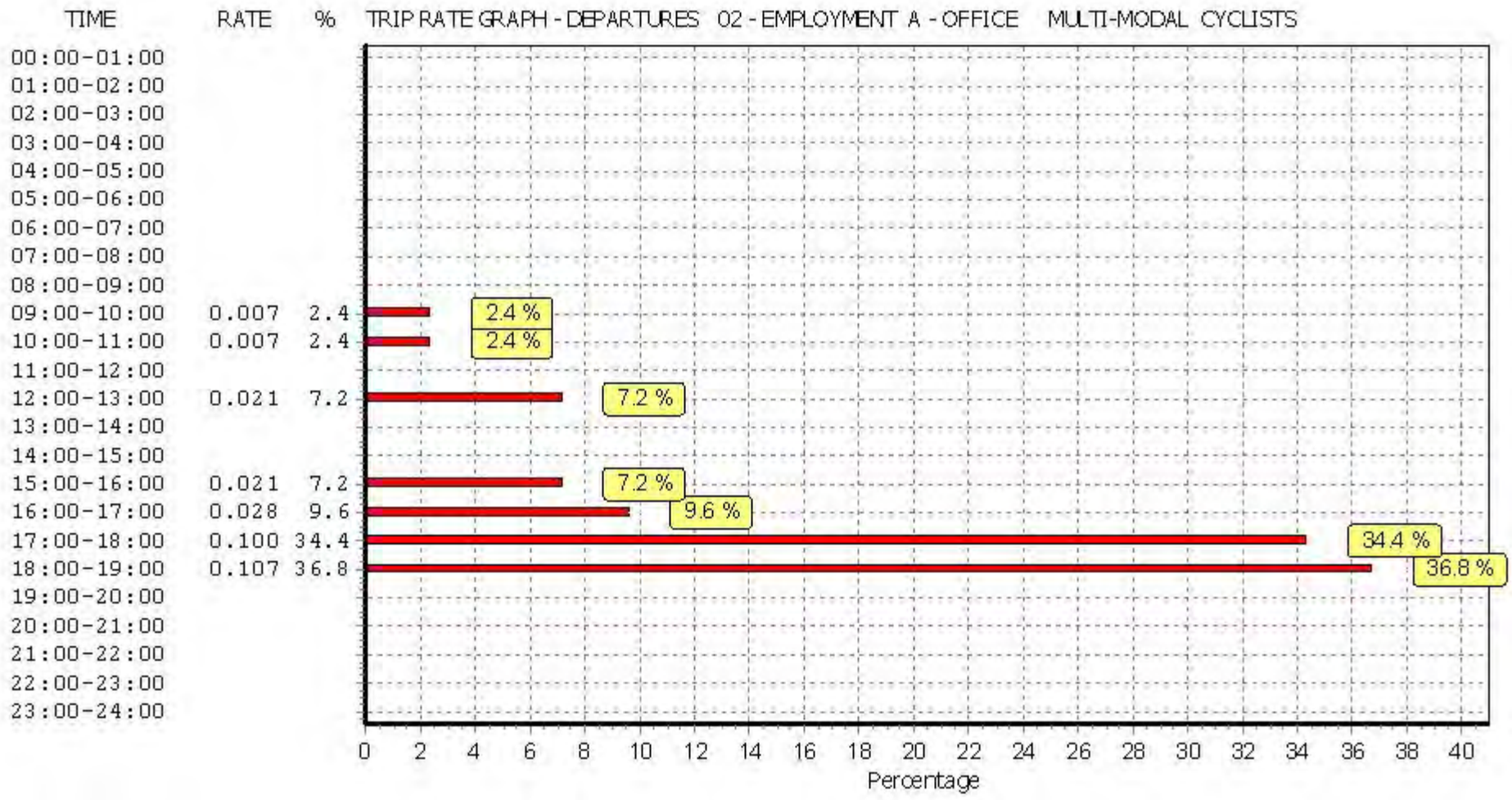
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
07:30 - 08:00	3	4685	0.007	3	4685	0.000	3	4685	0.007
08:00 - 08:30	3	4685	0.057	3	4685	0.000	3	4685	0.057
08:30 - 09:00	3	4685	0.036	3	4685	0.000	3	4685	0.036
09:00 - 09:30	3	4685	0.057	3	4685	0.007	3	4685	0.064
09:30 - 10:00	3	4685	0.014	3	4685	0.000	3	4685	0.014
10:00 - 10:30	3	4685	0.007	3	4685	0.000	3	4685	0.007
10:30 - 11:00	3	4685	0.014	3	4685	0.007	3	4685	0.021
11:00 - 11:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
11:30 - 12:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
12:00 - 12:30	3	4685	0.007	3	4685	0.007	3	4685	0.014
12:30 - 13:00	3	4685	0.021	3	4685	0.014	3	4685	0.035
13:00 - 13:30	3	4685	0.007	3	4685	0.000	3	4685	0.007
13:30 - 14:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
14:00 - 14:30	3	4685	0.000	3	4685	0.000	3	4685	0.000
14:30 - 15:00	3	4685	0.000	3	4685	0.000	3	4685	0.000
15:00 - 15:30	3	4685	0.014	3	4685	0.007	3	4685	0.021
15:30 - 16:00	3	4685	0.007	3	4685	0.014	3	4685	0.021
16:00 - 16:30	3	4685	0.000	3	4685	0.028	3	4685	0.028
16:30 - 17:00	3	4685	0.014	3	4685	0.000	3	4685	0.014
17:00 - 17:30	3	4685	0.000	3	4685	0.057	3	4685	0.057
17:30 - 18:00	3	4685	0.000	3	4685	0.043	3	4685	0.043
18:00 - 18:30	3	4685	0.014	3	4685	0.064	3	4685	0.078
18:30 - 19:00	3	4685	0.000	3	4685	0.043	3	4685	0.043
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.276			0.291			0.567

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

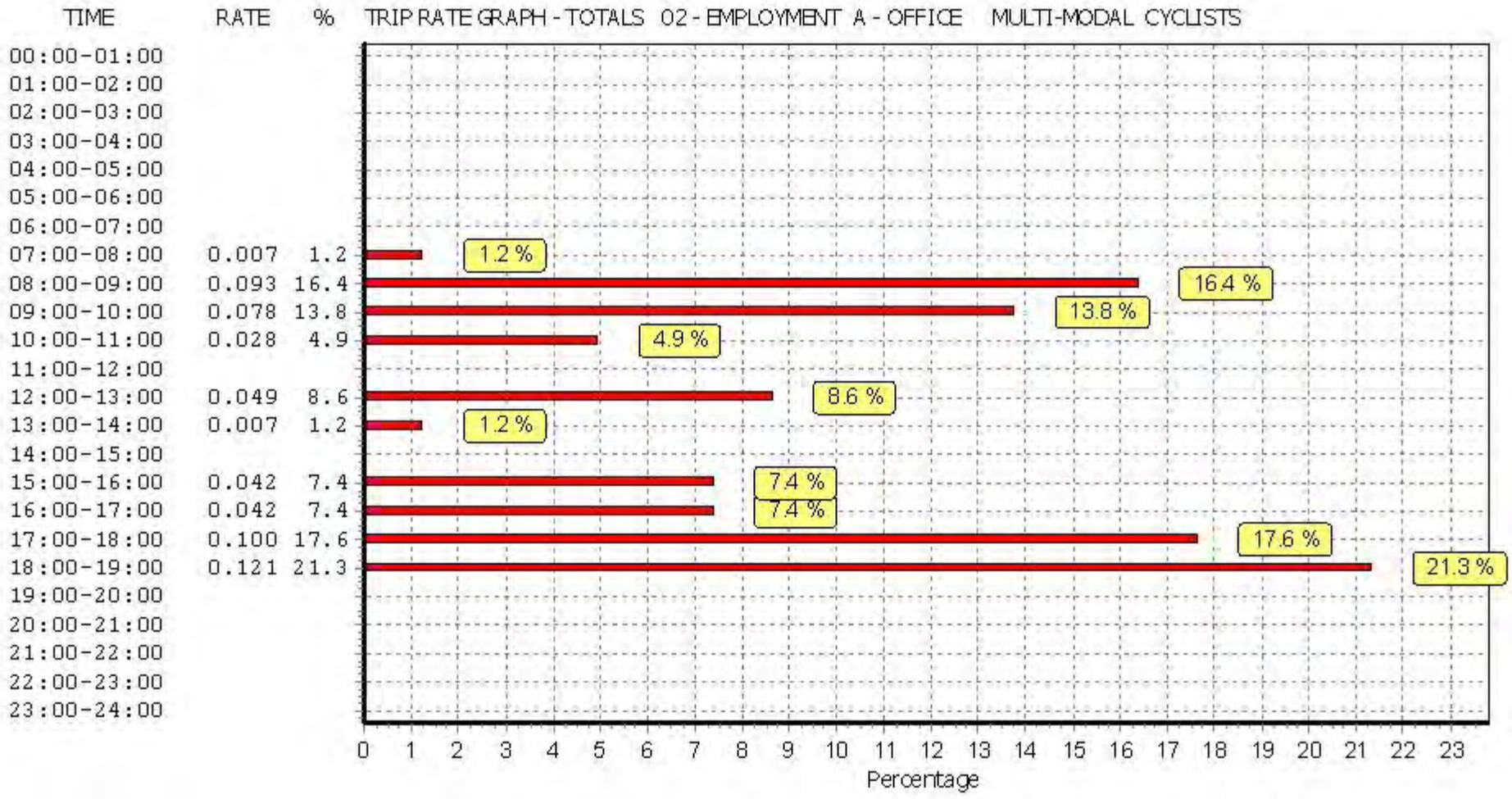
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



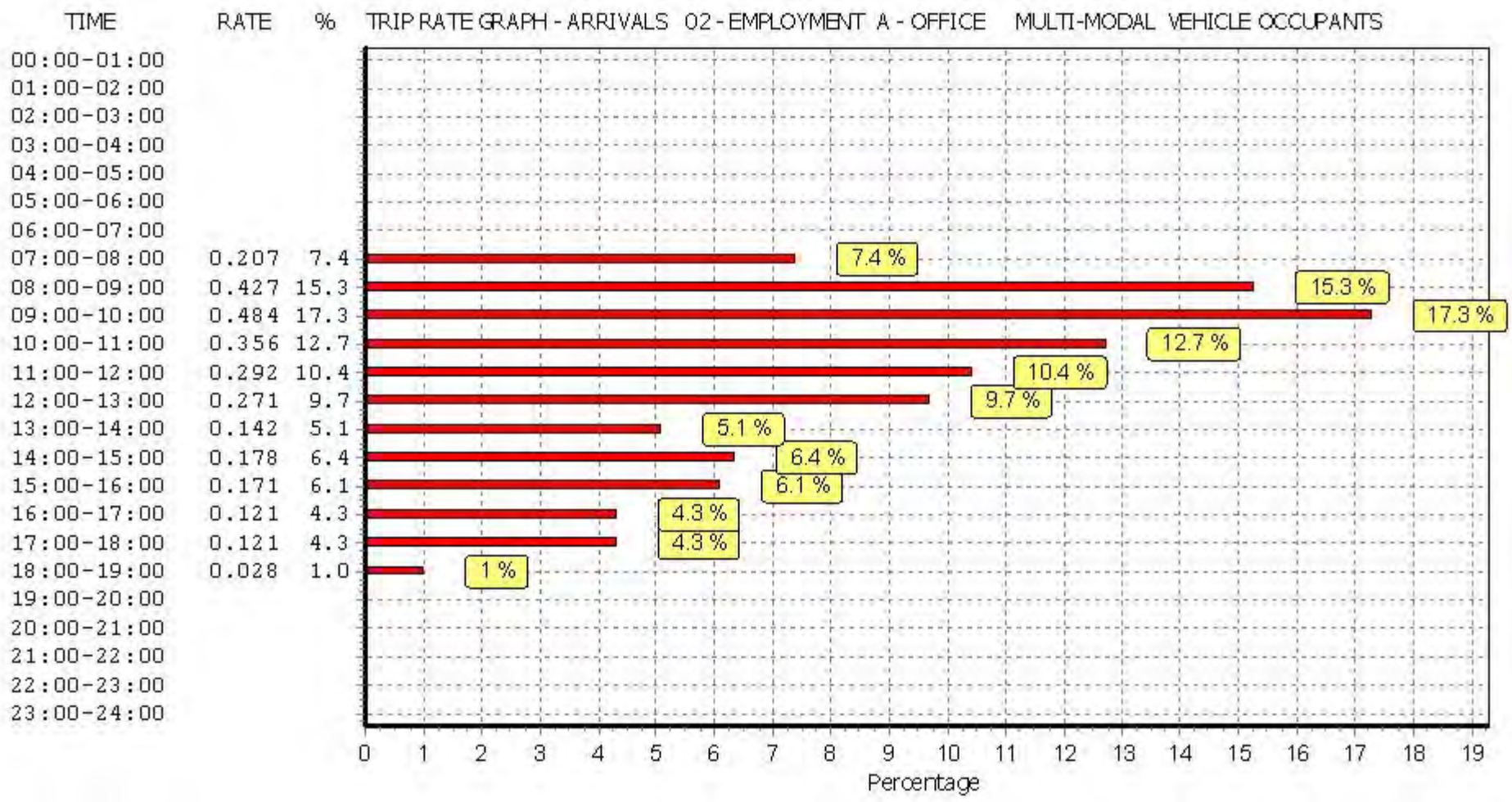
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

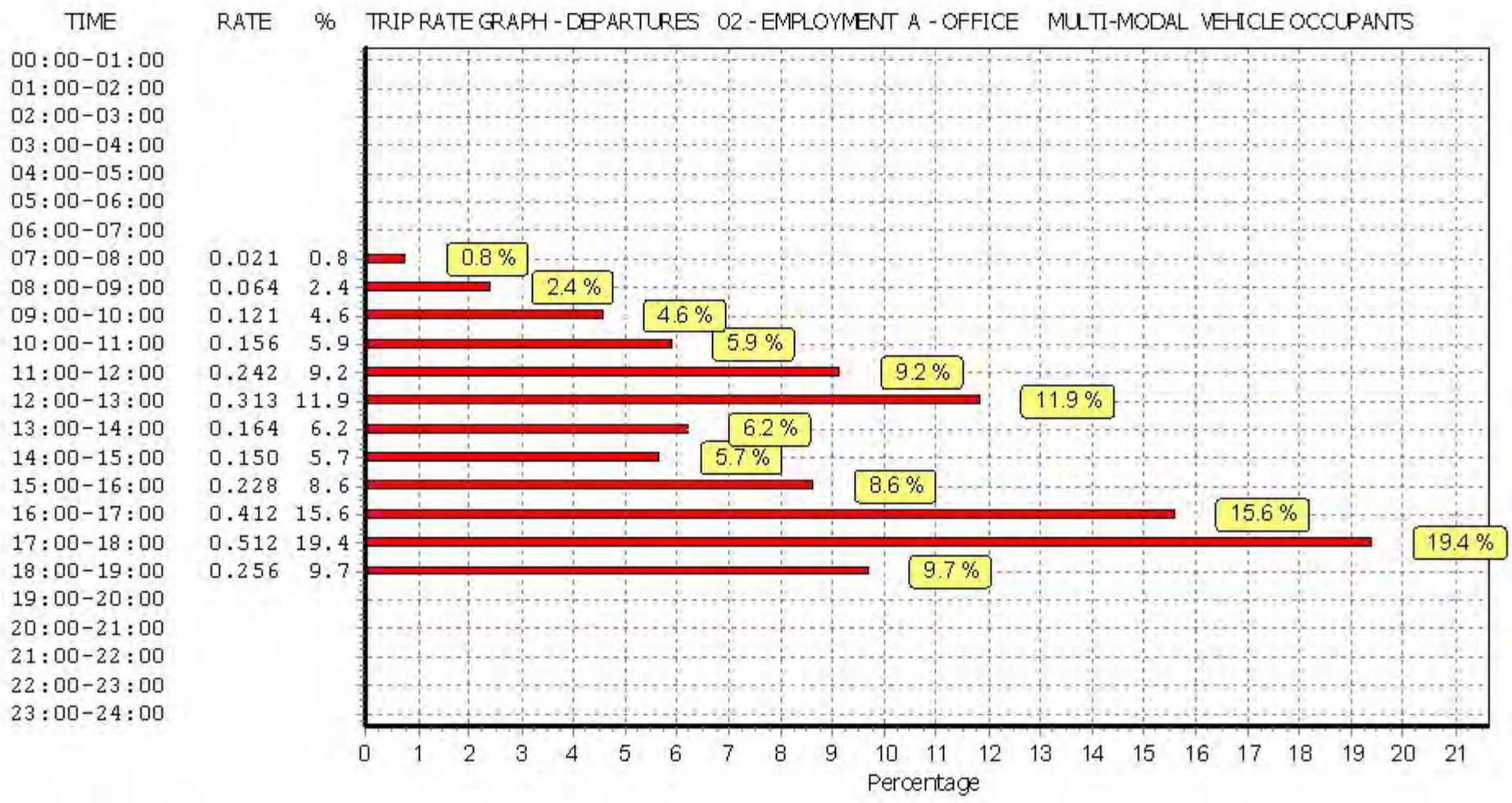
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	4685	0.050	3	4685	0.007	3	4685	0.057
07:30 - 08:00	3	4685	0.157	3	4685	0.014	3	4685	0.171
08:00 - 08:30	3	4685	0.249	3	4685	0.043	3	4685	0.292
08:30 - 09:00	3	4685	0.178	3	4685	0.021	3	4685	0.199
09:00 - 09:30	3	4685	0.242	3	4685	0.064	3	4685	0.306
09:30 - 10:00	3	4685	0.242	3	4685	0.057	3	4685	0.299
10:00 - 10:30	3	4685	0.242	3	4685	0.085	3	4685	0.327
10:30 - 11:00	3	4685	0.114	3	4685	0.071	3	4685	0.185
11:00 - 11:30	3	4685	0.185	3	4685	0.185	3	4685	0.370
11:30 - 12:00	3	4685	0.107	3	4685	0.057	3	4685	0.164
12:00 - 12:30	3	4685	0.100	3	4685	0.142	3	4685	0.242
12:30 - 13:00	3	4685	0.171	3	4685	0.171	3	4685	0.342
13:00 - 13:30	3	4685	0.071	3	4685	0.100	3	4685	0.171
13:30 - 14:00	3	4685	0.071	3	4685	0.064	3	4685	0.135
14:00 - 14:30	3	4685	0.107	3	4685	0.093	3	4685	0.200
14:30 - 15:00	3	4685	0.071	3	4685	0.057	3	4685	0.128
15:00 - 15:30	3	4685	0.057	3	4685	0.114	3	4685	0.171
15:30 - 16:00	3	4685	0.114	3	4685	0.114	3	4685	0.228
16:00 - 16:30	3	4685	0.050	3	4685	0.199	3	4685	0.249
16:30 - 17:00	3	4685	0.071	3	4685	0.213	3	4685	0.284
17:00 - 17:30	3	4685	0.093	3	4685	0.334	3	4685	0.427
17:30 - 18:00	3	4685	0.028	3	4685	0.178	3	4685	0.206
18:00 - 18:30	3	4685	0.028	3	4685	0.199	3	4685	0.227
18:30 - 19:00	3	4685	0.000	3	4685	0.057	3	4685	0.057
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.798			2.639			5.437

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

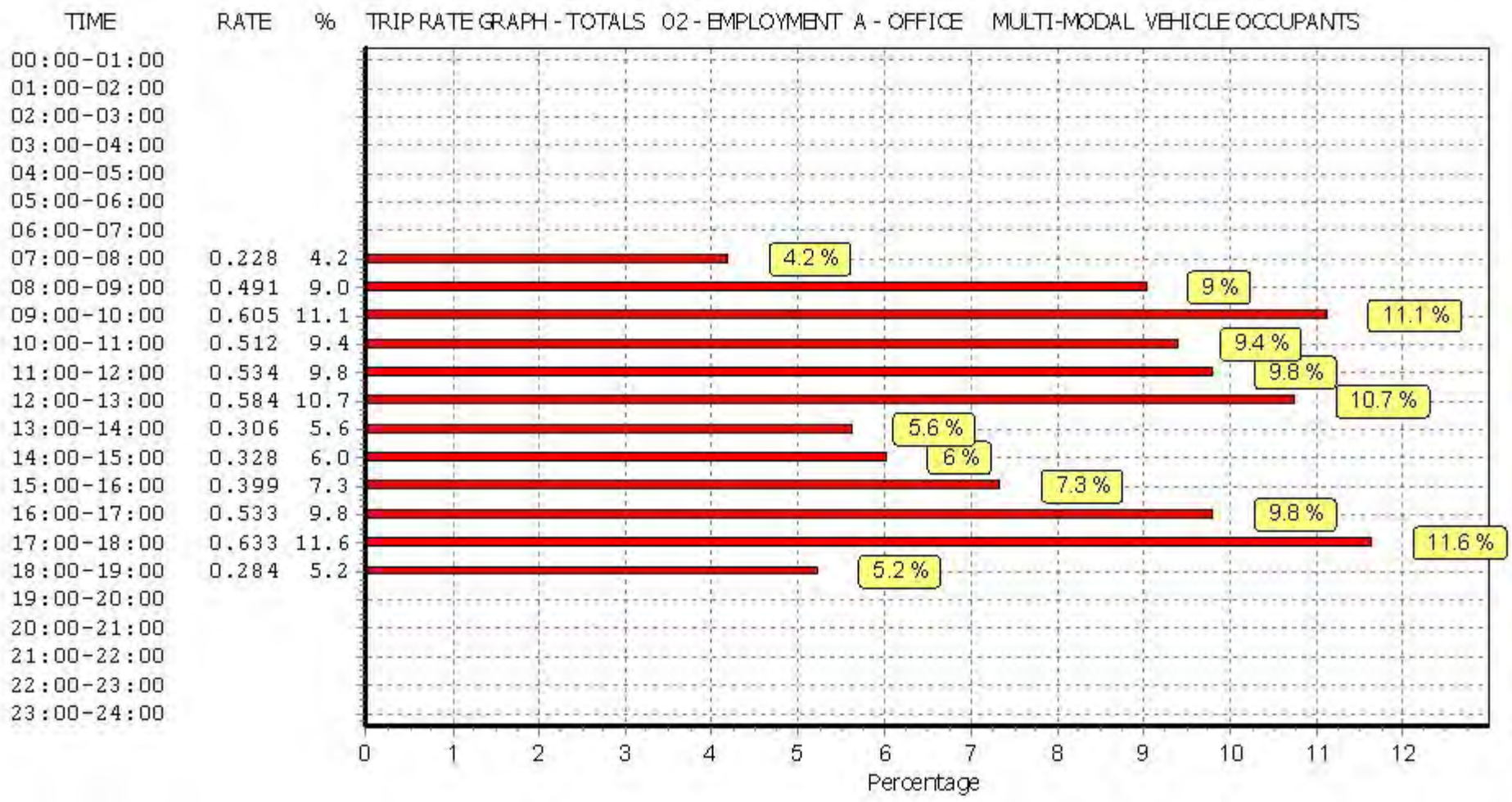
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



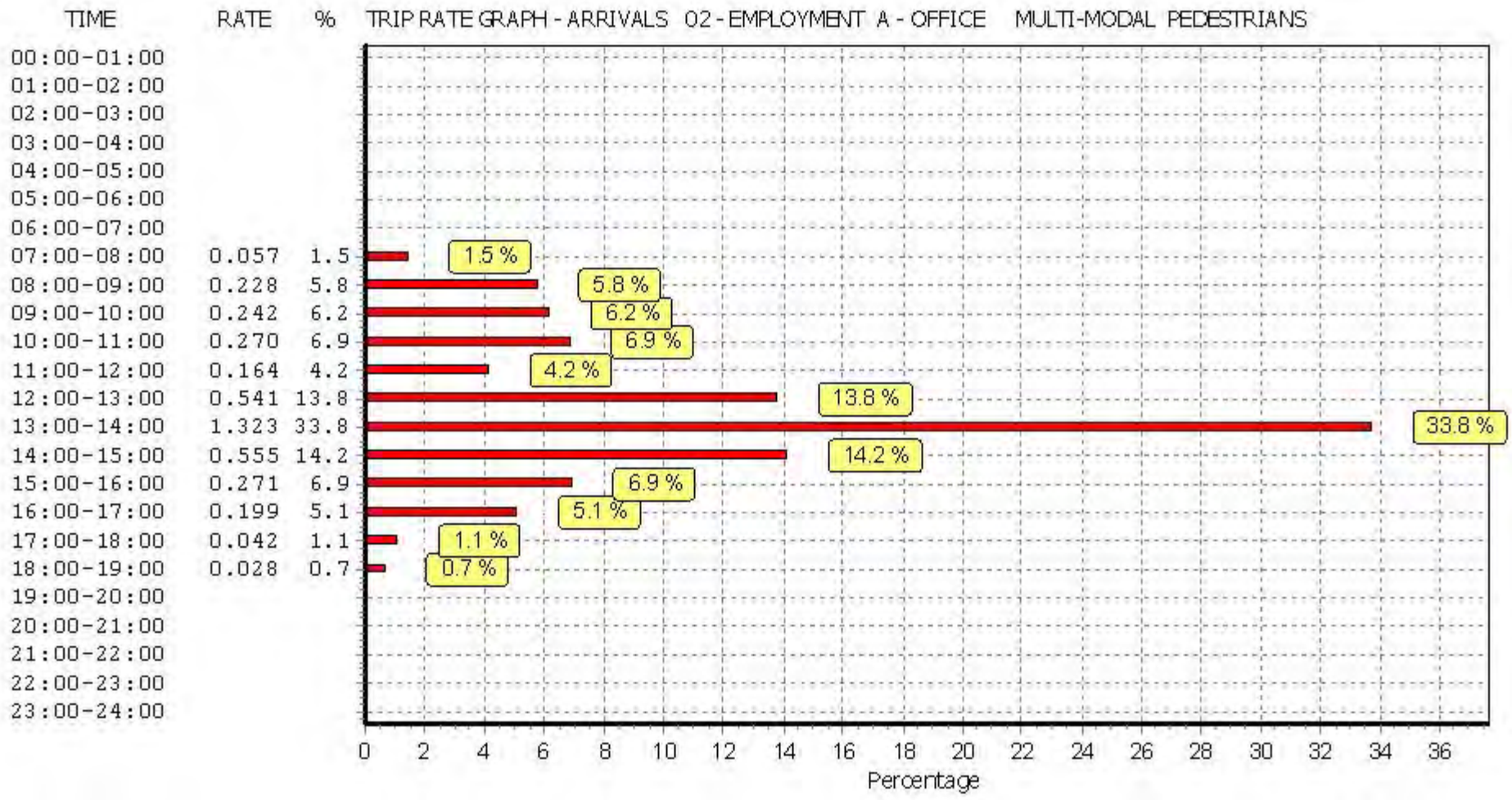
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

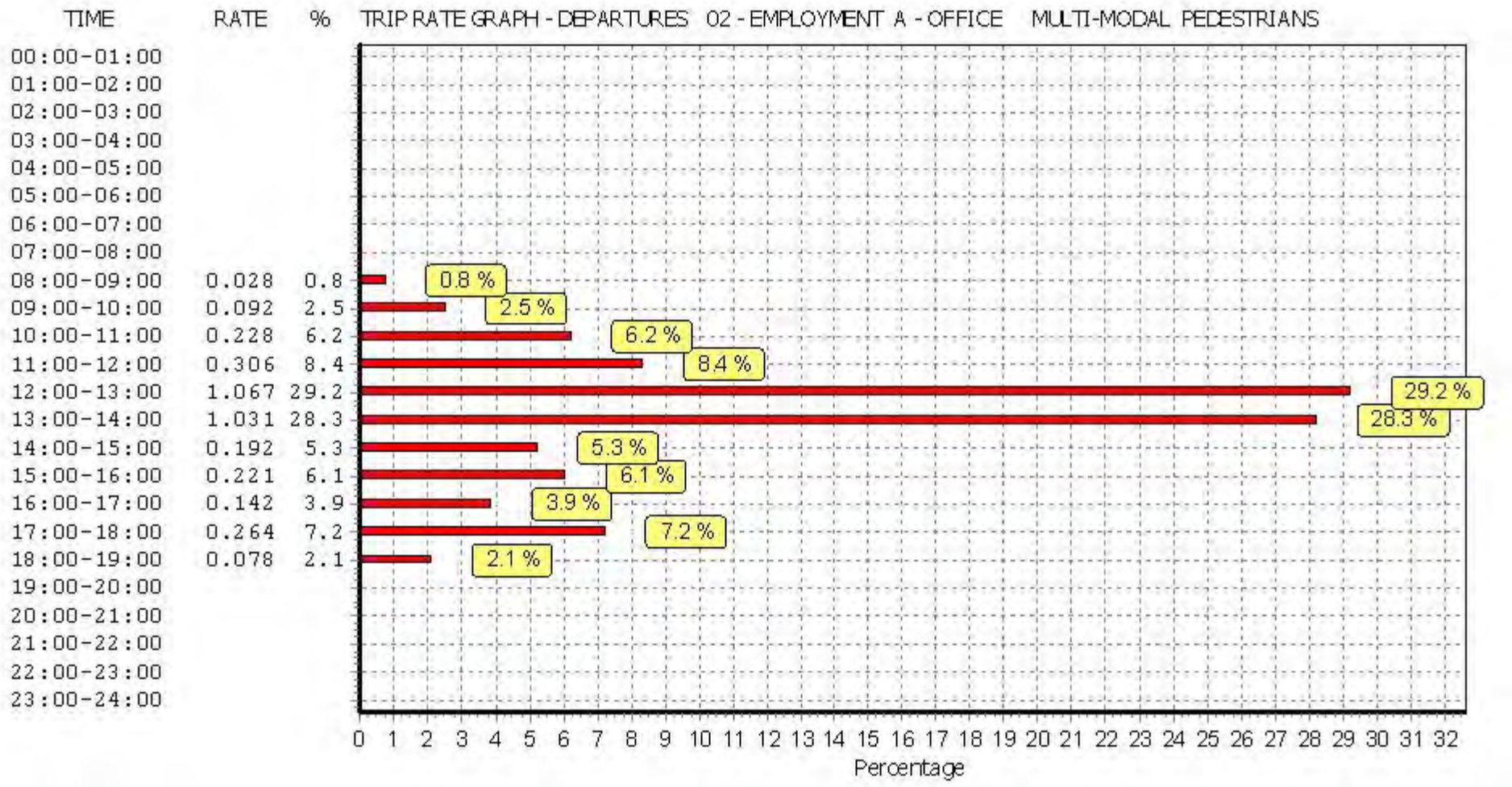
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	4685	0.014	3	4685	0.000	3	4685	0.014
07:30 - 08:00	3	4685	0.043	3	4685	0.000	3	4685	0.043
08:00 - 08:30	3	4685	0.057	3	4685	0.000	3	4685	0.057
08:30 - 09:00	3	4685	0.171	3	4685	0.028	3	4685	0.199
09:00 - 09:30	3	4685	0.121	3	4685	0.071	3	4685	0.192
09:30 - 10:00	3	4685	0.121	3	4685	0.021	3	4685	0.142
10:00 - 10:30	3	4685	0.142	3	4685	0.071	3	4685	0.213
10:30 - 11:00	3	4685	0.128	3	4685	0.157	3	4685	0.285
11:00 - 11:30	3	4685	0.093	3	4685	0.071	3	4685	0.164
11:30 - 12:00	3	4685	0.071	3	4685	0.235	3	4685	0.306
12:00 - 12:30	3	4685	0.256	3	4685	0.583	3	4685	0.839
12:30 - 13:00	3	4685	0.285	3	4685	0.484	3	4685	0.769
13:00 - 13:30	3	4685	0.562	3	4685	0.697	3	4685	1.259
13:30 - 14:00	3	4685	0.761	3	4685	0.334	3	4685	1.095
14:00 - 14:30	3	4685	0.413	3	4685	0.121	3	4685	0.534
14:30 - 15:00	3	4685	0.142	3	4685	0.071	3	4685	0.213
15:00 - 15:30	3	4685	0.114	3	4685	0.064	3	4685	0.178
15:30 - 16:00	3	4685	0.157	3	4685	0.157	3	4685	0.314
16:00 - 16:30	3	4685	0.064	3	4685	0.064	3	4685	0.128
16:30 - 17:00	3	4685	0.135	3	4685	0.078	3	4685	0.213
17:00 - 17:30	3	4685	0.028	3	4685	0.093	3	4685	0.121
17:30 - 18:00	3	4685	0.014	3	4685	0.171	3	4685	0.185
18:00 - 18:30	3	4685	0.014	3	4685	0.071	3	4685	0.085
18:30 - 19:00	3	4685	0.014	3	4685	0.007	3	4685	0.021
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			3.920			3.649			7.569

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

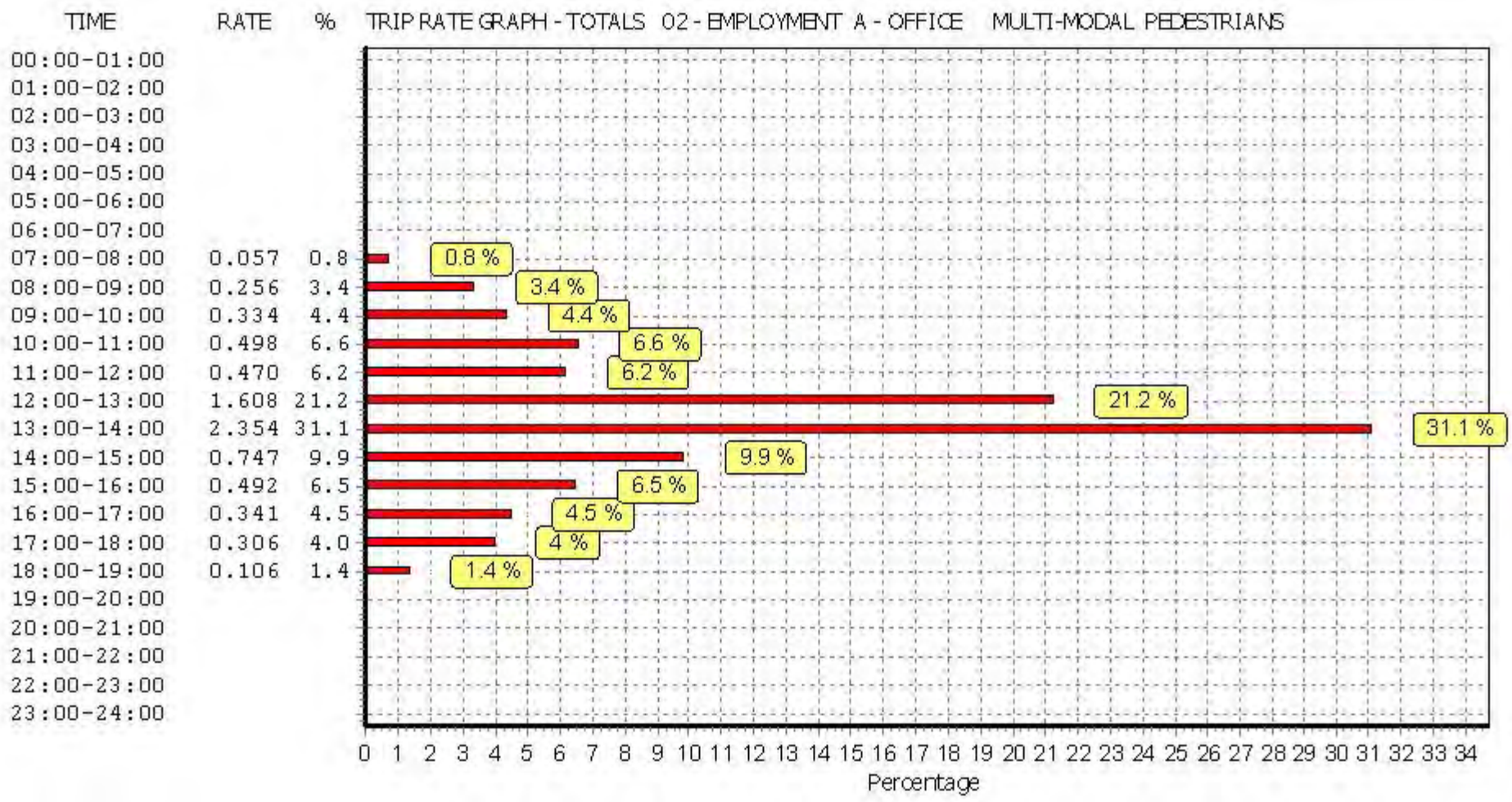
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



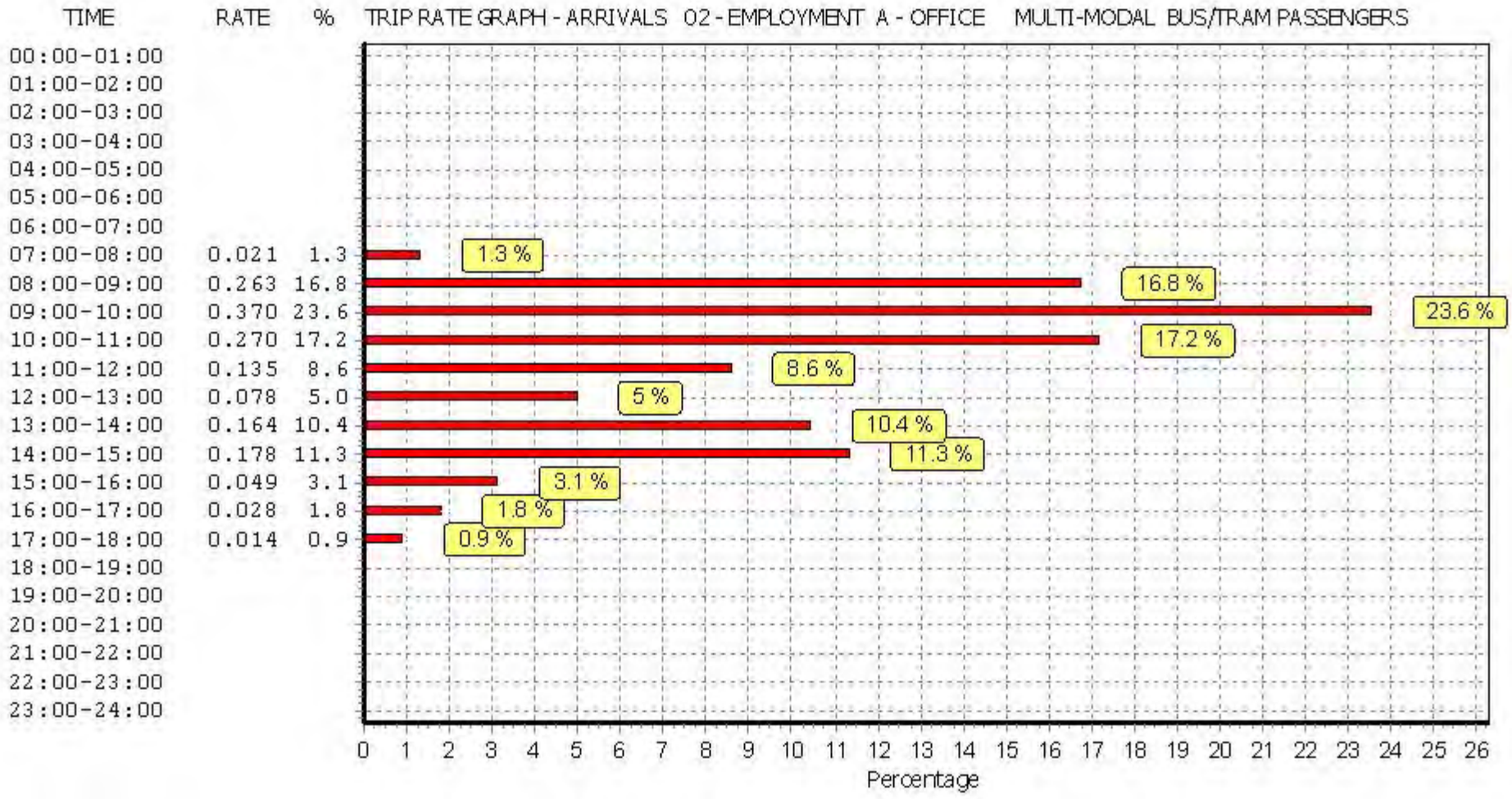
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

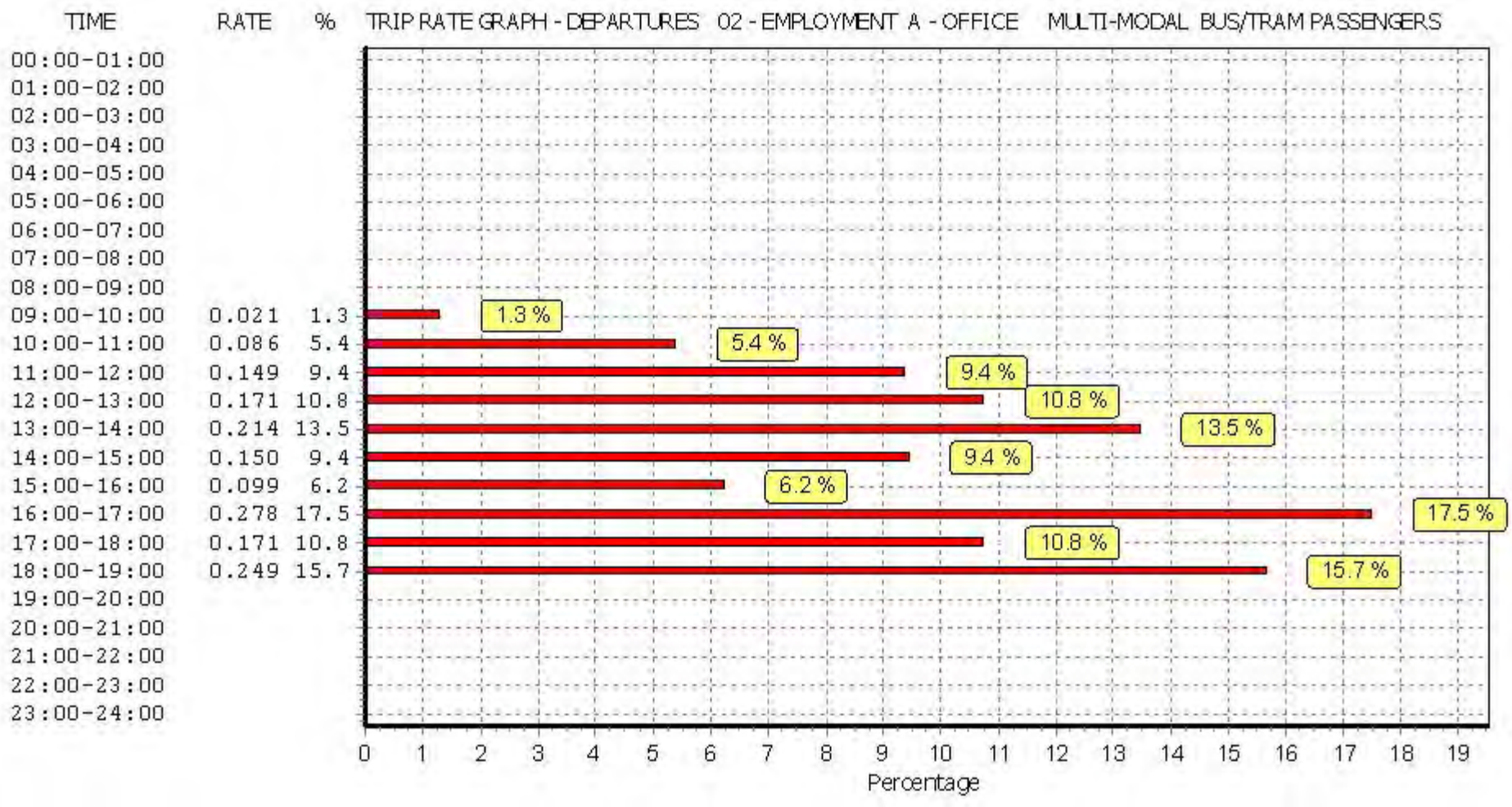
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	4685	0.007	3	4685	0.000	3	4685	0.007
07:30 - 08:00	3	4685	0.014	3	4685	0.000	3	4685	0.014
08:00 - 08:30	3	4685	0.064	3	4685	0.000	3	4685	0.064
08:30 - 09:00	3	4685	0.199	3	4685	0.000	3	4685	0.199
09:00 - 09:30	3	4685	0.192	3	4685	0.014	3	4685	0.206
09:30 - 10:00	3	4685	0.178	3	4685	0.007	3	4685	0.185
10:00 - 10:30	3	4685	0.135	3	4685	0.043	3	4685	0.178
10:30 - 11:00	3	4685	0.135	3	4685	0.043	3	4685	0.178
11:00 - 11:30	3	4685	0.057	3	4685	0.078	3	4685	0.135
11:30 - 12:00	3	4685	0.078	3	4685	0.071	3	4685	0.149
12:00 - 12:30	3	4685	0.057	3	4685	0.114	3	4685	0.171
12:30 - 13:00	3	4685	0.021	3	4685	0.057	3	4685	0.078
13:00 - 13:30	3	4685	0.100	3	4685	0.121	3	4685	0.221
13:30 - 14:00	3	4685	0.064	3	4685	0.093	3	4685	0.157
14:00 - 14:30	3	4685	0.078	3	4685	0.057	3	4685	0.135
14:30 - 15:00	3	4685	0.100	3	4685	0.093	3	4685	0.193
15:00 - 15:30	3	4685	0.028	3	4685	0.071	3	4685	0.099
15:30 - 16:00	3	4685	0.021	3	4685	0.028	3	4685	0.049
16:00 - 16:30	3	4685	0.028	3	4685	0.157	3	4685	0.185
16:30 - 17:00	3	4685	0.000	3	4685	0.121	3	4685	0.121
17:00 - 17:30	3	4685	0.007	3	4685	0.064	3	4685	0.071
17:30 - 18:00	3	4685	0.007	3	4685	0.107	3	4685	0.114
18:00 - 18:30	3	4685	0.000	3	4685	0.178	3	4685	0.178
18:30 - 19:00	3	4685	0.000	3	4685	0.071	3	4685	0.071
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.570			1.588			3.158

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

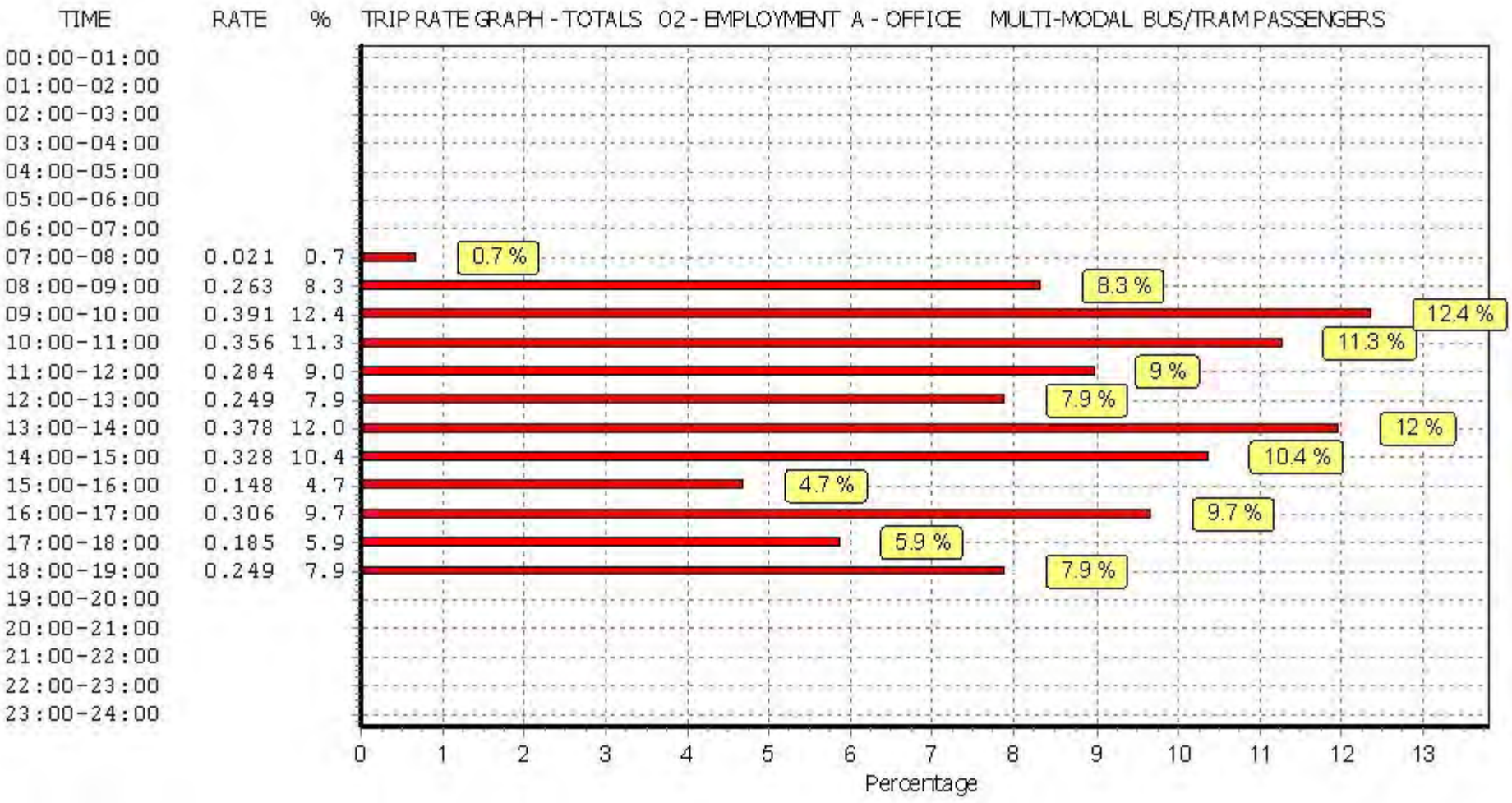
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



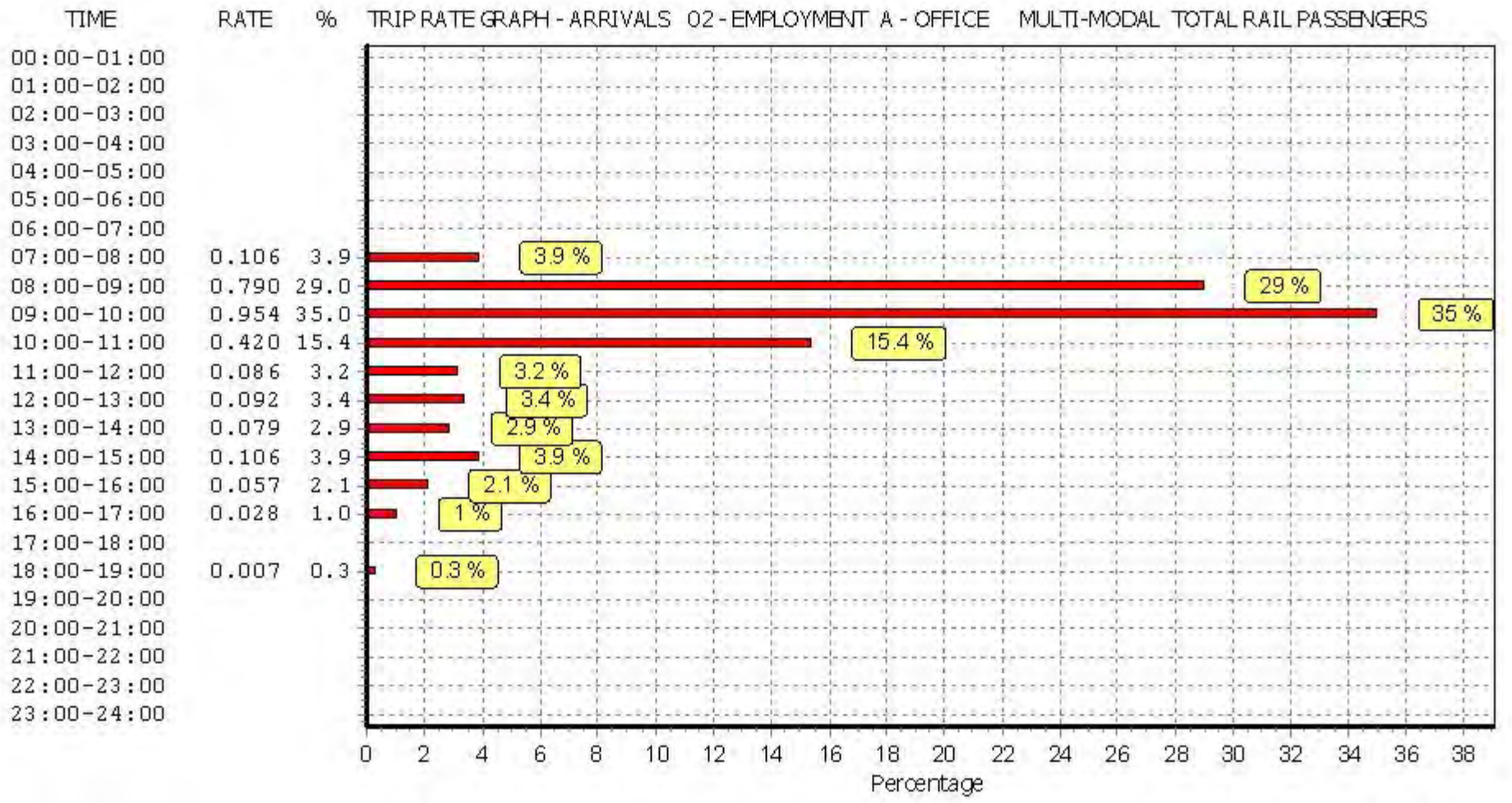
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

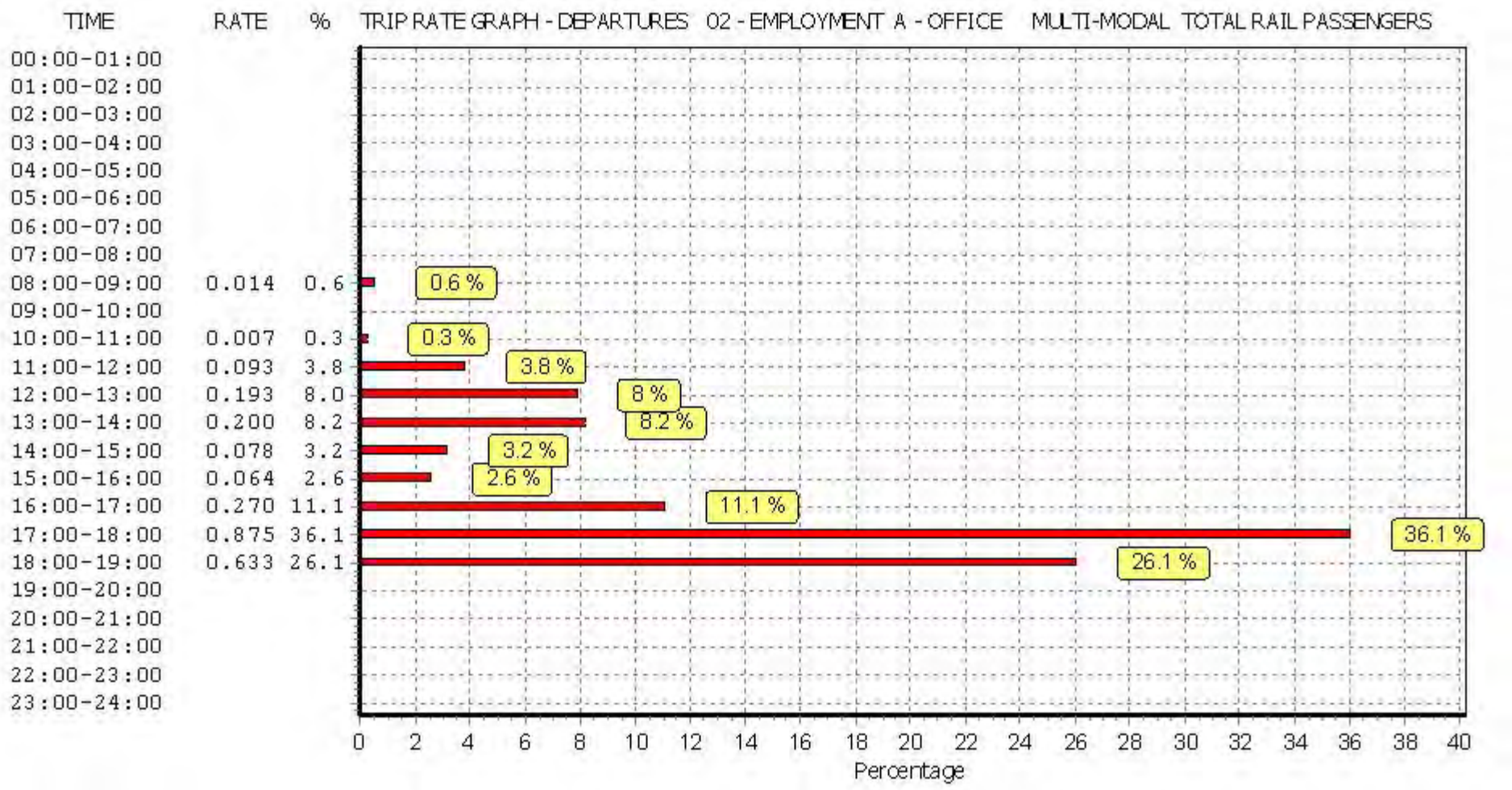
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	4685	0.028	3	4685	0.000	3	4685	0.028
07:30 - 08:00	3	4685	0.078	3	4685	0.000	3	4685	0.078
08:00 - 08:30	3	4685	0.199	3	4685	0.014	3	4685	0.213
08:30 - 09:00	3	4685	0.591	3	4685	0.000	3	4685	0.591
09:00 - 09:30	3	4685	0.648	3	4685	0.000	3	4685	0.648
09:30 - 10:00	3	4685	0.306	3	4685	0.000	3	4685	0.306
10:00 - 10:30	3	4685	0.249	3	4685	0.007	3	4685	0.256
10:30 - 11:00	3	4685	0.171	3	4685	0.000	3	4685	0.171
11:00 - 11:30	3	4685	0.036	3	4685	0.050	3	4685	0.086
11:30 - 12:00	3	4685	0.050	3	4685	0.043	3	4685	0.093
12:00 - 12:30	3	4685	0.021	3	4685	0.093	3	4685	0.114
12:30 - 13:00	3	4685	0.071	3	4685	0.100	3	4685	0.171
13:00 - 13:30	3	4685	0.036	3	4685	0.093	3	4685	0.129
13:30 - 14:00	3	4685	0.043	3	4685	0.107	3	4685	0.150
14:00 - 14:30	3	4685	0.078	3	4685	0.057	3	4685	0.135
14:30 - 15:00	3	4685	0.028	3	4685	0.021	3	4685	0.049
15:00 - 15:30	3	4685	0.043	3	4685	0.007	3	4685	0.050
15:30 - 16:00	3	4685	0.014	3	4685	0.057	3	4685	0.071
16:00 - 16:30	3	4685	0.007	3	4685	0.071	3	4685	0.078
16:30 - 17:00	3	4685	0.021	3	4685	0.199	3	4685	0.220
17:00 - 17:30	3	4685	0.000	3	4685	0.398	3	4685	0.398
17:30 - 18:00	3	4685	0.000	3	4685	0.477	3	4685	0.477
18:00 - 18:30	3	4685	0.000	3	4685	0.455	3	4685	0.455
18:30 - 19:00	3	4685	0.007	3	4685	0.178	3	4685	0.185
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.725			2.427			5.152

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

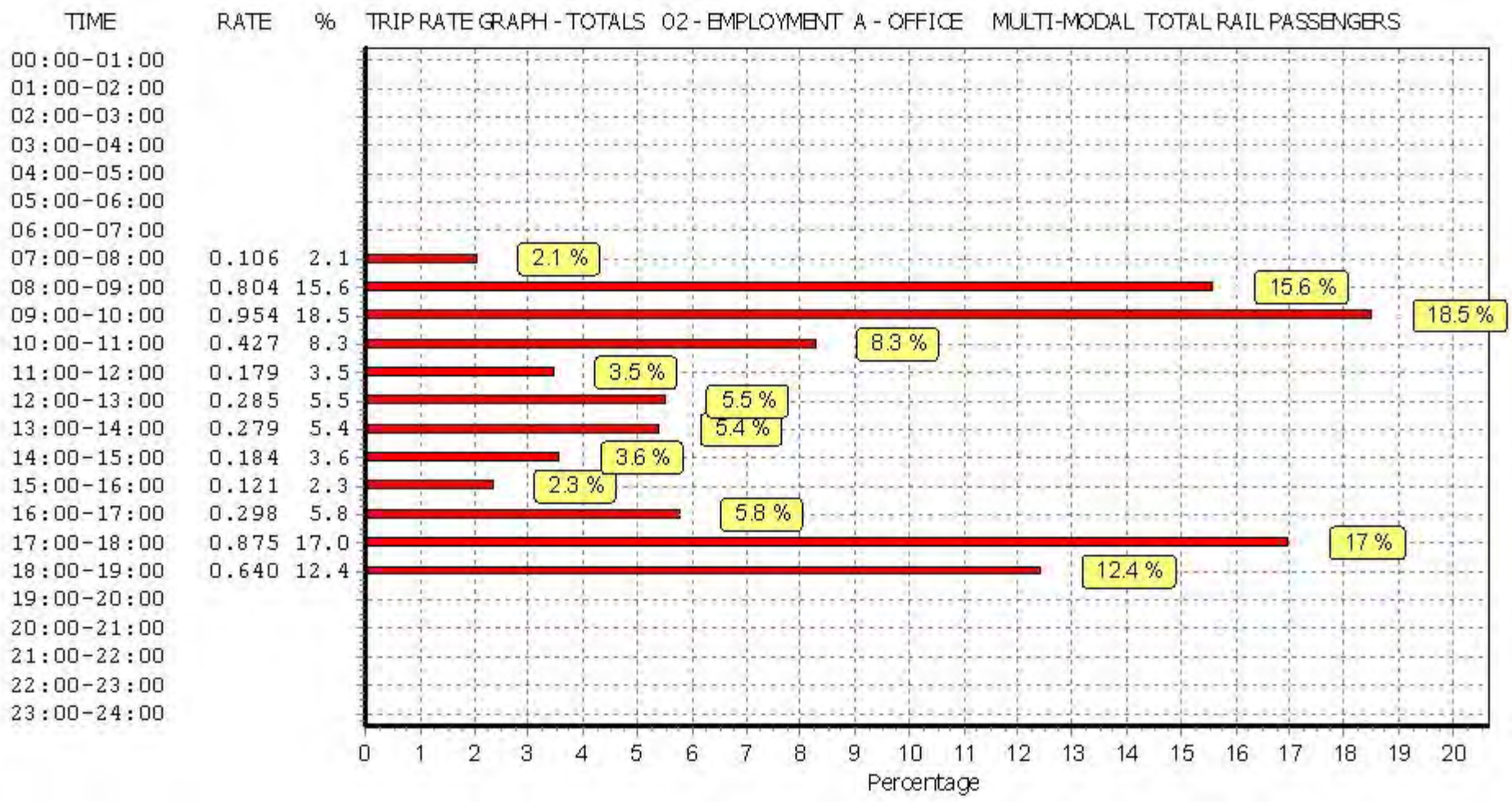
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



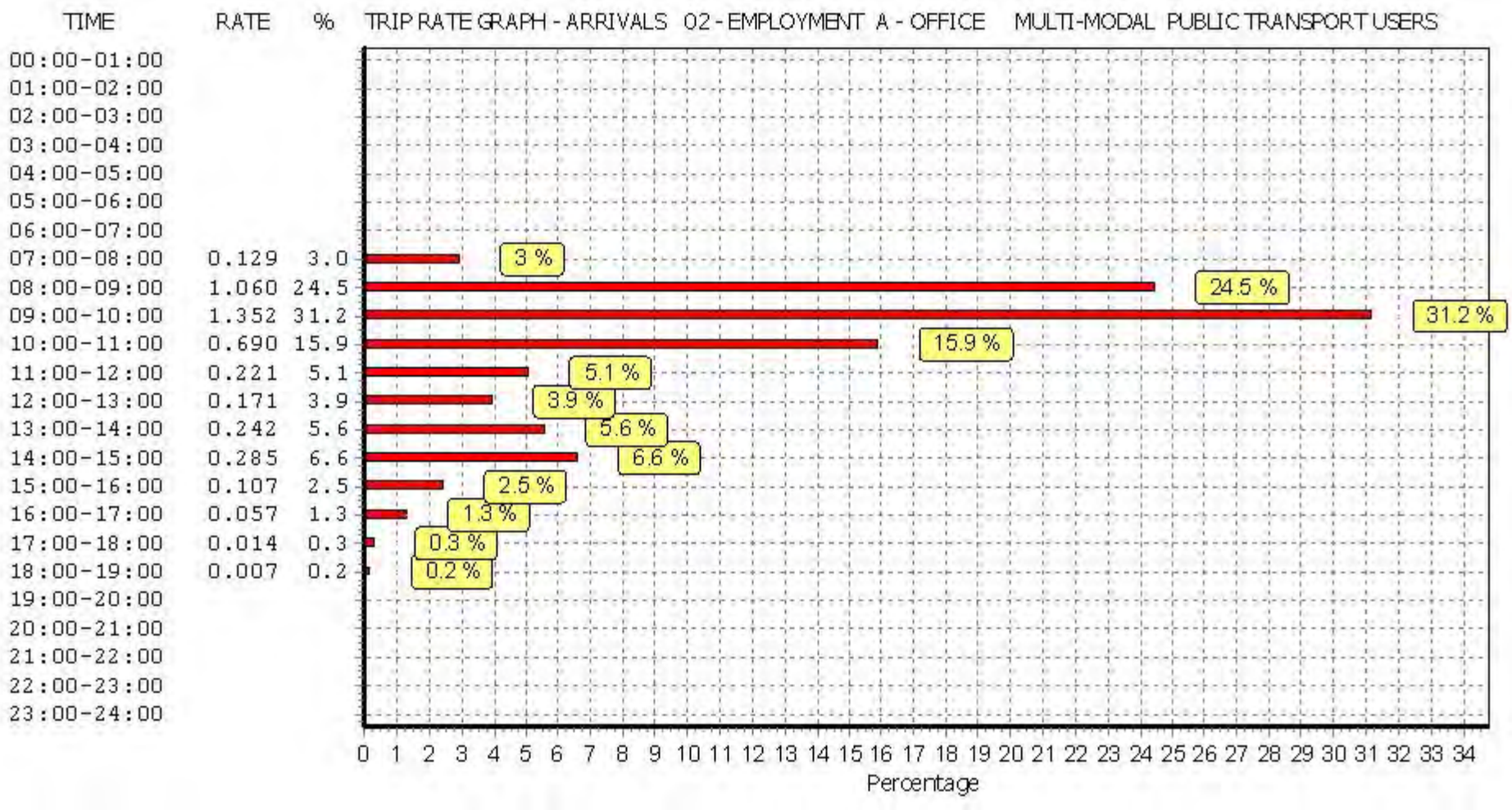
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

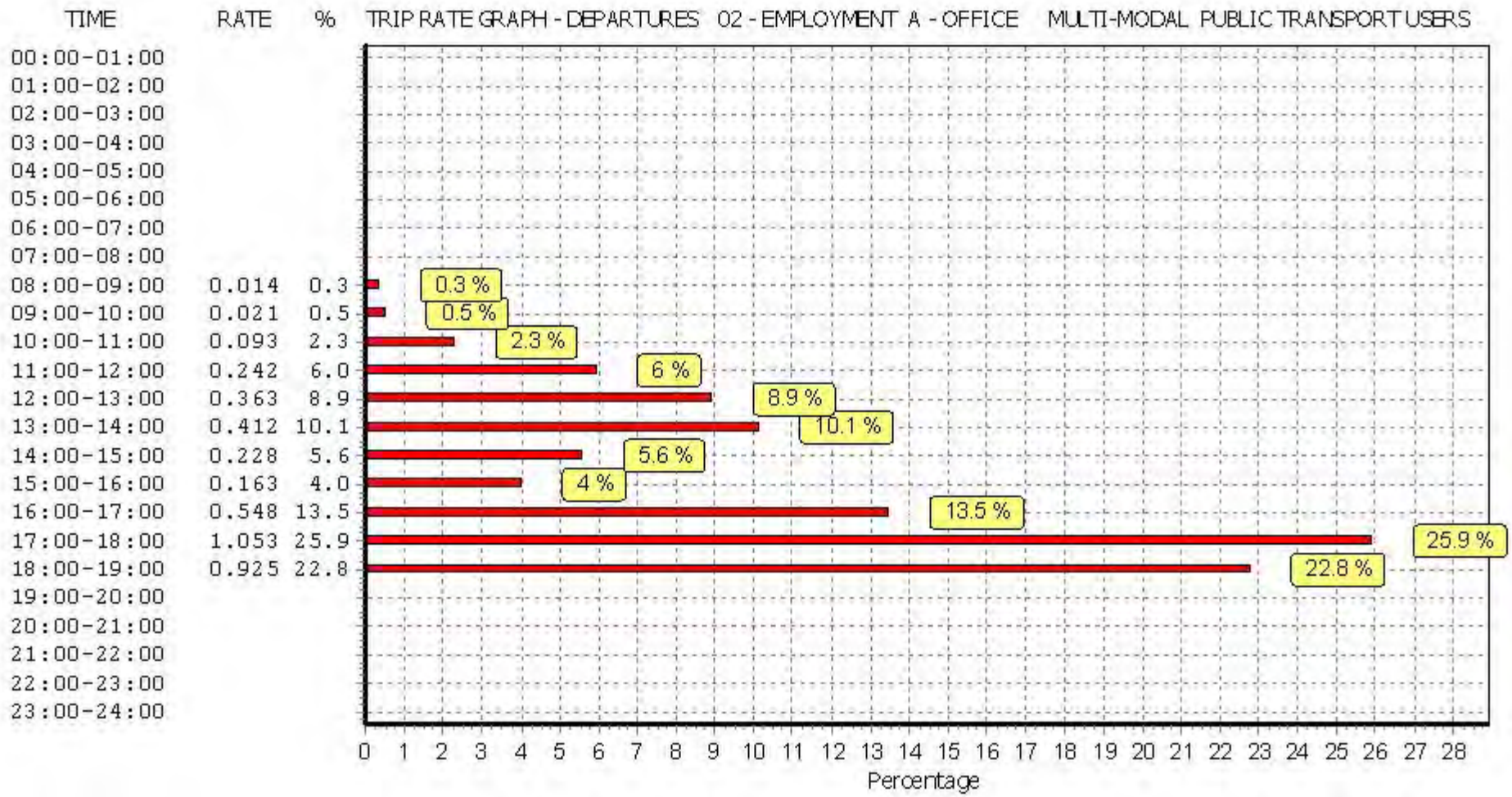
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	4685	0.036	3	4685	0.000	3	4685	0.036
07:30 - 08:00	3	4685	0.093	3	4685	0.000	3	4685	0.093
08:00 - 08:30	3	4685	0.263	3	4685	0.014	3	4685	0.277
08:30 - 09:00	3	4685	0.797	3	4685	0.000	3	4685	0.797
09:00 - 09:30	3	4685	0.854	3	4685	0.014	3	4685	0.868
09:30 - 10:00	3	4685	0.498	3	4685	0.007	3	4685	0.505
10:00 - 10:30	3	4685	0.384	3	4685	0.050	3	4685	0.434
10:30 - 11:00	3	4685	0.306	3	4685	0.043	3	4685	0.349
11:00 - 11:30	3	4685	0.093	3	4685	0.128	3	4685	0.221
11:30 - 12:00	3	4685	0.128	3	4685	0.114	3	4685	0.242
12:00 - 12:30	3	4685	0.078	3	4685	0.206	3	4685	0.284
12:30 - 13:00	3	4685	0.093	3	4685	0.157	3	4685	0.250
13:00 - 13:30	3	4685	0.135	3	4685	0.213	3	4685	0.348
13:30 - 14:00	3	4685	0.107	3	4685	0.199	3	4685	0.306
14:00 - 14:30	3	4685	0.157	3	4685	0.114	3	4685	0.271
14:30 - 15:00	3	4685	0.128	3	4685	0.114	3	4685	0.242
15:00 - 15:30	3	4685	0.071	3	4685	0.078	3	4685	0.149
15:30 - 16:00	3	4685	0.036	3	4685	0.085	3	4685	0.121
16:00 - 16:30	3	4685	0.036	3	4685	0.228	3	4685	0.264
16:30 - 17:00	3	4685	0.021	3	4685	0.320	3	4685	0.341
17:00 - 17:30	3	4685	0.007	3	4685	0.470	3	4685	0.477
17:30 - 18:00	3	4685	0.007	3	4685	0.583	3	4685	0.590
18:00 - 18:30	3	4685	0.000	3	4685	0.655	3	4685	0.655
18:30 - 19:00	3	4685	0.007	3	4685	0.270	3	4685	0.277
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			4.335			4.062			8.397

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

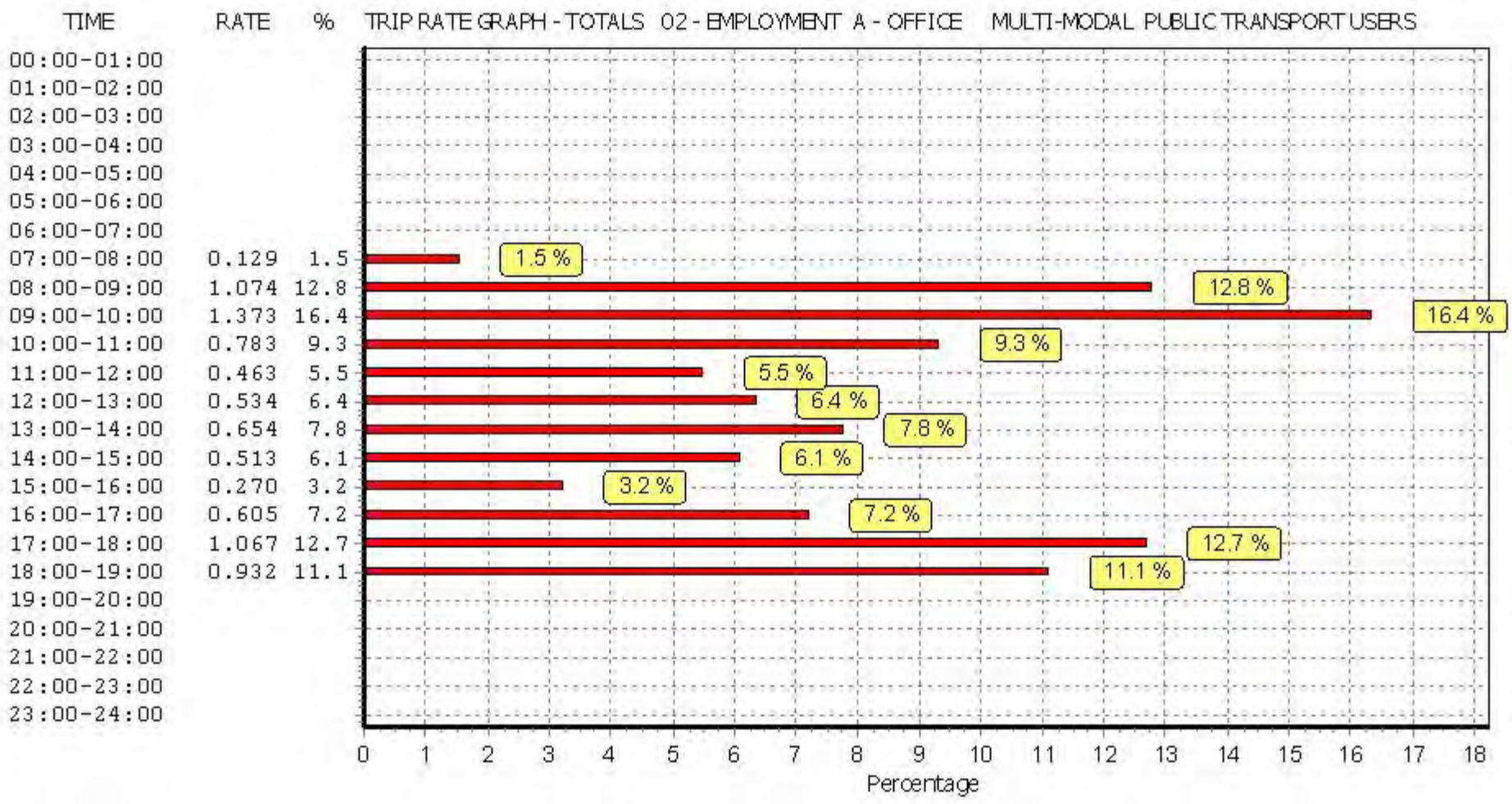
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



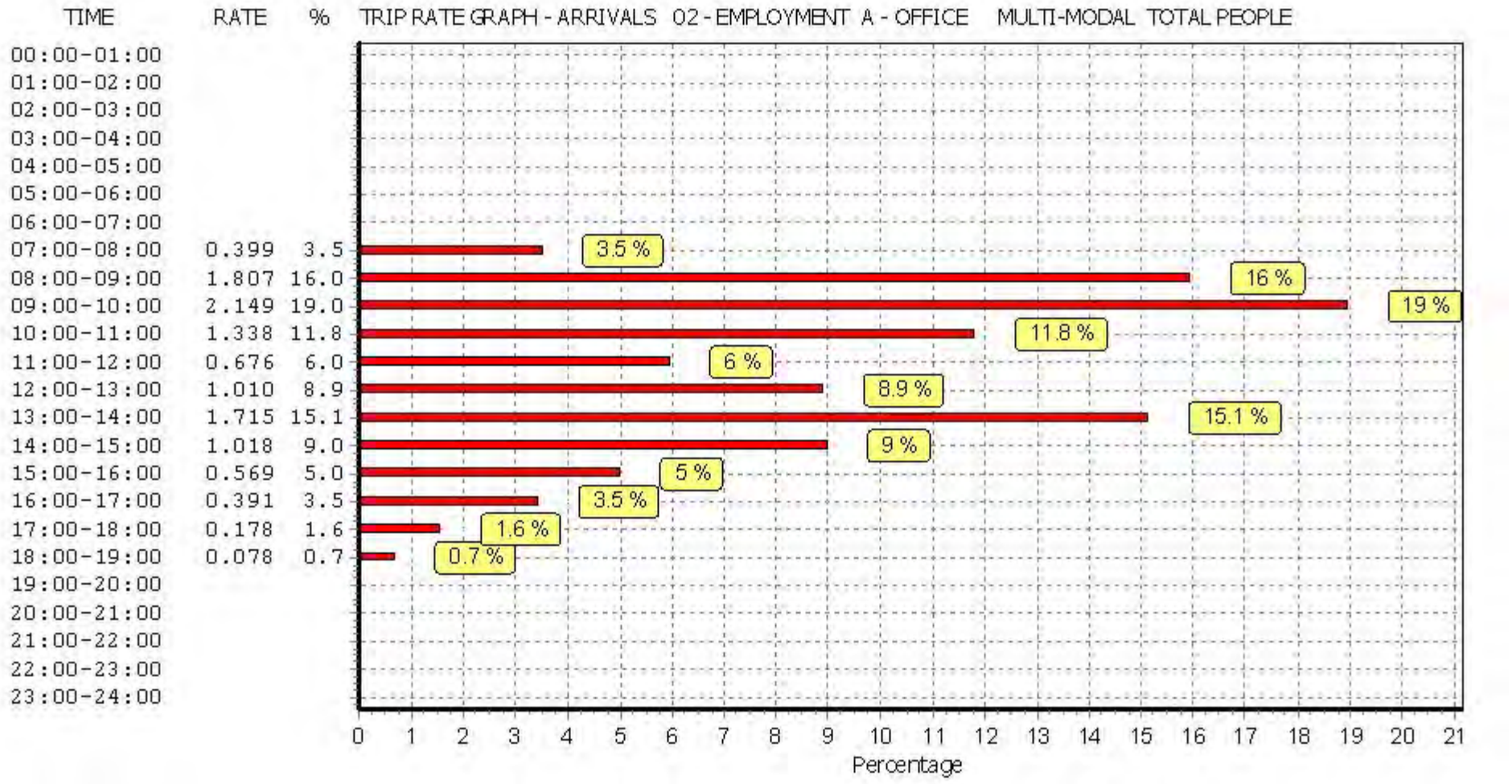
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

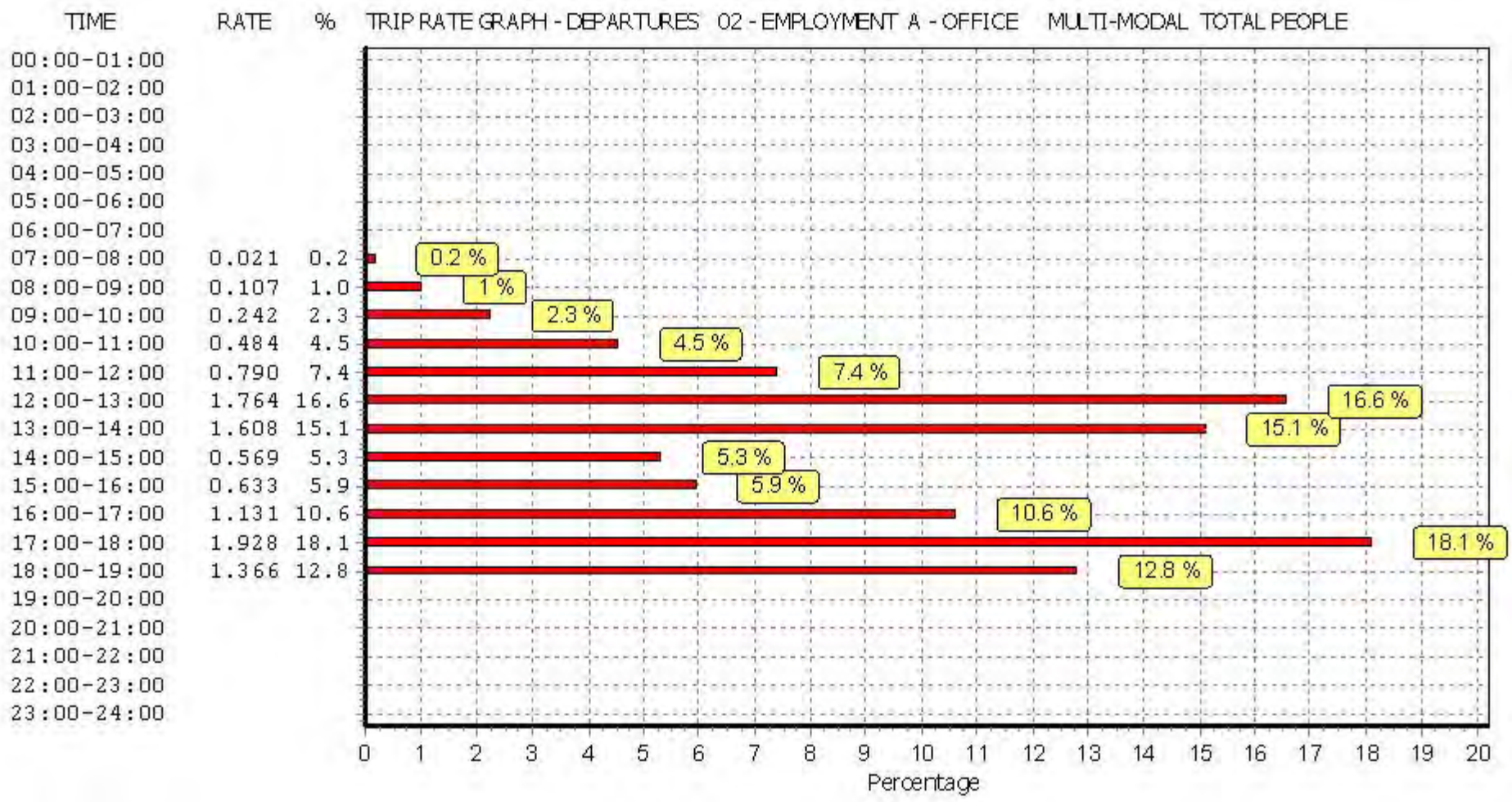
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	4685	0.100	3	4685	0.007	3	4685	0.107
07:30 - 08:00	3	4685	0.299	3	4685	0.014	3	4685	0.313
08:00 - 08:30	3	4685	0.626	3	4685	0.057	3	4685	0.683
08:30 - 09:00	3	4685	1.181	3	4685	0.050	3	4685	1.231
09:00 - 09:30	3	4685	1.274	3	4685	0.157	3	4685	1.431
09:30 - 10:00	3	4685	0.875	3	4685	0.085	3	4685	0.960
10:00 - 10:30	3	4685	0.776	3	4685	0.206	3	4685	0.982
10:30 - 11:00	3	4685	0.562	3	4685	0.278	3	4685	0.840
11:00 - 11:30	3	4685	0.370	3	4685	0.384	3	4685	0.754
11:30 - 12:00	3	4685	0.306	3	4685	0.406	3	4685	0.712
12:00 - 12:30	3	4685	0.441	3	4685	0.939	3	4685	1.380
12:30 - 13:00	3	4685	0.569	3	4685	0.825	3	4685	1.394
13:00 - 13:30	3	4685	0.776	3	4685	1.010	3	4685	1.786
13:30 - 14:00	3	4685	0.939	3	4685	0.598	3	4685	1.537
14:00 - 14:30	3	4685	0.676	3	4685	0.327	3	4685	1.003
14:30 - 15:00	3	4685	0.342	3	4685	0.242	3	4685	0.584
15:00 - 15:30	3	4685	0.256	3	4685	0.263	3	4685	0.519
15:30 - 16:00	3	4685	0.313	3	4685	0.370	3	4685	0.683
16:00 - 16:30	3	4685	0.149	3	4685	0.519	3	4685	0.668
16:30 - 17:00	3	4685	0.242	3	4685	0.612	3	4685	0.854
17:00 - 17:30	3	4685	0.128	3	4685	0.953	3	4685	1.081
17:30 - 18:00	3	4685	0.050	3	4685	0.975	3	4685	1.025
18:00 - 18:30	3	4685	0.057	3	4685	0.989	3	4685	1.046
18:30 - 19:00	3	4685	0.021	3	4685	0.377	3	4685	0.398
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			11.328			10.643			21.971

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

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



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



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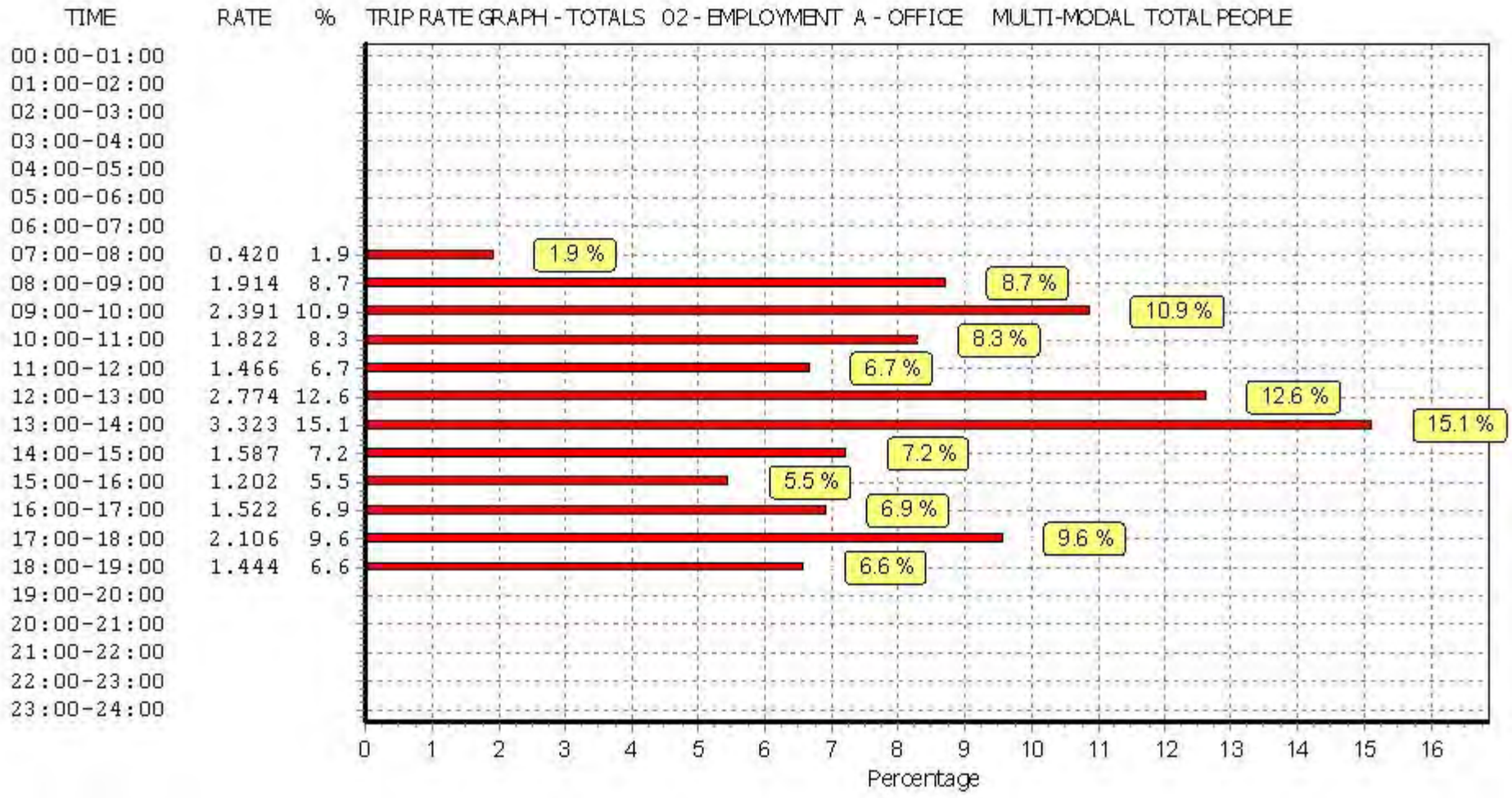


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

Filtering Summary

Land Use	03/C	RESIDENTIAL/FLATS PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	200-493 DWELLS	
Actual Trip Rate Calculation Parameter Range	203-493 DWELLS	
Date Range	Minimum: 01/01/13	Maximum: 14/11/19
Parking Spaces Range	All Surveys Included	
Parking Spaces Per Dwelling Range:	All Surveys Included	
Bedrooms Per Dwelling Range:	All Surveys Included	
Percentage of dwellings privately owned:	All Surveys Included	
Days of the week selected	Tuesday	3
	Wednesday	2
	Thursday	1
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	2
	Edge of Town	1
	Neighbourhood Centre (PPS6 Local Centre)	3
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	10,001 to 15,000	1
	15,001 to 20,000	1
	25,001 to 50,000	3
	100,001 or More	1
Population <5 Mile ranges selected	125,001 to 250,000	1
	250,001 to 500,000	1
	500,001 or More	4
Car Ownership <5 Mile ranges selected	0.6 to 1.0	5
	1.1 to 1.5	1
PTAL Rating	2 Poor	2
	3 Moderate	1
	5 Very Good	2
	6a Excellent	1

Calculation Reference: AUDIT-700101-210525-0523

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON		
	BE	BEXLEY	1 days
	BT	BRENT	1 days
	HG	HARINGEY	1 days
	HO	HOUNSLOW	1 days
	HV	HAVERING	1 days
	SK	SOUTHWARK	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 203 to 493 (units:)
Range Selected by User: 200 to 493 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Monday-Friday 0700-1900
Include days where PT not known: Yes
Range: 200 to 2880

Date Range: 01/01/13 to 14/11/19

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

Selected survey days:

Tuesday	3 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 undertaking using machines.

Selected Locations:

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

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

Selected Location Sub Categories:

Industrial Zone	1
Development Zone	2
Residential Zone	2
Built-Up Zone	1

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

Secondary Filtering selection:

Use Class:

C3	6 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	3 days
100,001 or More	1 days

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

Population within 5 miles:

125,001 to 250,000	1 days
250,001 to 500,000	1 days
500,001 or More	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	5 days
1.1 to 1.5	1 days

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

Travel Plan:

Yes	4 days
No	2 days

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

PTAL Rating:

2 Poor	2 days
3 Moderate	1 days
5 Very Good	2 days
6a Excellent	1 days

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

LIST OF SITES relevant to selection parameters

Site(1):	BE-03-C-02	Site area:	3.04 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	402
Location:	BELVEDERE	Housing density:	197
Postcode:	DA17 6FB	Total Bedrooms:	699
Main Location Type:	Edge of Town	Survey Date:	19/09/18
Sub-Location Type:	Industrial Zone	Survey Day:	Wednesday
PTAL:	2 Poor	Parking Spaces:	550

Site(2):	BT-03-C-02	Site area:	0.94 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	472
Location:	WEMBLEY	Housing density:	549
Postcode:	HA9 0NH	Total Bedrooms:	719
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	30/11/16
Sub-Location Type:	Development Zone	Survey Day:	Wednesday
PTAL:	5 Very Good	Parking Spaces:	151

Site(3):	HG-03-C-01	Site area:	2.66 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	255
Location:	TOTTENHAM HALE	Housing density:	181
Postcode:	N17 9DJ	Total Bedrooms:	378
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	18/06/19
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	5 Very Good	Parking Spaces:	110

Site(4):	HO-03-C-04	Site area:	1.02 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	203
Location:	ISLEWORTH	Housing density:	274
Postcode:	TW7 5FR	Total Bedrooms:	354
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	03/07/18
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	3 Moderate	Parking Spaces:	142

Site(5):	HV-03-C-02	Site area:	3.48 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	493
Location:	ROMFORD	Housing density:	258
Postcode:	RM7 0GR	Total Bedrooms:	1231
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	22/11/16
Sub-Location Type:	Built-Up Zone	Survey Day:	Tuesday
PTAL:	2 Poor	Parking Spaces:	246

Site(6):	SK-03-C-03	Site area:	1.21 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	233
Location:	SURREY QUAYS	Housing density:	231
Postcode:	SE16 7FU	Total Bedrooms:	439
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	14/11/19
Sub-Location Type:	Development Zone	Survey Day:	Thursday
PTAL:	6a Excellent	Parking Spaces:	

Trip Rates for Key Periods		Trips per 1 dwells DWELLS	
Period	Inbound	Outbound	Total
0800-0900	0.019	0.082	0.101
1700-1800	0.076	0.040	0.116

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.016	6	343	0.069	6	343	0.085
08:00 - 09:00	6	343	0.019	6	343	0.082	6	343	0.101
09:00 - 10:00	6	343	0.033	6	343	0.036	6	343	0.069
10:00 - 11:00	6	343	0.027	6	343	0.033	6	343	0.060
11:00 - 12:00	6	343	0.029	6	343	0.038	6	343	0.067
12:00 - 13:00	6	343	0.033	6	343	0.037	6	343	0.070
13:00 - 14:00	6	343	0.035	6	343	0.037	6	343	0.072
14:00 - 15:00	6	343	0.038	6	343	0.037	6	343	0.075
15:00 - 16:00	6	343	0.047	6	343	0.041	6	343	0.088
16:00 - 17:00	6	343	0.061	6	343	0.041	6	343	0.102
17:00 - 18:00	6	343	0.076	6	343	0.040	6	343	0.116
18:00 - 19:00	6	343	0.083	6	343	0.043	6	343	0.126
19:00 - 20:00	4	328	0.058	4	328	0.033	4	328	0.091
20:00 - 21:00	4	328	0.055	4	328	0.034	4	328	0.089
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.610			0.601			1.211

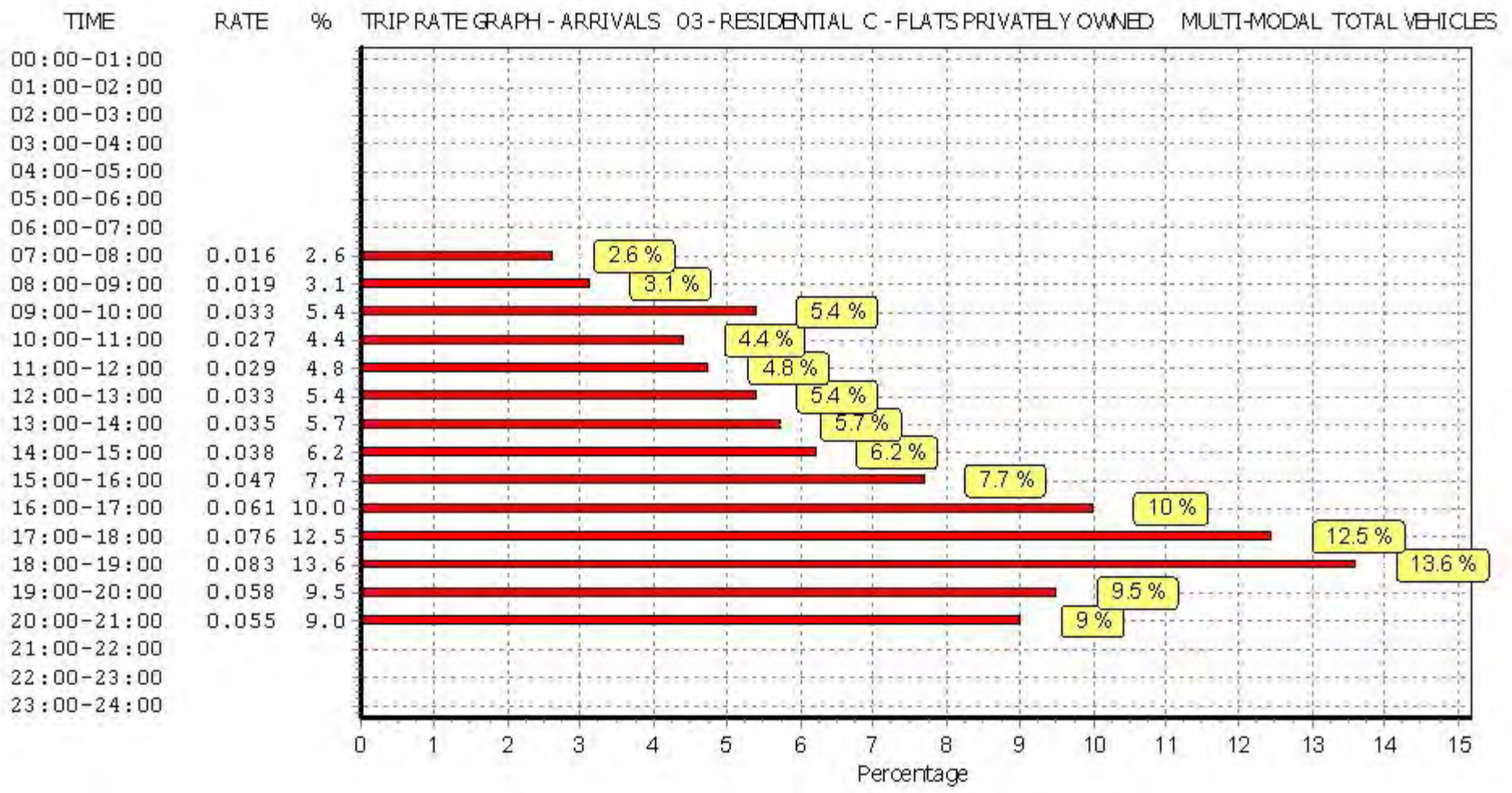
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

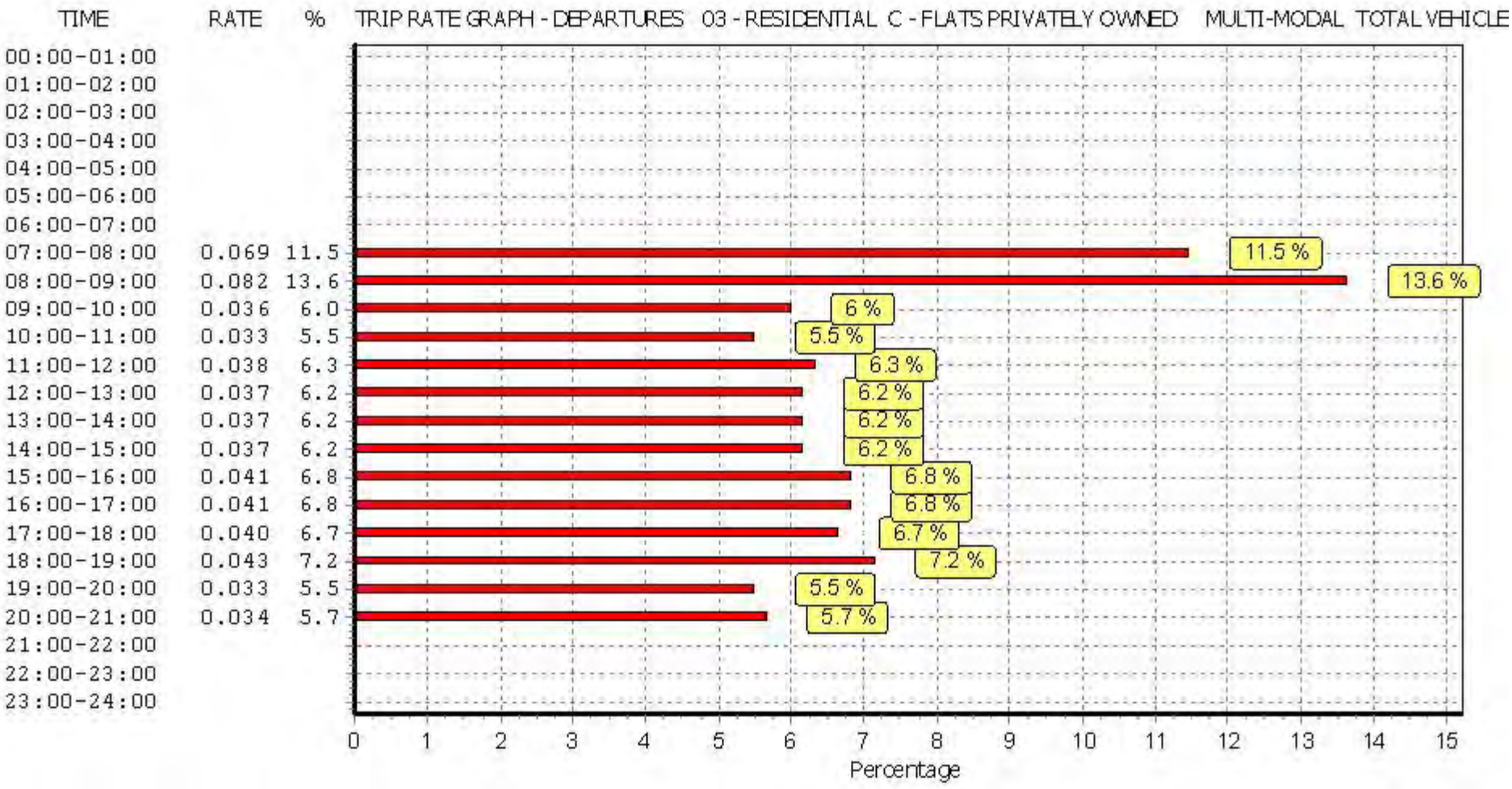
Parameter summary

Trip rate parameter range selected:	203 - 493 (units:)
Survey date date range:	01/01/13 - 14/11/19
Number of weekdays (Monday-Friday):	6
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



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



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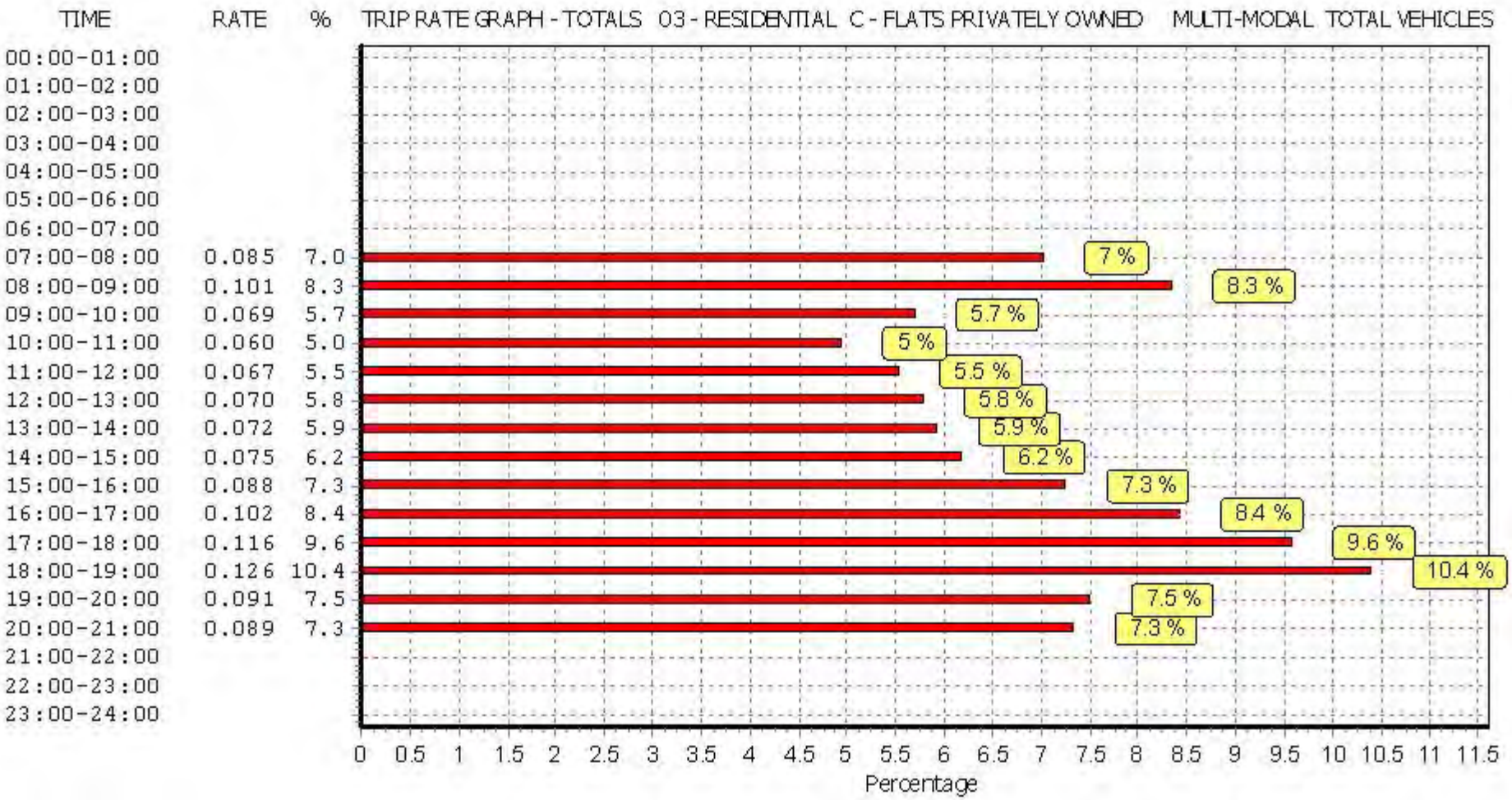

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.001	6	343	0.001	6	343	0.002
08:00 - 09:00	6	343	0.002	6	343	0.003	6	343	0.005
09:00 - 10:00	6	343	0.001	6	343	0.001	6	343	0.002
10:00 - 11:00	6	343	0.001	6	343	0.001	6	343	0.002
11:00 - 12:00	6	343	0.001	6	343	0.001	6	343	0.002
12:00 - 13:00	6	343	0.001	6	343	0.001	6	343	0.002
13:00 - 14:00	6	343	0.002	6	343	0.002	6	343	0.004
14:00 - 15:00	6	343	0.003	6	343	0.002	6	343	0.005
15:00 - 16:00	6	343	0.000	6	343	0.001	6	343	0.001
16:00 - 17:00	6	343	0.001	6	343	0.001	6	343	0.002
17:00 - 18:00	6	343	0.001	6	343	0.001	6	343	0.002
18:00 - 19:00	6	343	0.002	6	343	0.002	6	343	0.004
19:00 - 20:00	4	328	0.004	4	328	0.003	4	328	0.007
20:00 - 21:00	4	328	0.002	4	328	0.002	4	328	0.004
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.022			0.022			0.044

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

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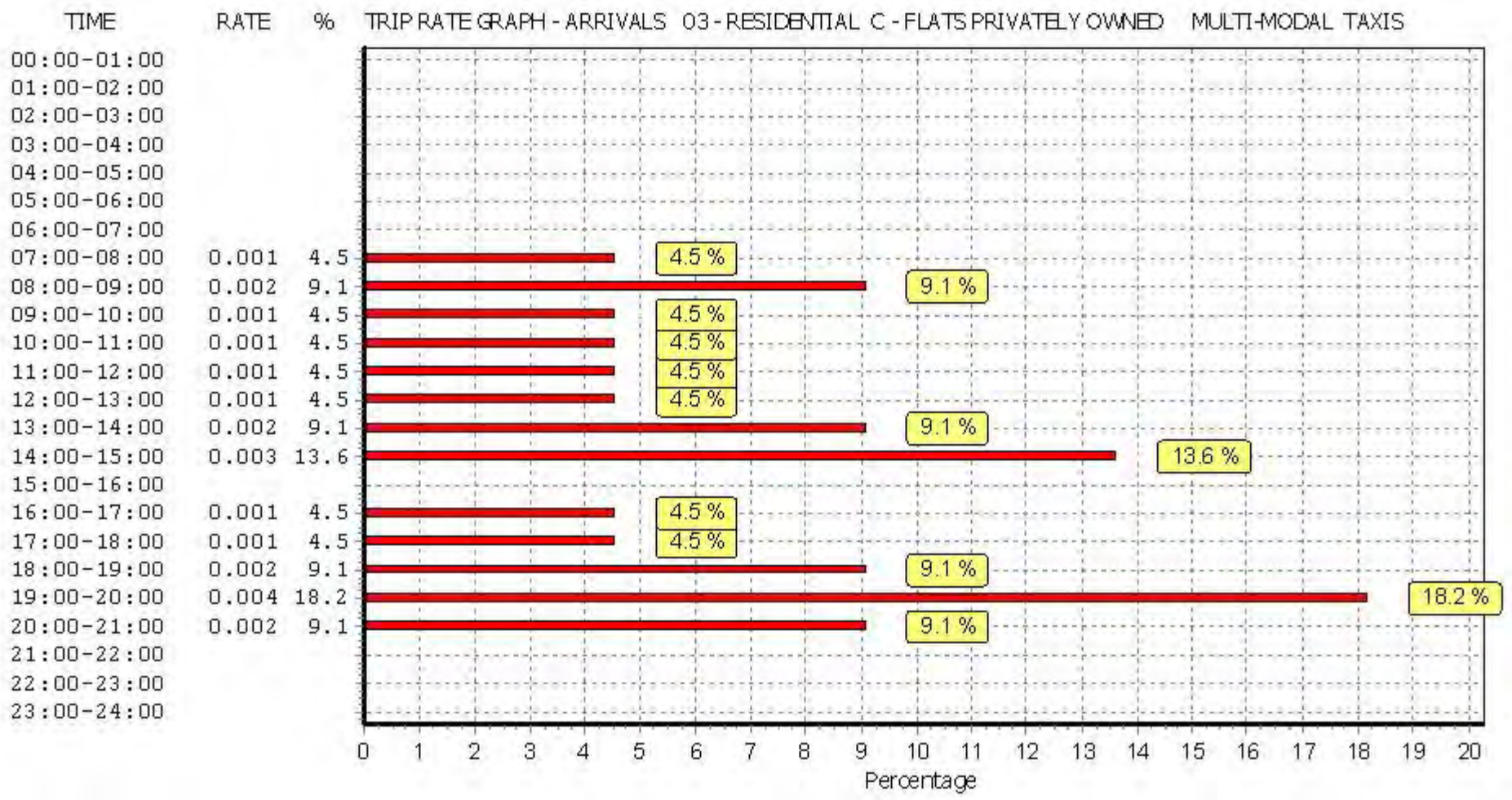

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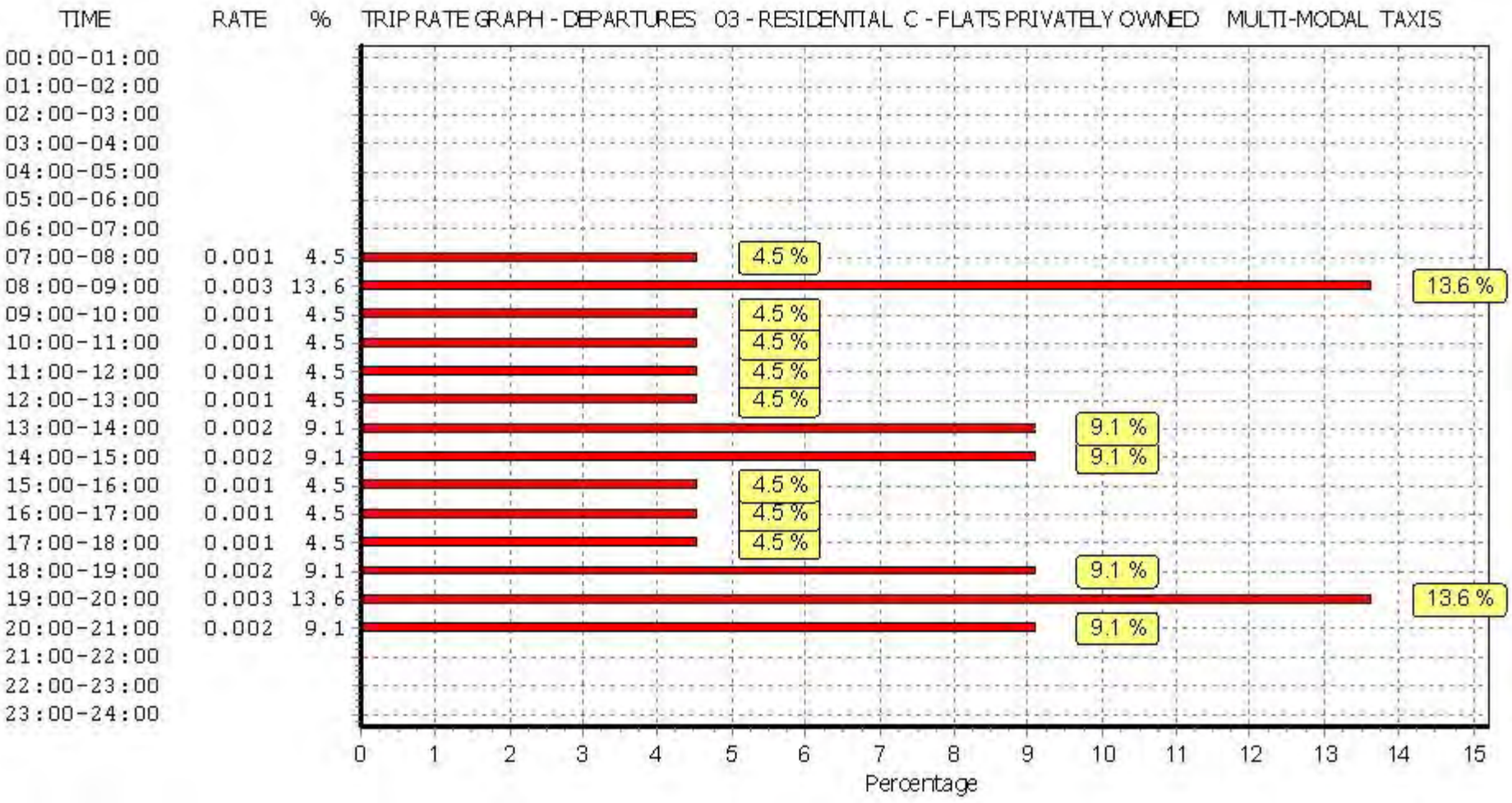

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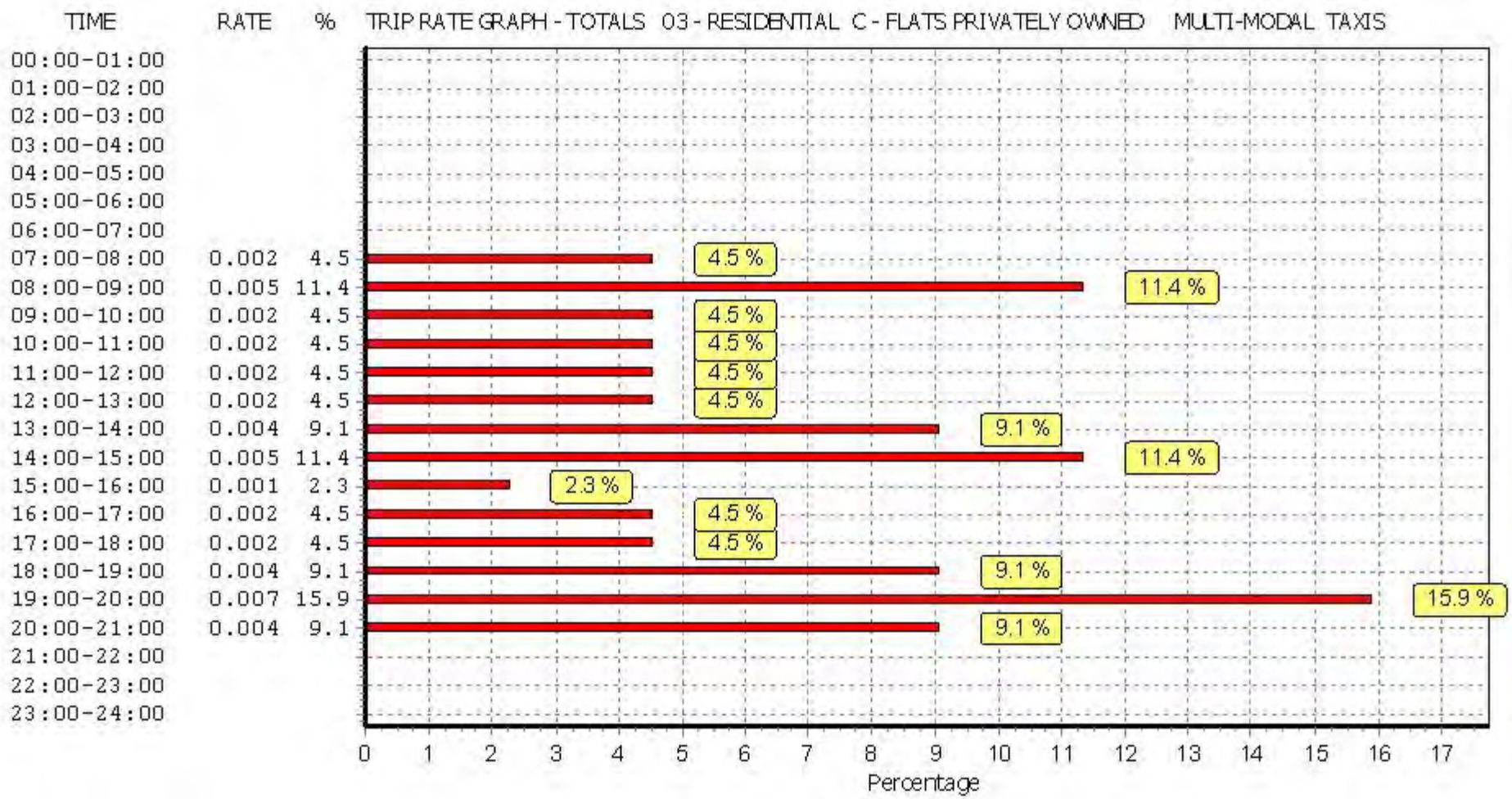

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.001	6	343	0.001	6	343	0.002
08:00 - 09:00	6	343	0.001	6	343	0.000	6	343	0.001
09:00 - 10:00	6	343	0.002	6	343	0.002	6	343	0.004
10:00 - 11:00	6	343	0.002	6	343	0.001	6	343	0.003
11:00 - 12:00	6	343	0.001	6	343	0.002	6	343	0.003
12:00 - 13:00	6	343	0.000	6	343	0.001	6	343	0.001
13:00 - 14:00	6	343	0.000	6	343	0.000	6	343	0.000
14:00 - 15:00	6	343	0.002	6	343	0.002	6	343	0.004
15:00 - 16:00	6	343	0.000	6	343	0.000	6	343	0.000
16:00 - 17:00	6	343	0.000	6	343	0.000	6	343	0.000
17:00 - 18:00	6	343	0.001	6	343	0.000	6	343	0.001
18:00 - 19:00	6	343	0.000	6	343	0.000	6	343	0.000
19:00 - 20:00	4	328	0.000	4	328	0.000	4	328	0.000
20:00 - 21:00	4	328	0.000	4	328	0.000	4	328	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.009			0.019

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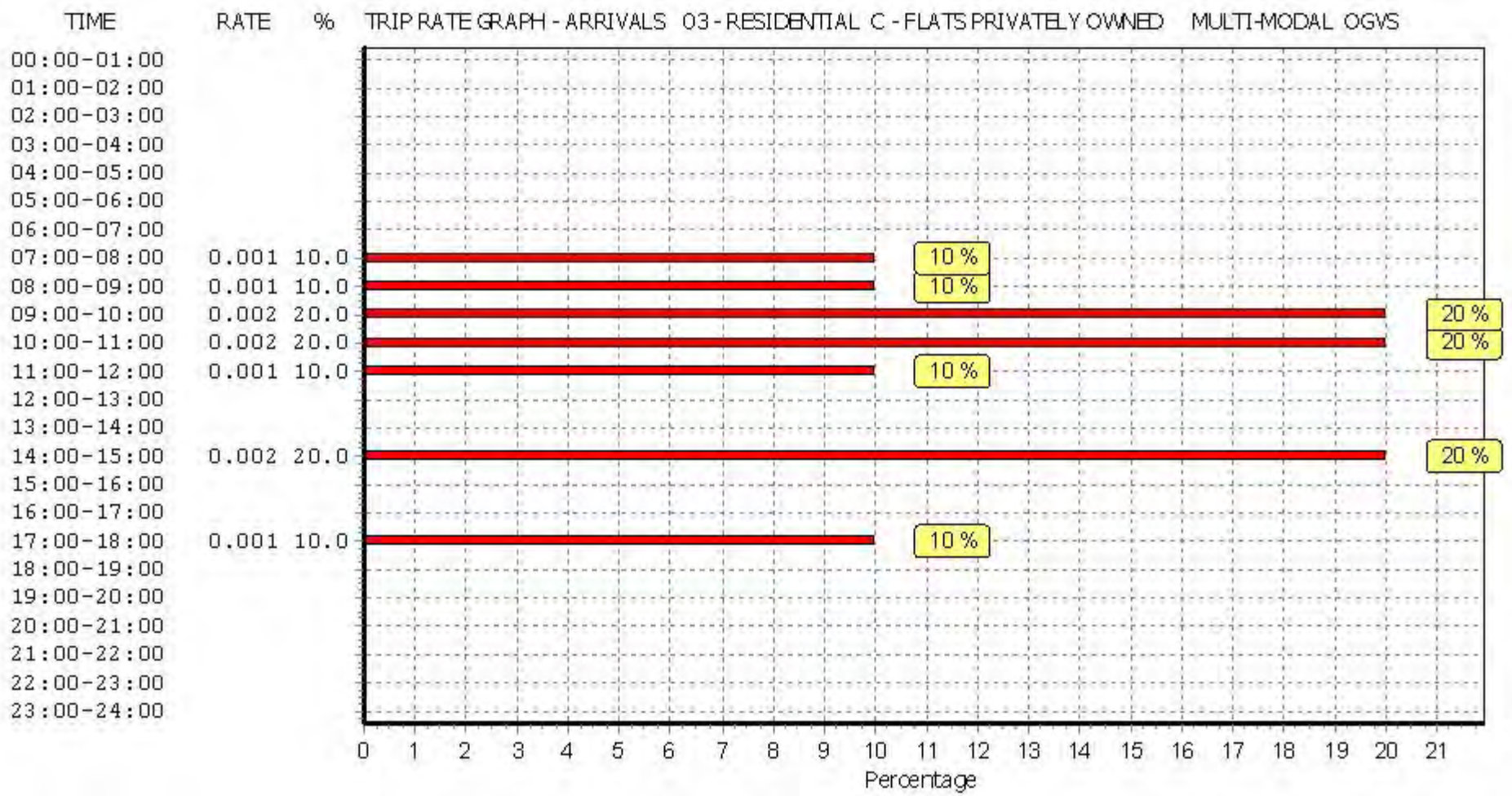

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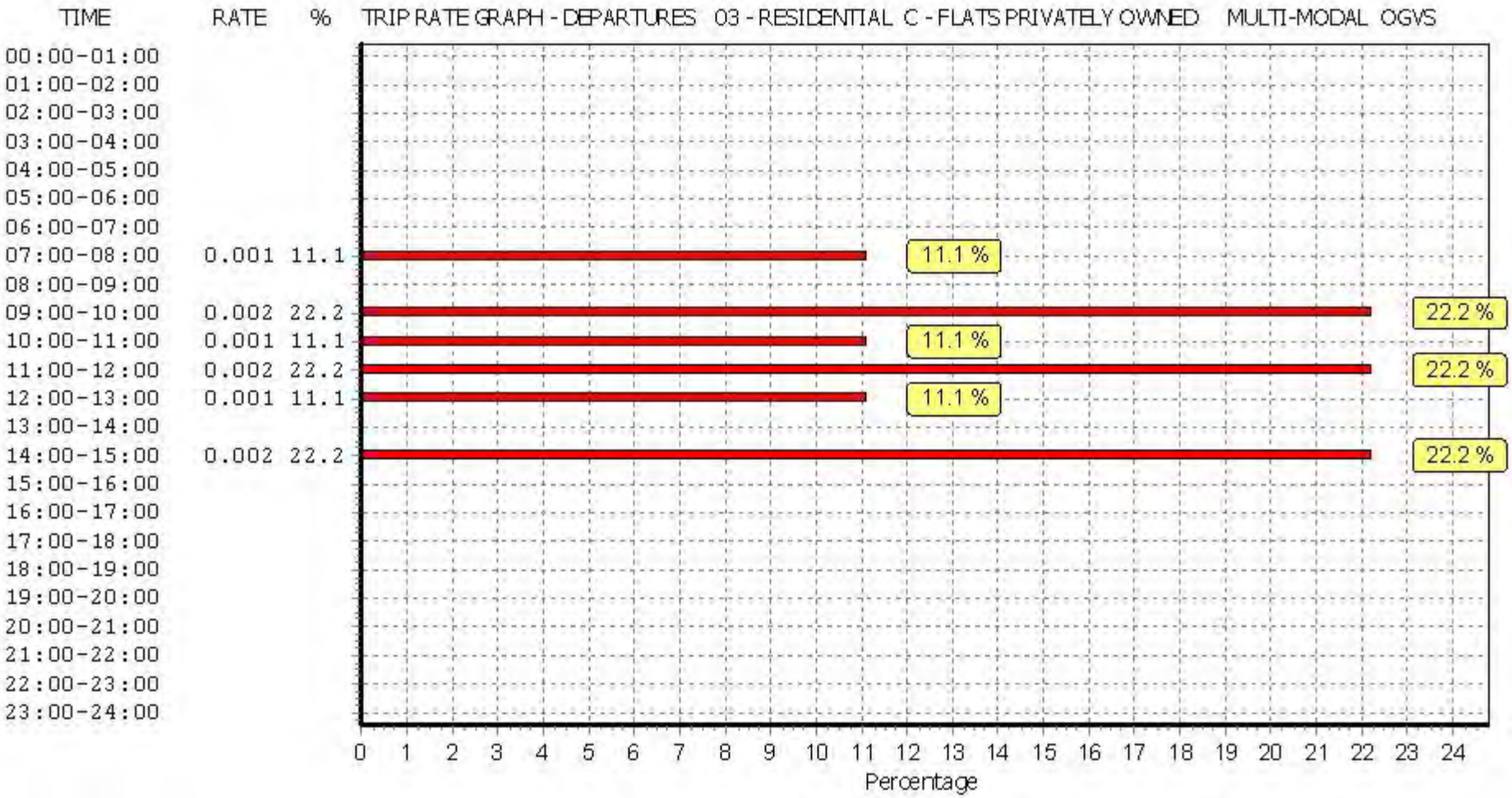

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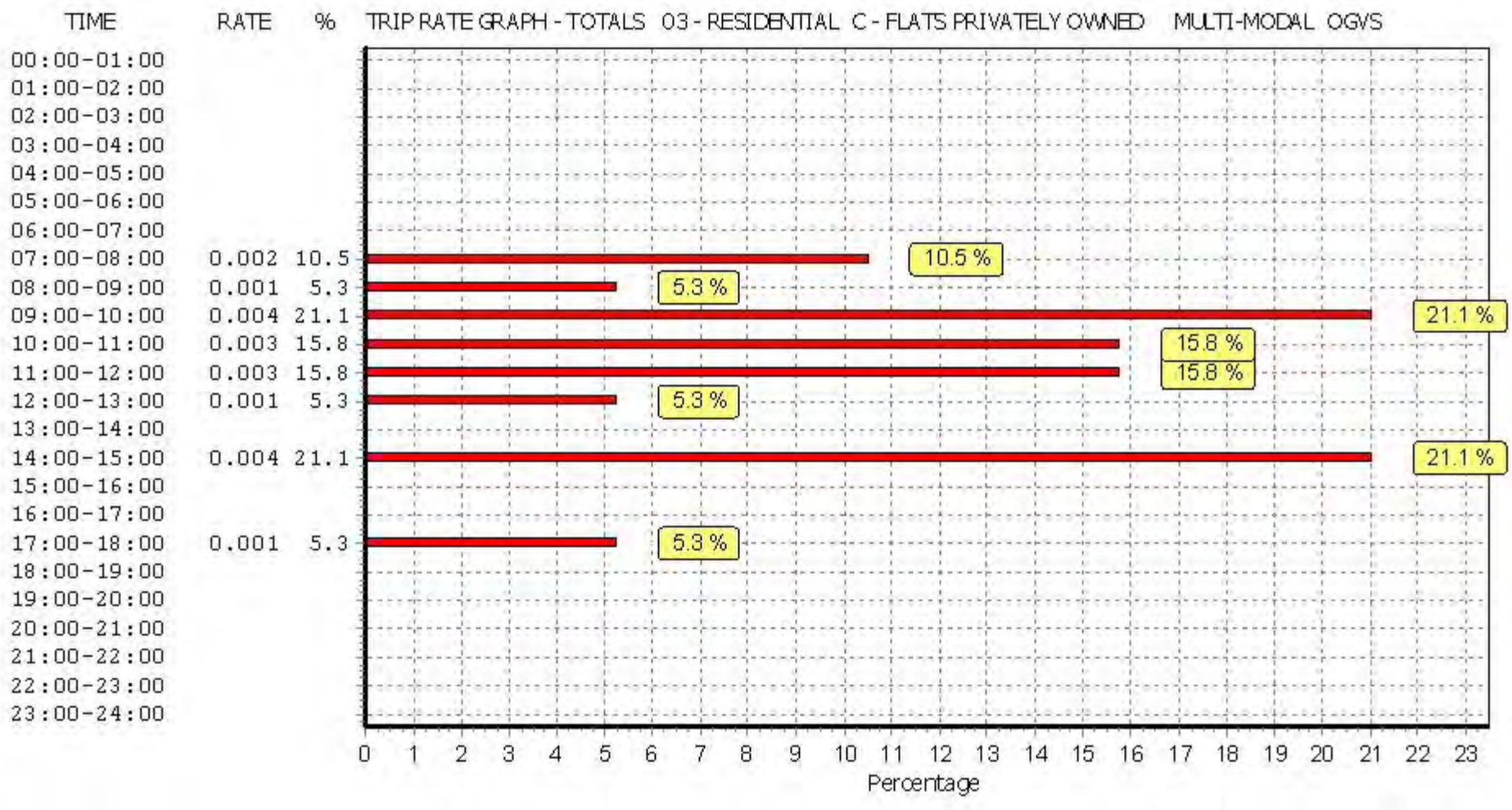

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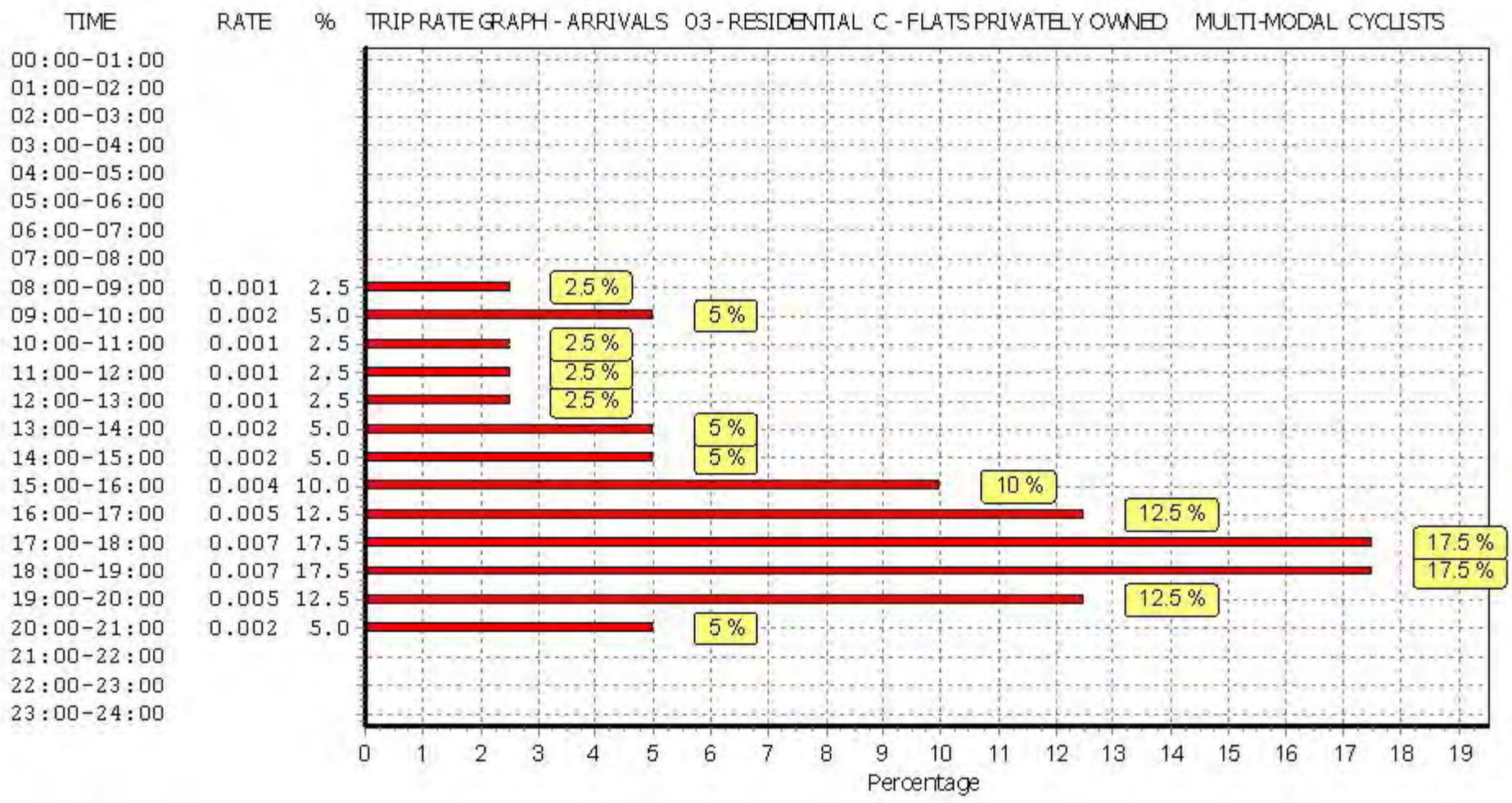
TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

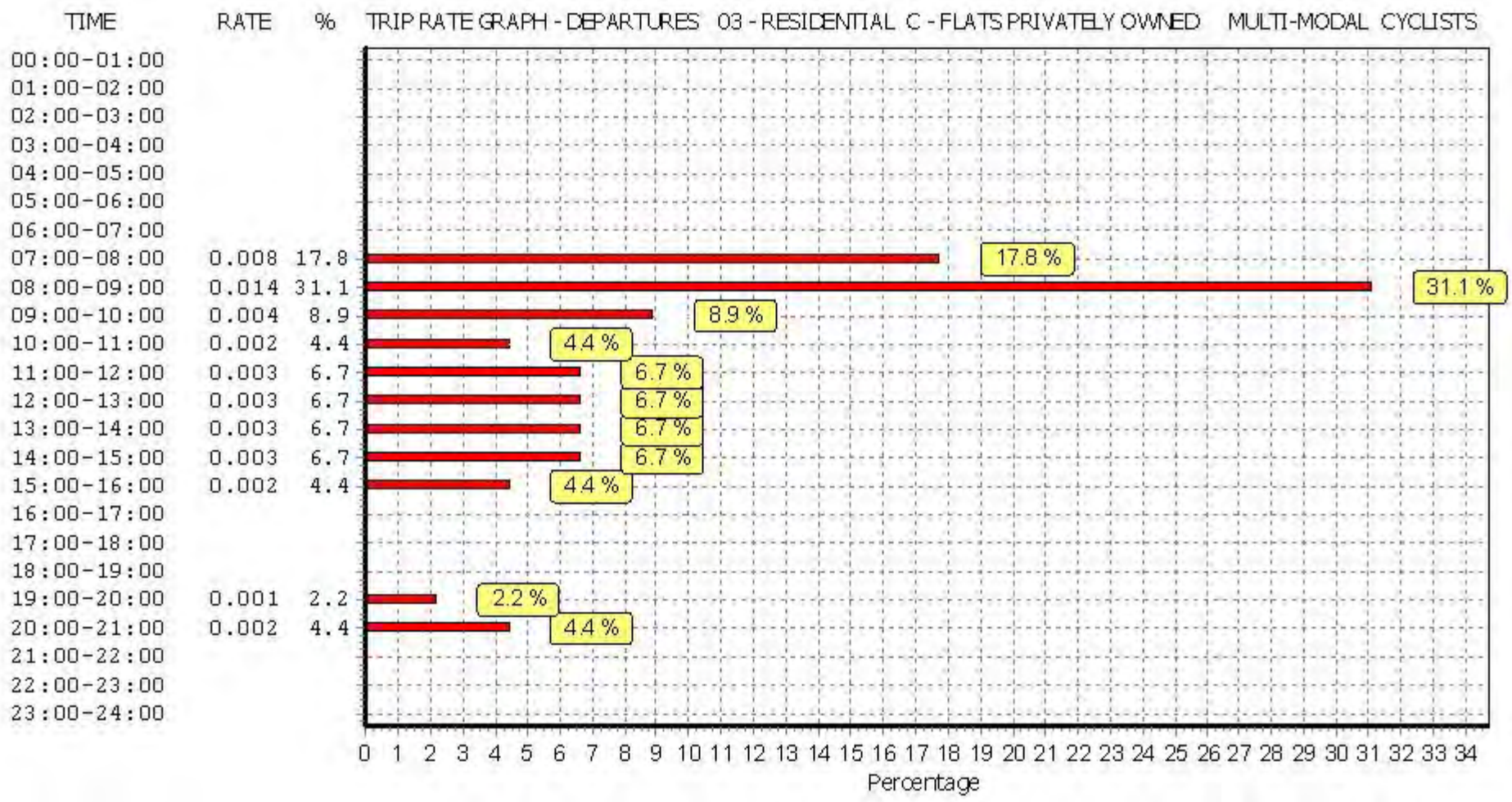
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.000	6	343	0.008	6	343	0.008
08:00 - 09:00	6	343	0.001	6	343	0.014	6	343	0.015
09:00 - 10:00	6	343	0.002	6	343	0.004	6	343	0.006
10:00 - 11:00	6	343	0.001	6	343	0.002	6	343	0.003
11:00 - 12:00	6	343	0.001	6	343	0.003	6	343	0.004
12:00 - 13:00	6	343	0.001	6	343	0.003	6	343	0.004
13:00 - 14:00	6	343	0.002	6	343	0.003	6	343	0.005
14:00 - 15:00	6	343	0.002	6	343	0.003	6	343	0.005
15:00 - 16:00	6	343	0.004	6	343	0.002	6	343	0.006
16:00 - 17:00	6	343	0.005	6	343	0.000	6	343	0.005
17:00 - 18:00	6	343	0.007	6	343	0.000	6	343	0.007
18:00 - 19:00	6	343	0.007	6	343	0.000	6	343	0.007
19:00 - 20:00	4	328	0.005	4	328	0.001	4	328	0.006
20:00 - 21:00	4	328	0.002	4	328	0.002	4	328	0.004
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.040			0.045			0.085

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

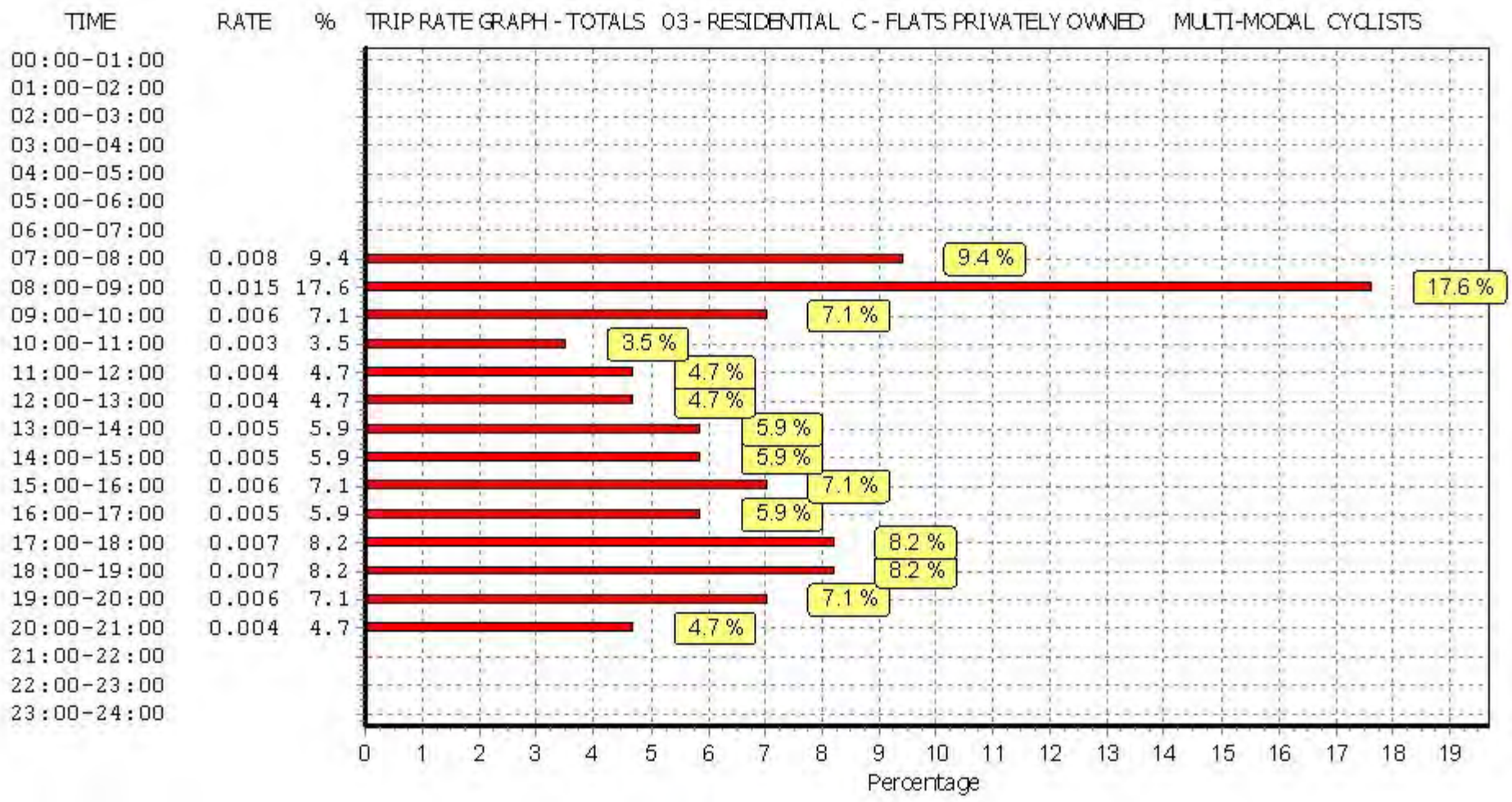
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



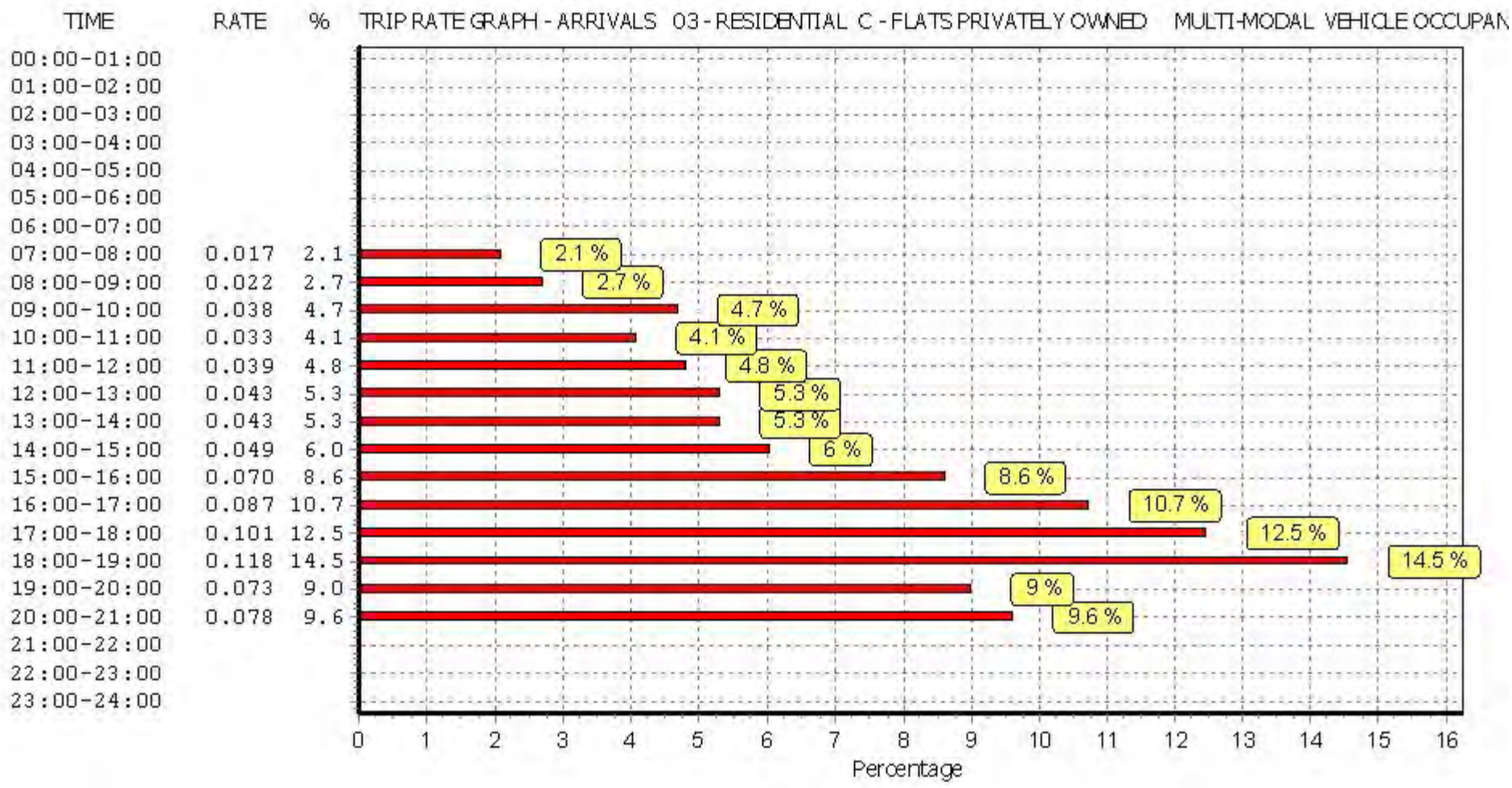
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

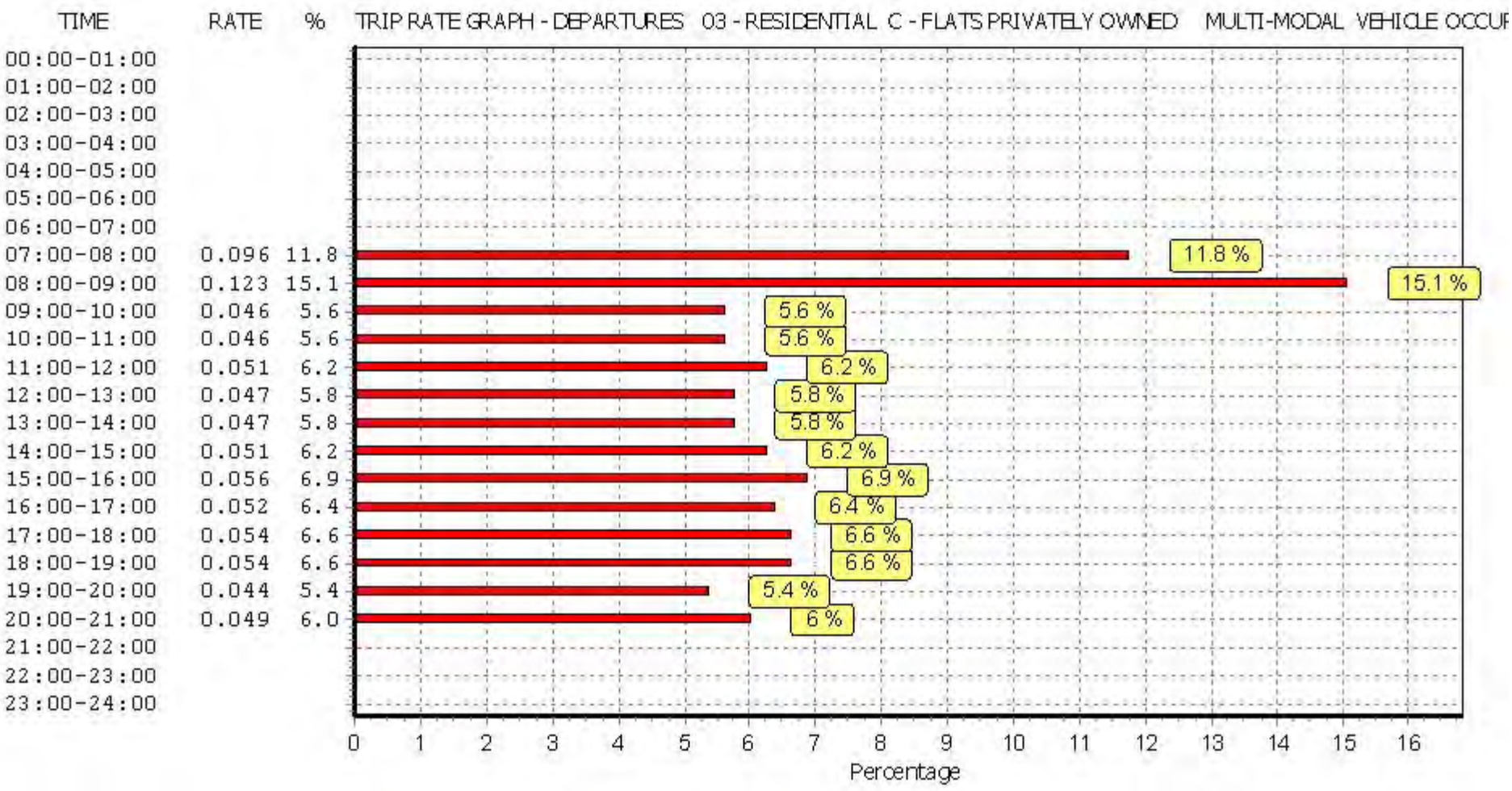
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.017	6	343	0.096	6	343	0.113
08:00 - 09:00	6	343	0.022	6	343	0.123	6	343	0.145
09:00 - 10:00	6	343	0.038	6	343	0.046	6	343	0.084
10:00 - 11:00	6	343	0.033	6	343	0.046	6	343	0.079
11:00 - 12:00	6	343	0.039	6	343	0.051	6	343	0.090
12:00 - 13:00	6	343	0.043	6	343	0.047	6	343	0.090
13:00 - 14:00	6	343	0.043	6	343	0.047	6	343	0.090
14:00 - 15:00	6	343	0.049	6	343	0.051	6	343	0.100
15:00 - 16:00	6	343	0.070	6	343	0.056	6	343	0.126
16:00 - 17:00	6	343	0.087	6	343	0.052	6	343	0.139
17:00 - 18:00	6	343	0.101	6	343	0.054	6	343	0.155
18:00 - 19:00	6	343	0.118	6	343	0.054	6	343	0.172
19:00 - 20:00	4	328	0.073	4	328	0.044	4	328	0.117
20:00 - 21:00	4	328	0.078	4	328	0.049	4	328	0.127
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.811			0.816			1.627

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

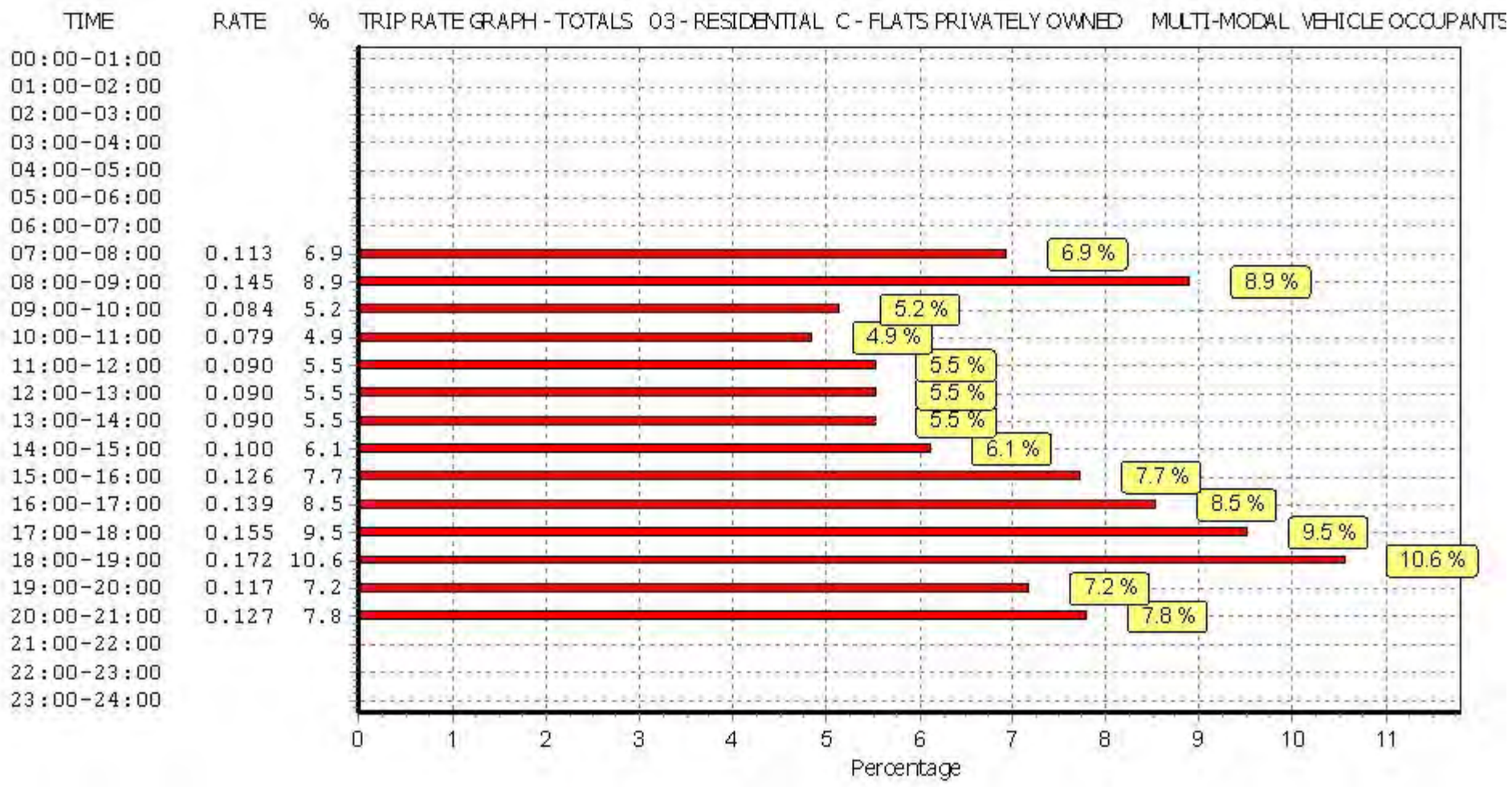
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



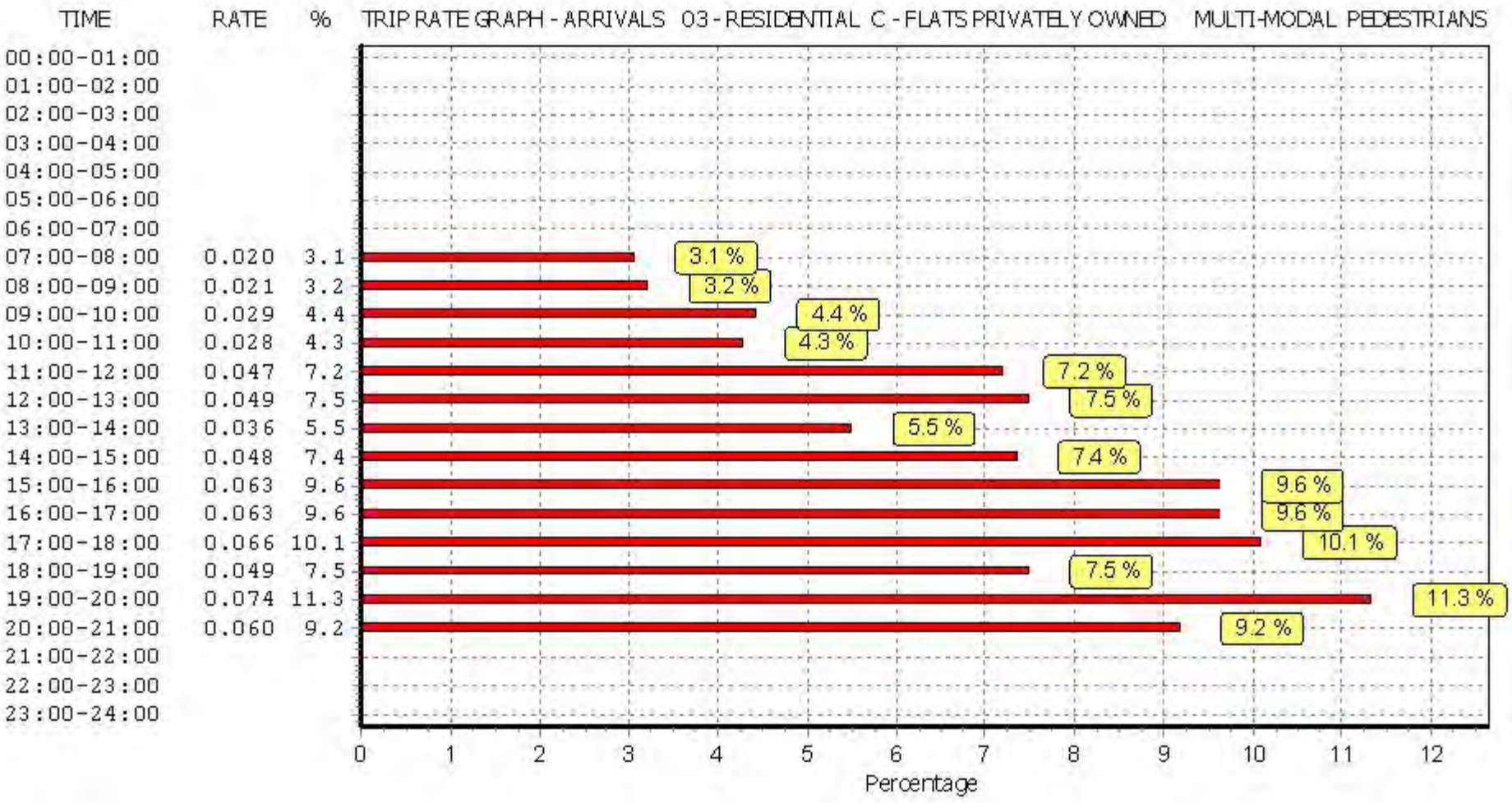
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

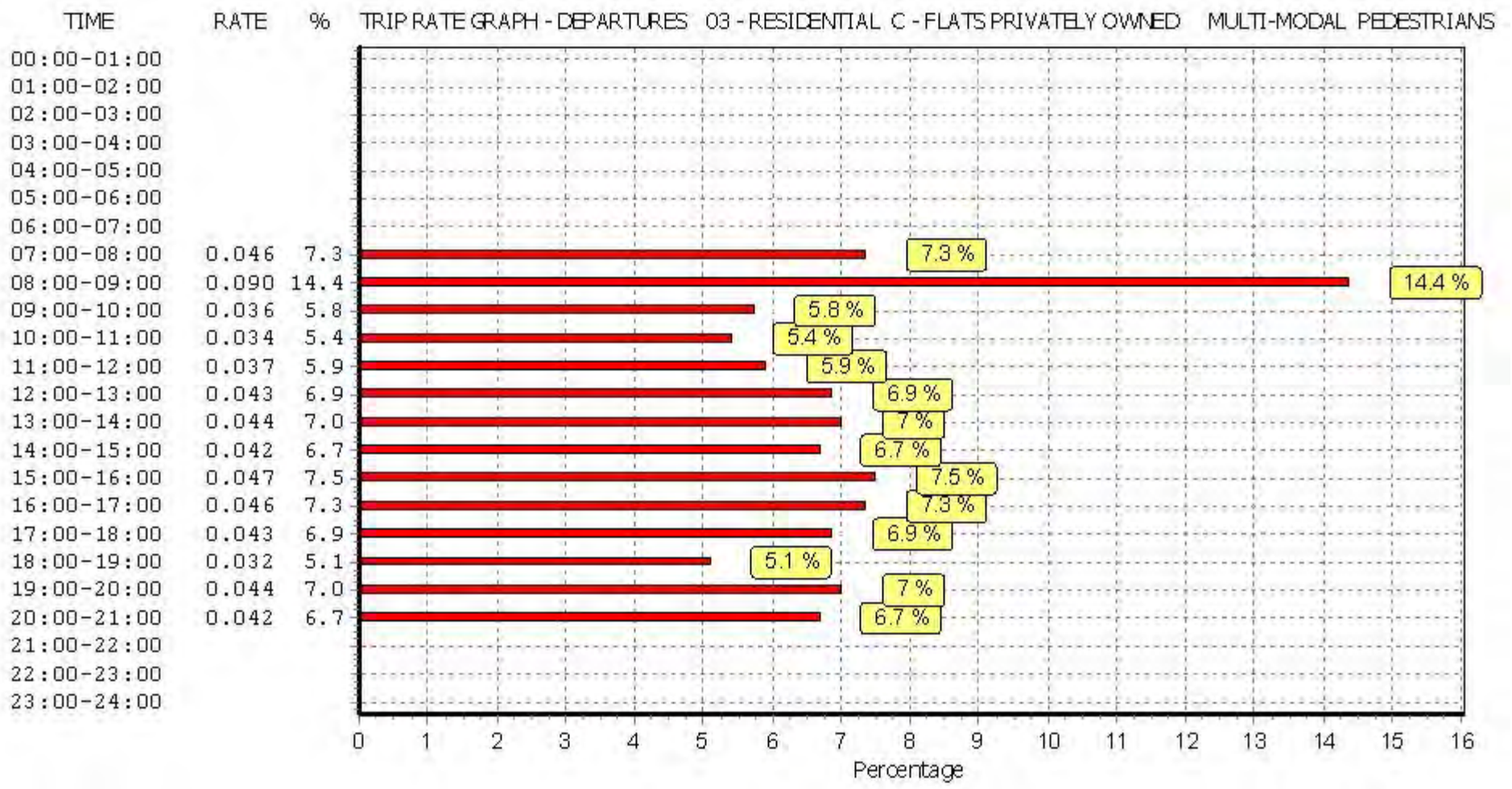
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.020	6	343	0.046	6	343	0.066
08:00 - 09:00	6	343	0.021	6	343	0.090	6	343	0.111
09:00 - 10:00	6	343	0.029	6	343	0.036	6	343	0.065
10:00 - 11:00	6	343	0.028	6	343	0.034	6	343	0.062
11:00 - 12:00	6	343	0.047	6	343	0.037	6	343	0.084
12:00 - 13:00	6	343	0.049	6	343	0.043	6	343	0.092
13:00 - 14:00	6	343	0.036	6	343	0.044	6	343	0.080
14:00 - 15:00	6	343	0.048	6	343	0.042	6	343	0.090
15:00 - 16:00	6	343	0.063	6	343	0.047	6	343	0.110
16:00 - 17:00	6	343	0.063	6	343	0.046	6	343	0.109
17:00 - 18:00	6	343	0.066	6	343	0.043	6	343	0.109
18:00 - 19:00	6	343	0.049	6	343	0.032	6	343	0.081
19:00 - 20:00	4	328	0.074	4	328	0.044	4	328	0.118
20:00 - 21:00	4	328	0.060	4	328	0.042	4	328	0.102
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.653			0.626			1.279

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

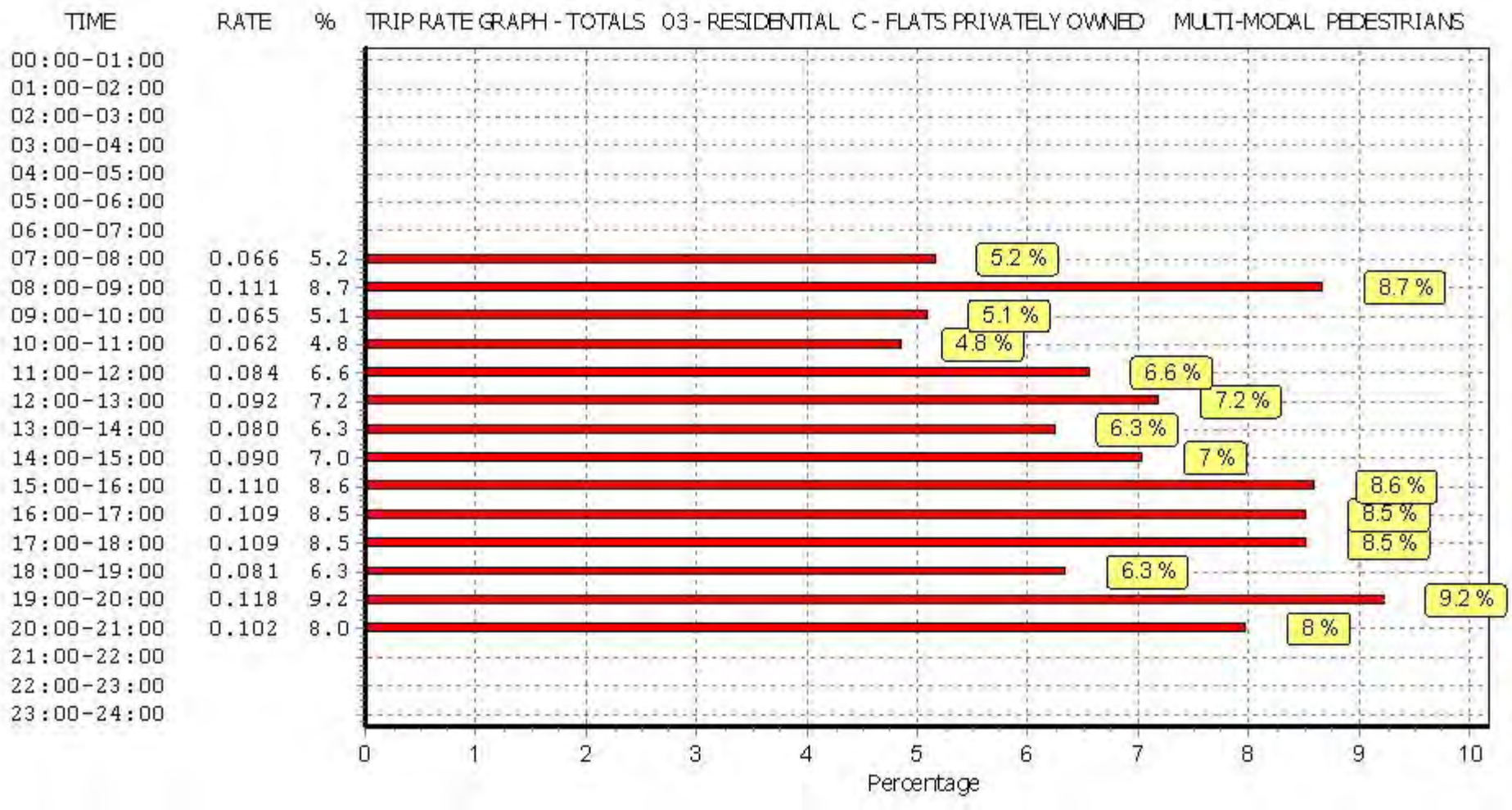
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



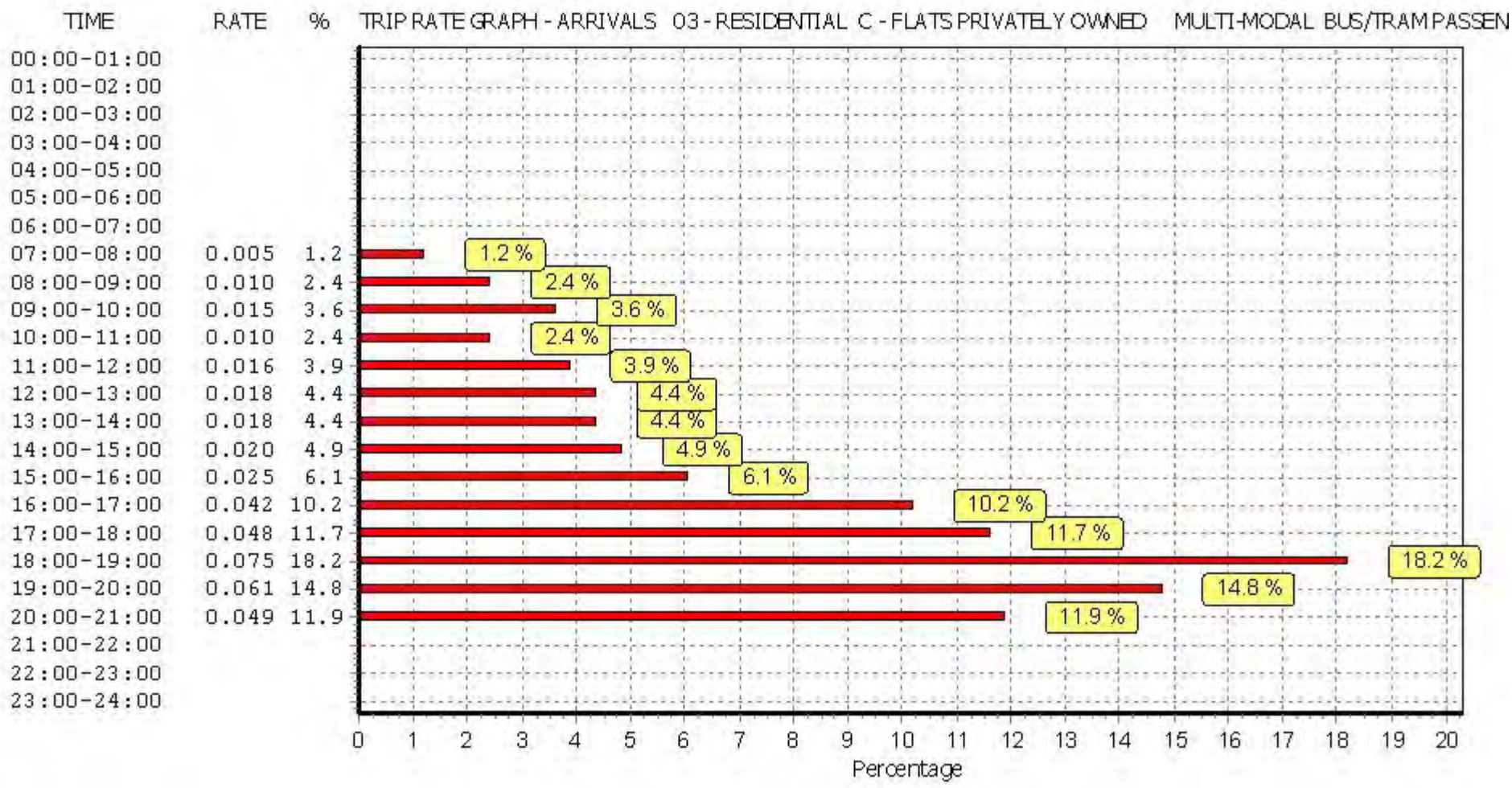
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.005	6	343	0.046	6	343	0.051
08:00 - 09:00	6	343	0.010	6	343	0.073	6	343	0.083
09:00 - 10:00	6	343	0.015	6	343	0.044	6	343	0.059
10:00 - 11:00	6	343	0.010	6	343	0.021	6	343	0.031
11:00 - 12:00	6	343	0.016	6	343	0.029	6	343	0.045
12:00 - 13:00	6	343	0.018	6	343	0.025	6	343	0.043
13:00 - 14:00	6	343	0.018	6	343	0.034	6	343	0.052
14:00 - 15:00	6	343	0.020	6	343	0.023	6	343	0.043
15:00 - 16:00	6	343	0.025	6	343	0.021	6	343	0.046
16:00 - 17:00	6	343	0.042	6	343	0.023	6	343	0.065
17:00 - 18:00	6	343	0.048	6	343	0.021	6	343	0.069
18:00 - 19:00	6	343	0.075	6	343	0.019	6	343	0.094
19:00 - 20:00	4	328	0.061	4	328	0.021	4	328	0.082
20:00 - 21:00	4	328	0.049	4	328	0.017	4	328	0.066
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.412			0.417			0.829

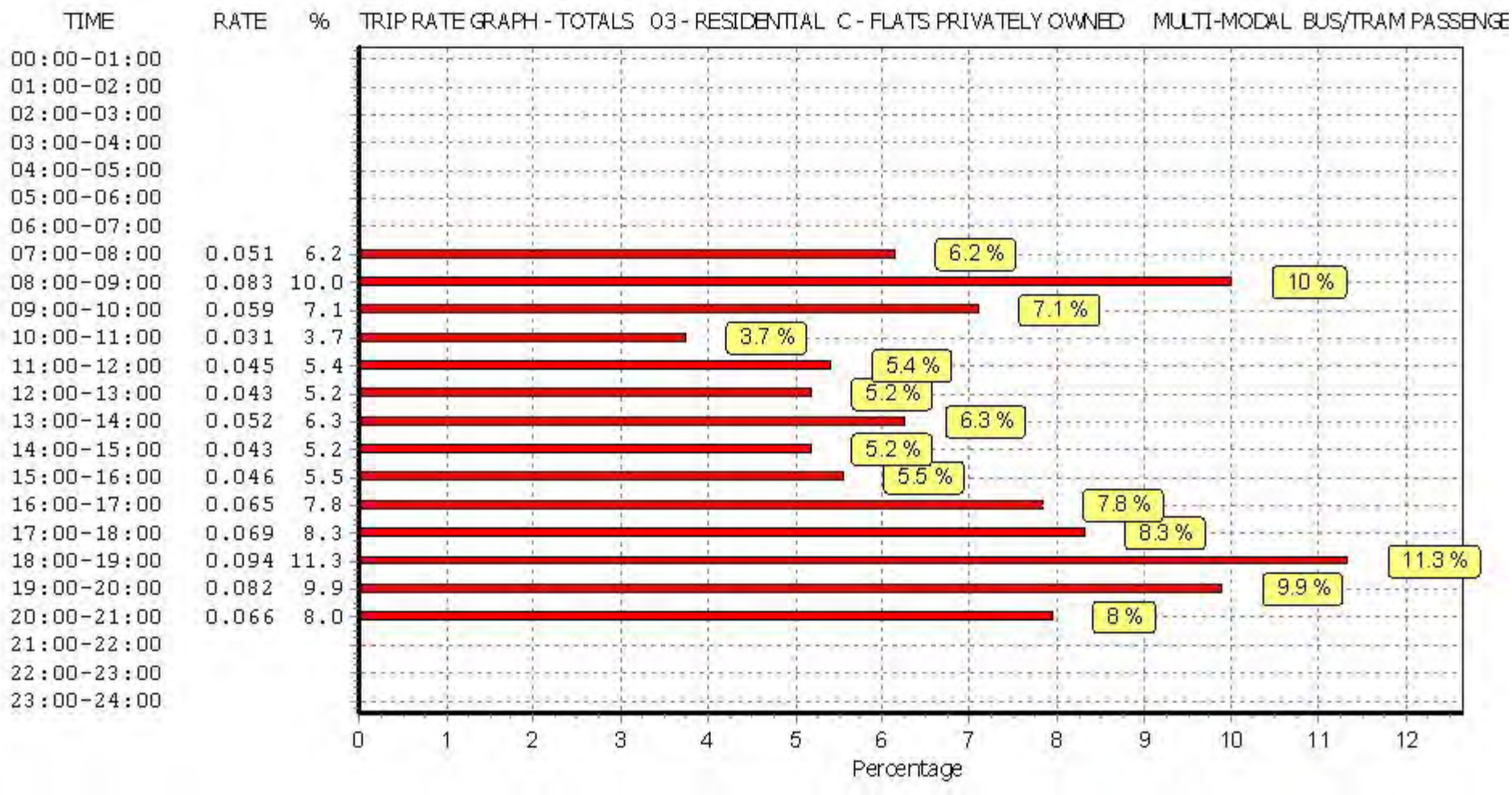
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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



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

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



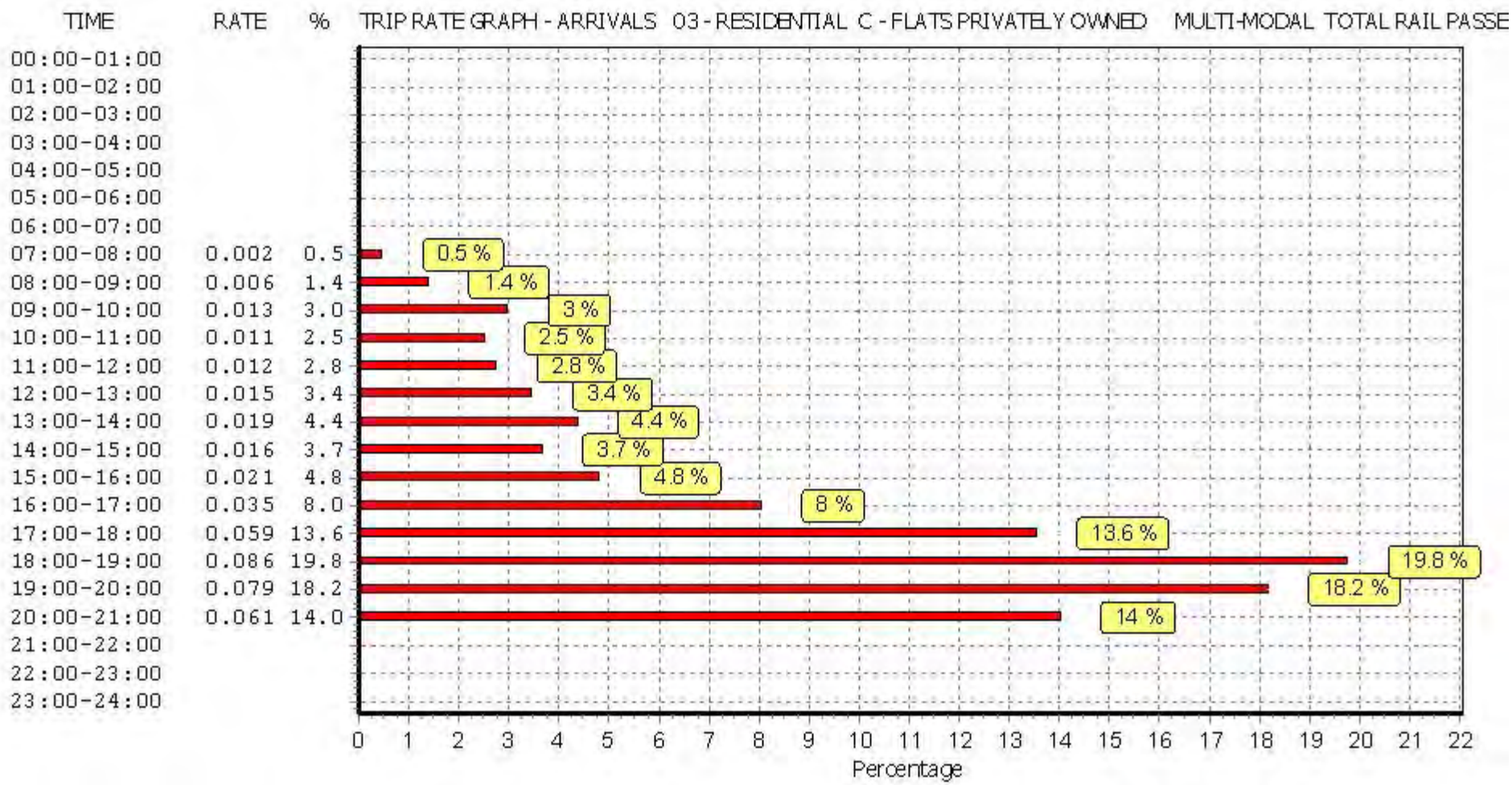
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

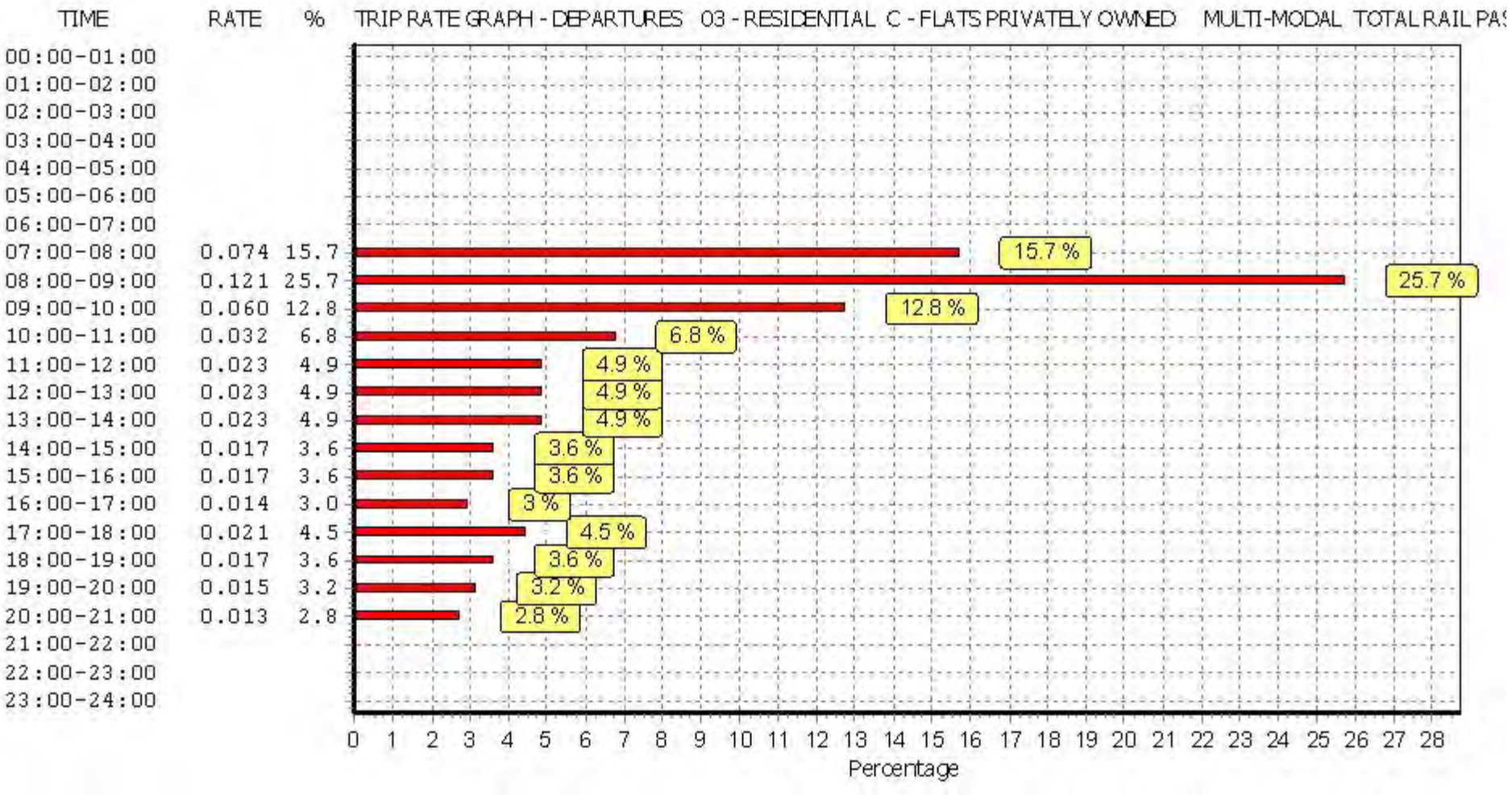
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.002	6	343	0.074	6	343	0.076
08:00 - 09:00	6	343	0.006	6	343	0.121	6	343	0.127
09:00 - 10:00	6	343	0.013	6	343	0.060	6	343	0.073
10:00 - 11:00	6	343	0.011	6	343	0.032	6	343	0.043
11:00 - 12:00	6	343	0.012	6	343	0.023	6	343	0.035
12:00 - 13:00	6	343	0.015	6	343	0.023	6	343	0.038
13:00 - 14:00	6	343	0.019	6	343	0.023	6	343	0.042
14:00 - 15:00	6	343	0.016	6	343	0.017	6	343	0.033
15:00 - 16:00	6	343	0.021	6	343	0.017	6	343	0.038
16:00 - 17:00	6	343	0.035	6	343	0.014	6	343	0.049
17:00 - 18:00	6	343	0.059	6	343	0.021	6	343	0.080
18:00 - 19:00	6	343	0.086	6	343	0.017	6	343	0.103
19:00 - 20:00	4	328	0.079	4	328	0.015	4	328	0.094
20:00 - 21:00	4	328	0.061	4	328	0.013	4	328	0.074
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.435			0.470			0.905

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

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



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



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

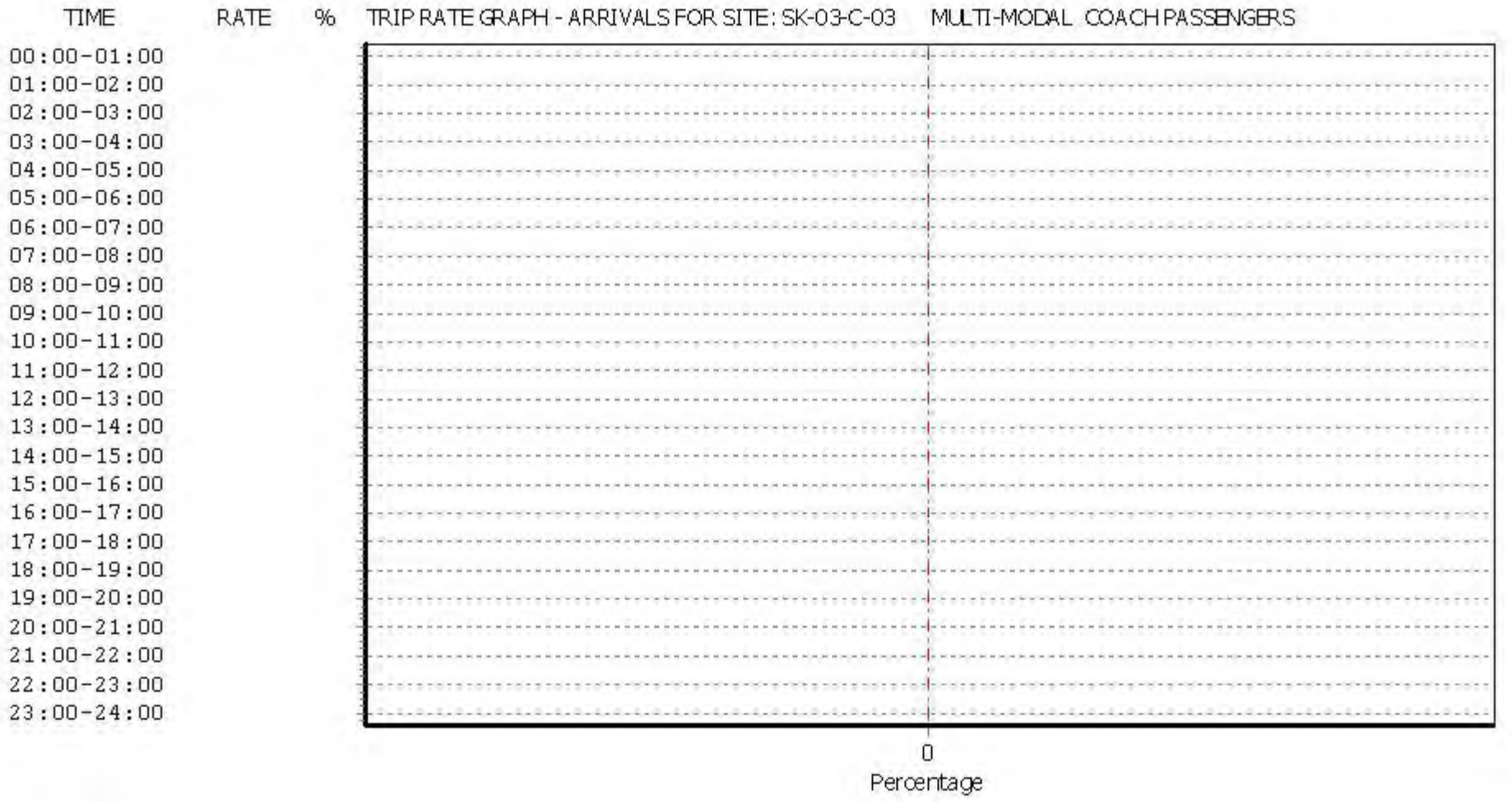
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

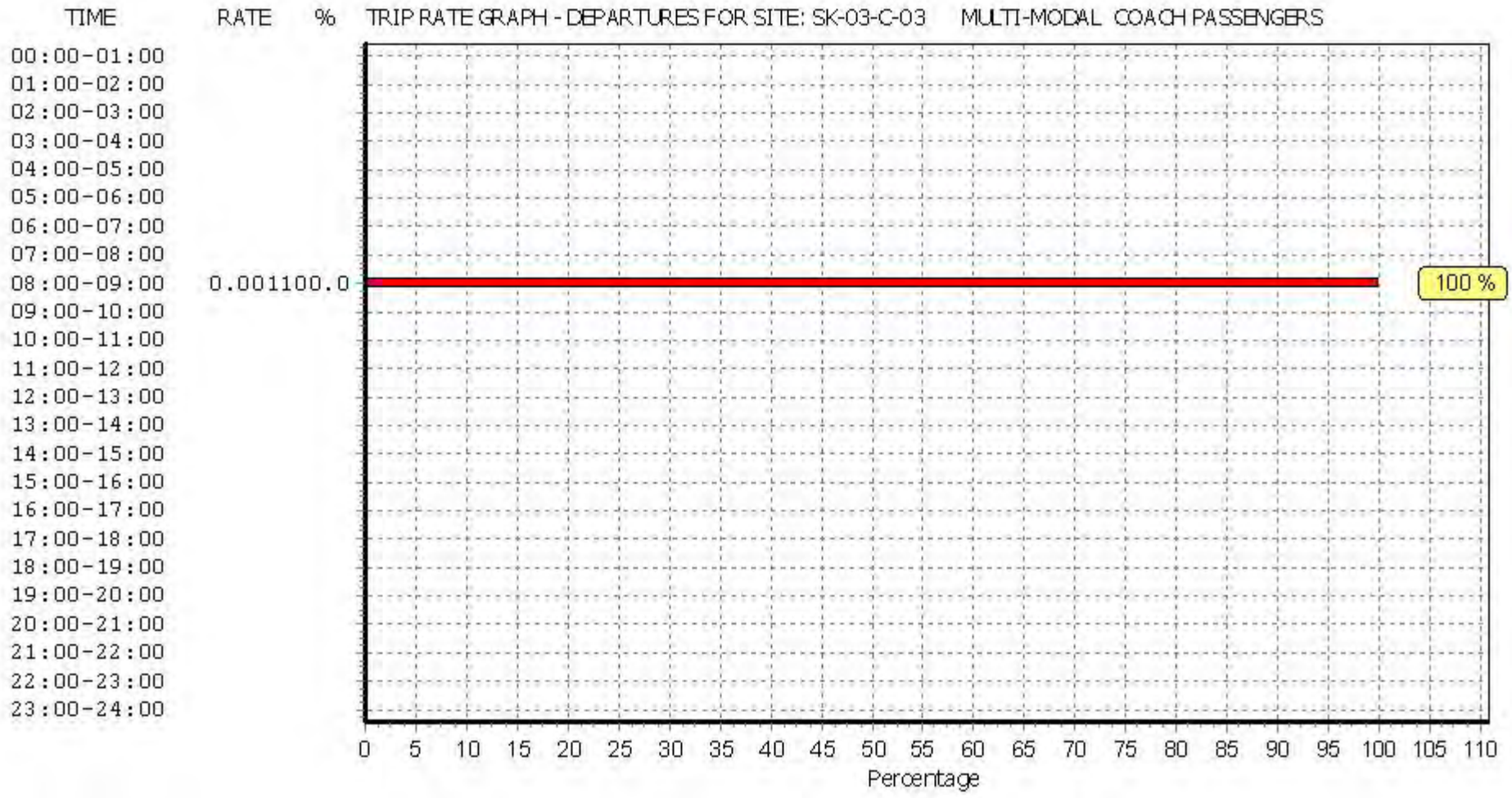
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.000	6	343	0.000	6	343	0.000
08:00 - 09:00	6	343	0.000	6	343	0.001	6	343	0.001
09:00 - 10:00	6	343	0.000	6	343	0.000	6	343	0.000
10:00 - 11:00	6	343	0.000	6	343	0.000	6	343	0.000
11:00 - 12:00	6	343	0.000	6	343	0.000	6	343	0.000
12:00 - 13:00	6	343	0.000	6	343	0.000	6	343	0.000
13:00 - 14:00	6	343	0.000	6	343	0.000	6	343	0.000
14:00 - 15:00	6	343	0.000	6	343	0.000	6	343	0.000
15:00 - 16:00	6	343	0.000	6	343	0.000	6	343	0.000
16:00 - 17:00	6	343	0.000	6	343	0.000	6	343	0.000
17:00 - 18:00	6	343	0.000	6	343	0.000	6	343	0.000
18:00 - 19:00	6	343	0.000	6	343	0.000	6	343	0.000
19:00 - 20:00	4	328	0.000	4	328	0.000	4	328	0.000
20:00 - 21:00	4	328	0.000	4	328	0.000	4	328	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.001			0.001

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

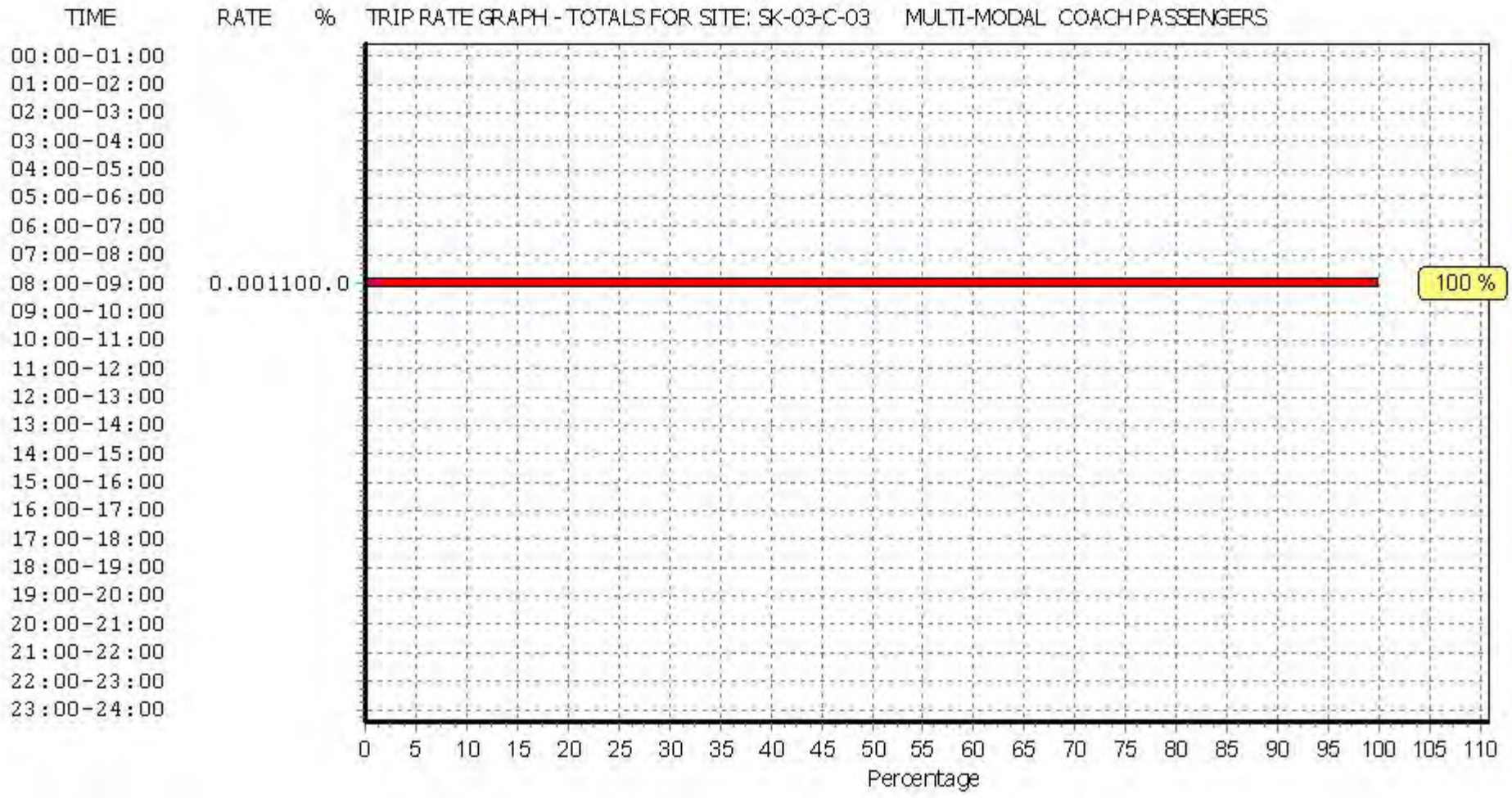
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



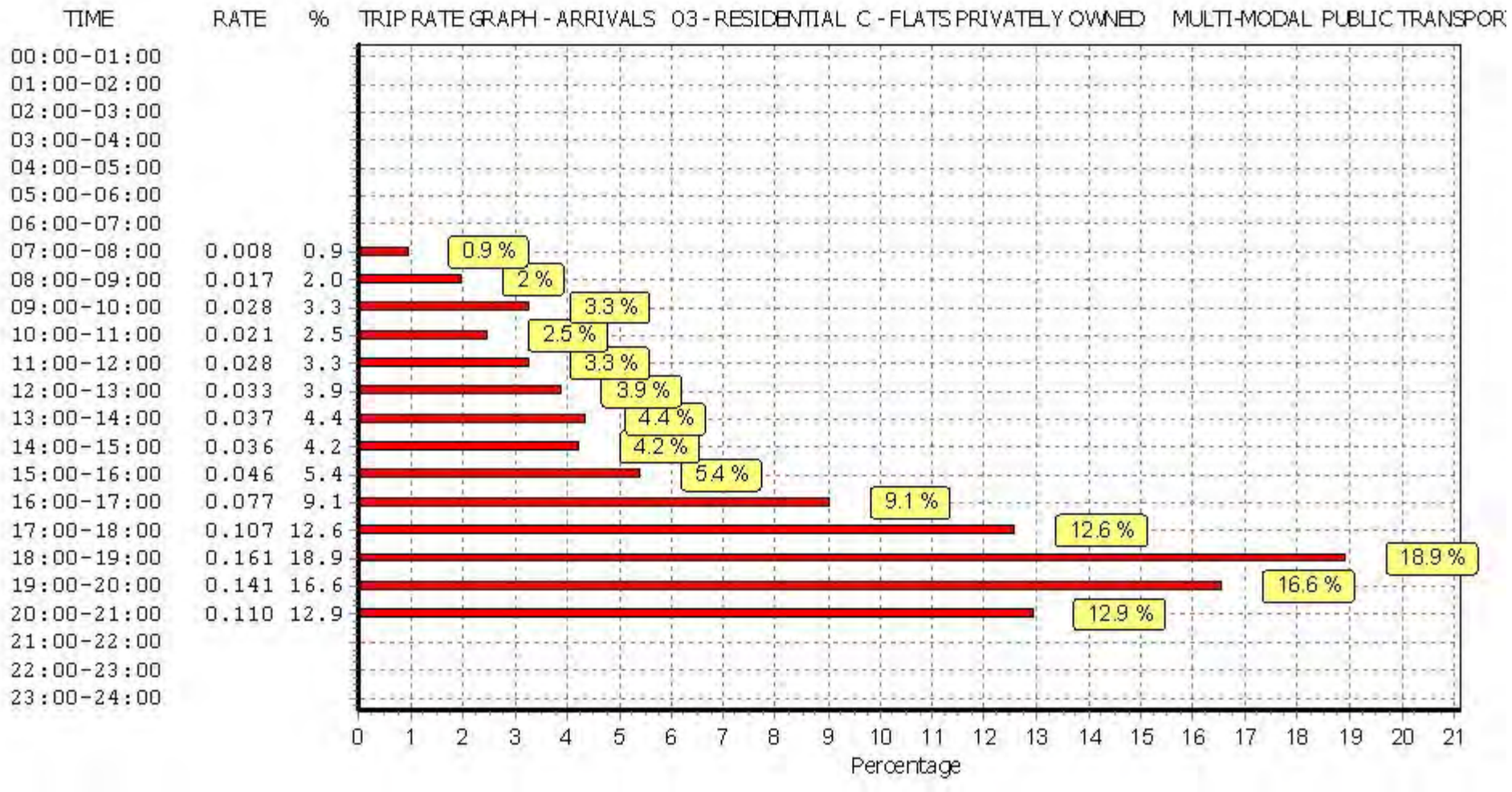
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

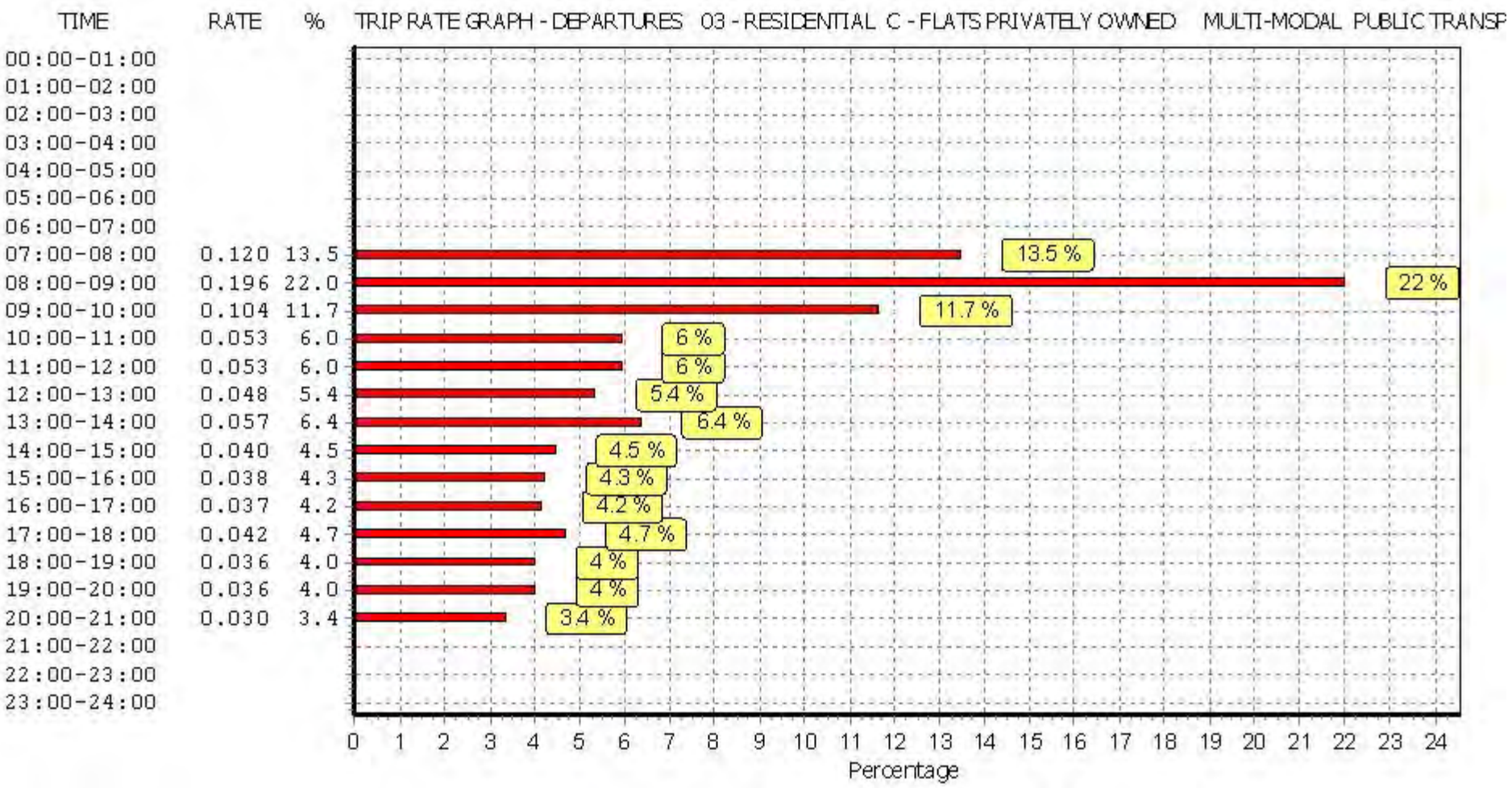
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.008	6	343	0.120	6	343	0.128
08:00 - 09:00	6	343	0.017	6	343	0.196	6	343	0.213
09:00 - 10:00	6	343	0.028	6	343	0.104	6	343	0.132
10:00 - 11:00	6	343	0.021	6	343	0.053	6	343	0.074
11:00 - 12:00	6	343	0.028	6	343	0.053	6	343	0.081
12:00 - 13:00	6	343	0.033	6	343	0.048	6	343	0.081
13:00 - 14:00	6	343	0.037	6	343	0.057	6	343	0.094
14:00 - 15:00	6	343	0.036	6	343	0.040	6	343	0.076
15:00 - 16:00	6	343	0.046	6	343	0.038	6	343	0.084
16:00 - 17:00	6	343	0.077	6	343	0.037	6	343	0.114
17:00 - 18:00	6	343	0.107	6	343	0.042	6	343	0.149
18:00 - 19:00	6	343	0.161	6	343	0.036	6	343	0.197
19:00 - 20:00	4	328	0.141	4	328	0.036	4	328	0.177
20:00 - 21:00	4	328	0.110	4	328	0.030	4	328	0.140
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.850			0.890			1.740

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

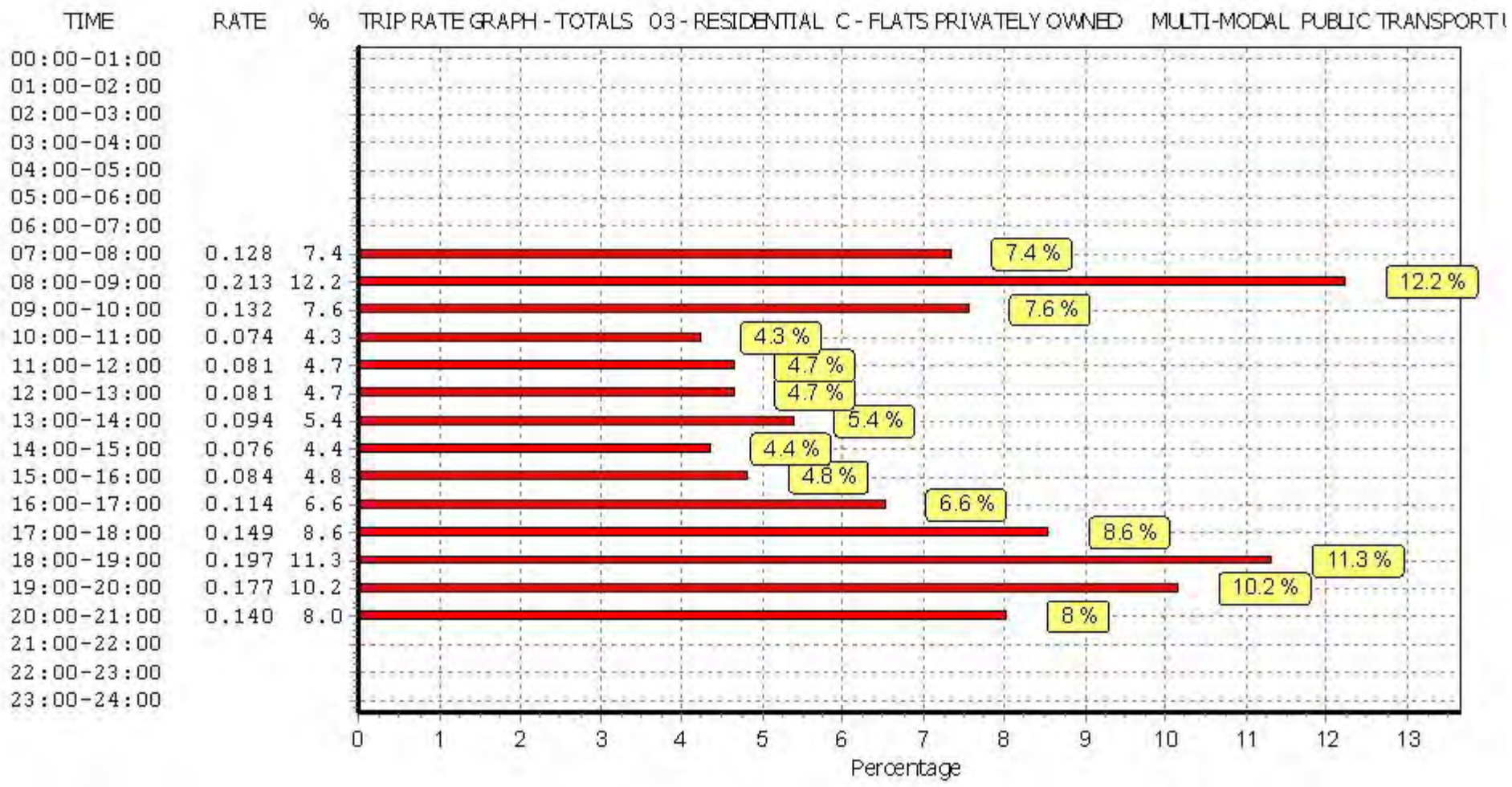
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



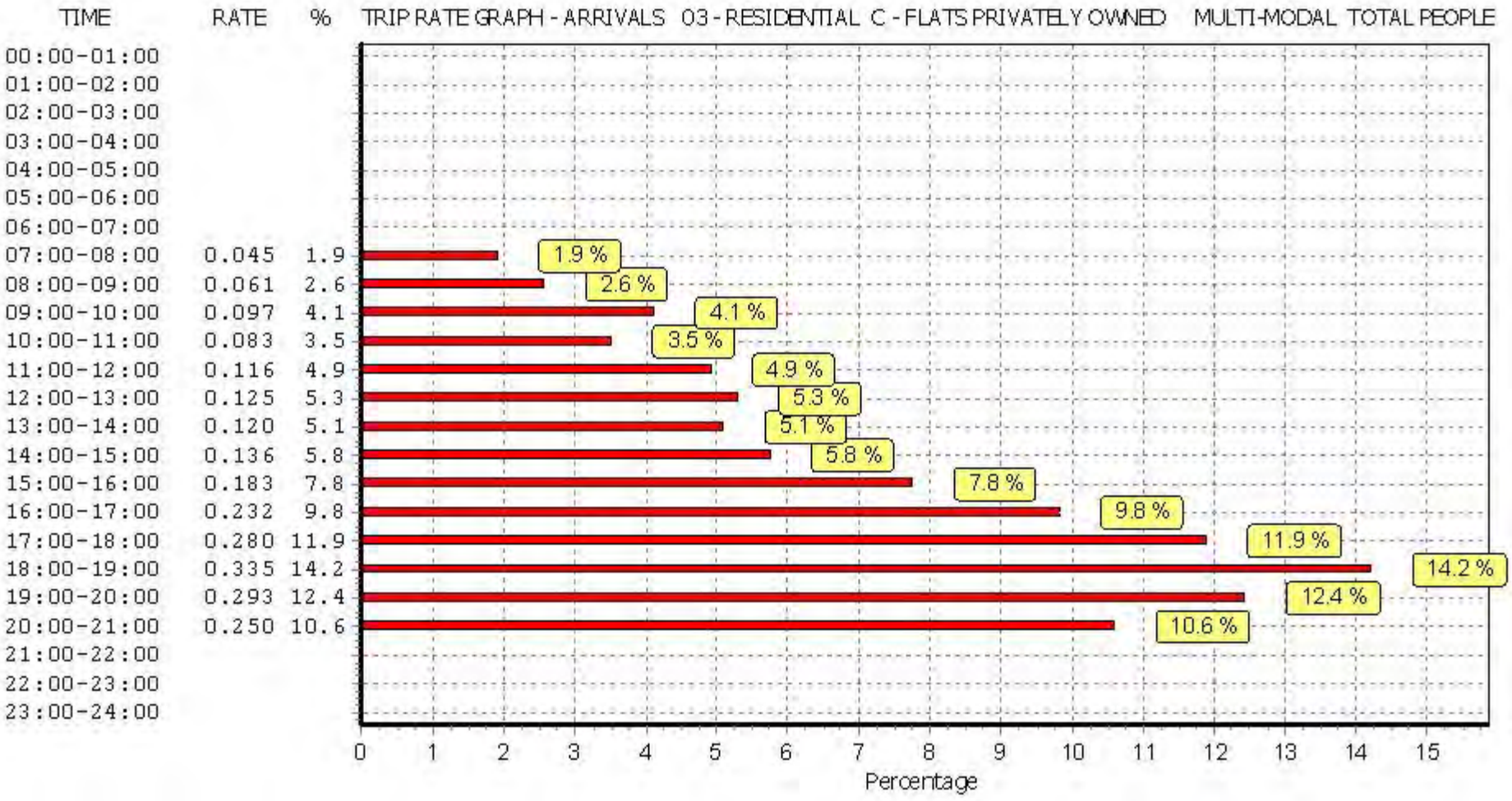
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

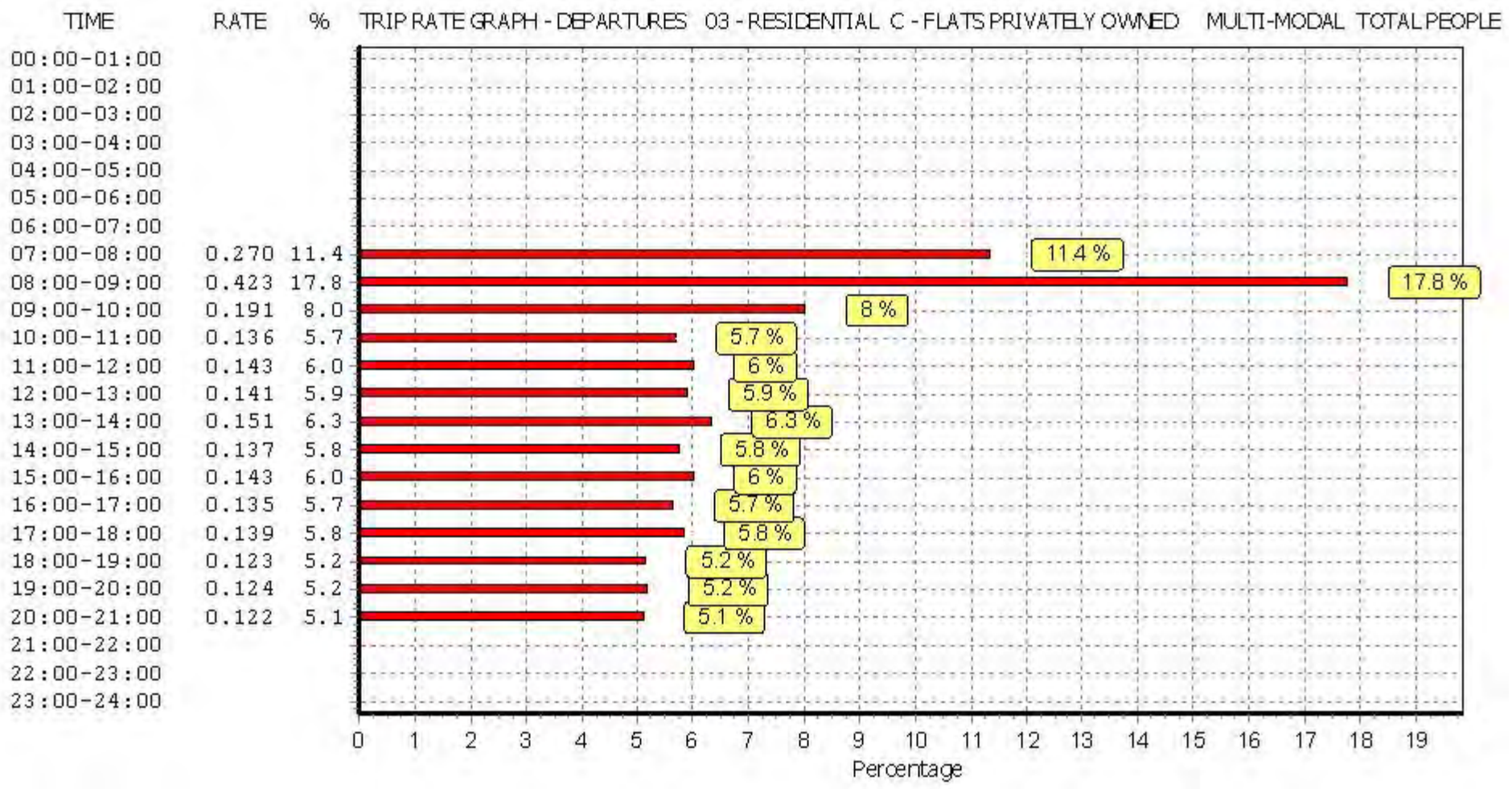
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.045	6	343	0.270	6	343	0.315
08:00 - 09:00	6	343	0.061	6	343	0.423	6	343	0.484
09:00 - 10:00	6	343	0.097	6	343	0.191	6	343	0.288
10:00 - 11:00	6	343	0.083	6	343	0.136	6	343	0.219
11:00 - 12:00	6	343	0.116	6	343	0.143	6	343	0.259
12:00 - 13:00	6	343	0.125	6	343	0.141	6	343	0.266
13:00 - 14:00	6	343	0.120	6	343	0.151	6	343	0.271
14:00 - 15:00	6	343	0.136	6	343	0.137	6	343	0.273
15:00 - 16:00	6	343	0.183	6	343	0.143	6	343	0.326
16:00 - 17:00	6	343	0.232	6	343	0.135	6	343	0.367
17:00 - 18:00	6	343	0.280	6	343	0.139	6	343	0.419
18:00 - 19:00	6	343	0.335	6	343	0.123	6	343	0.458
19:00 - 20:00	4	328	0.293	4	328	0.124	4	328	0.417
20:00 - 21:00	4	328	0.250	4	328	0.122	4	328	0.372
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.356			2.378			4.734

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

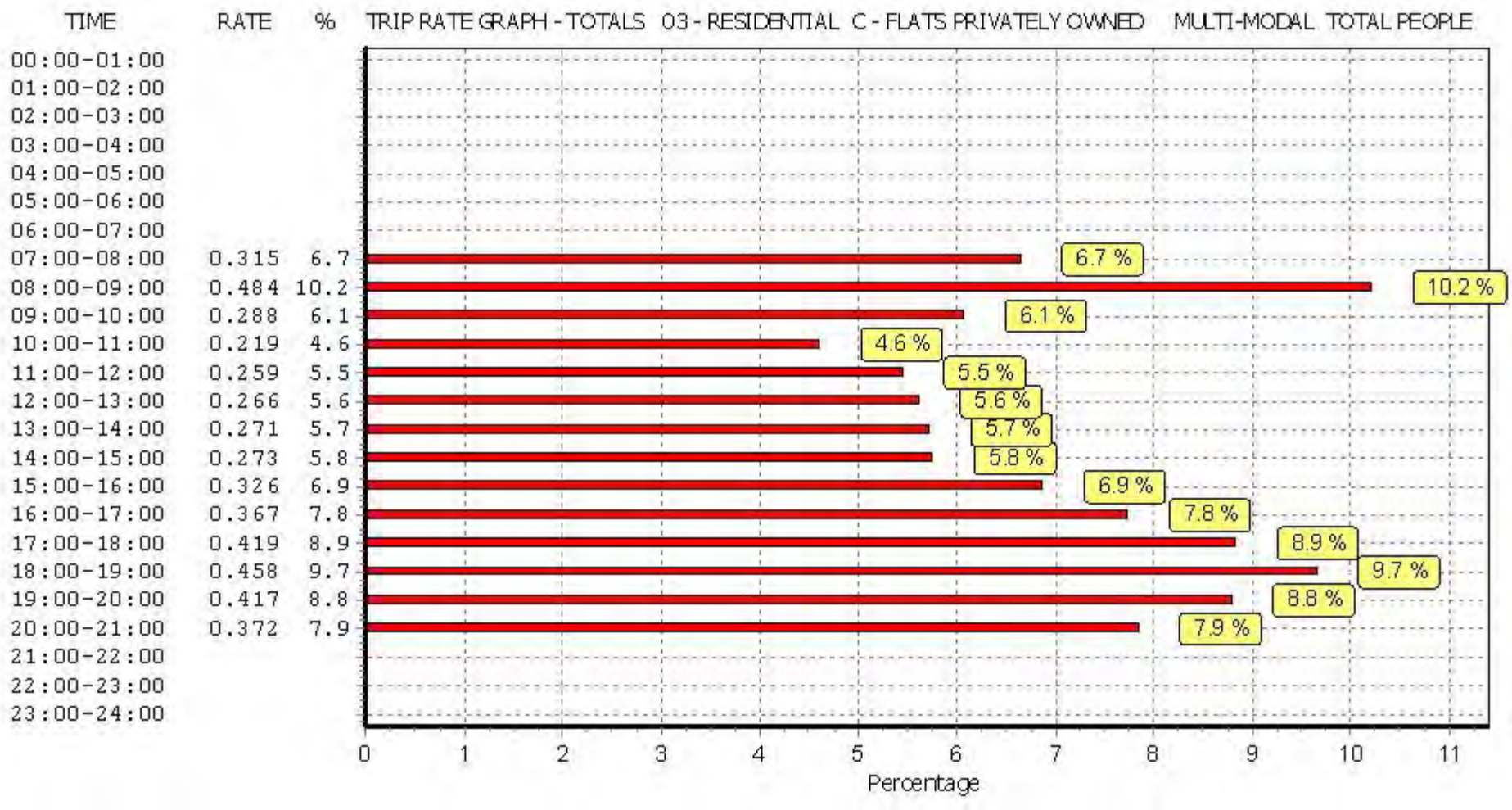
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



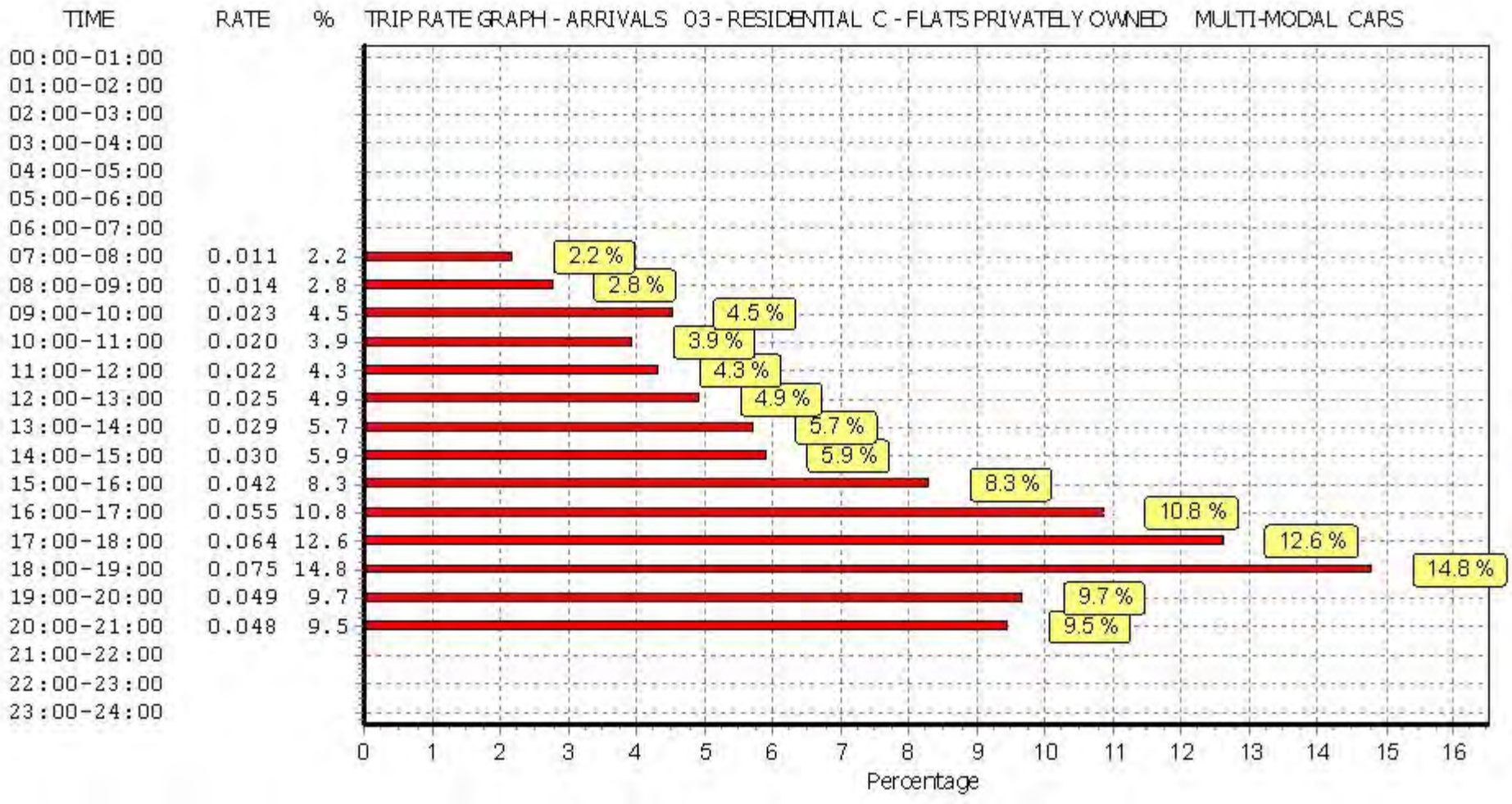
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

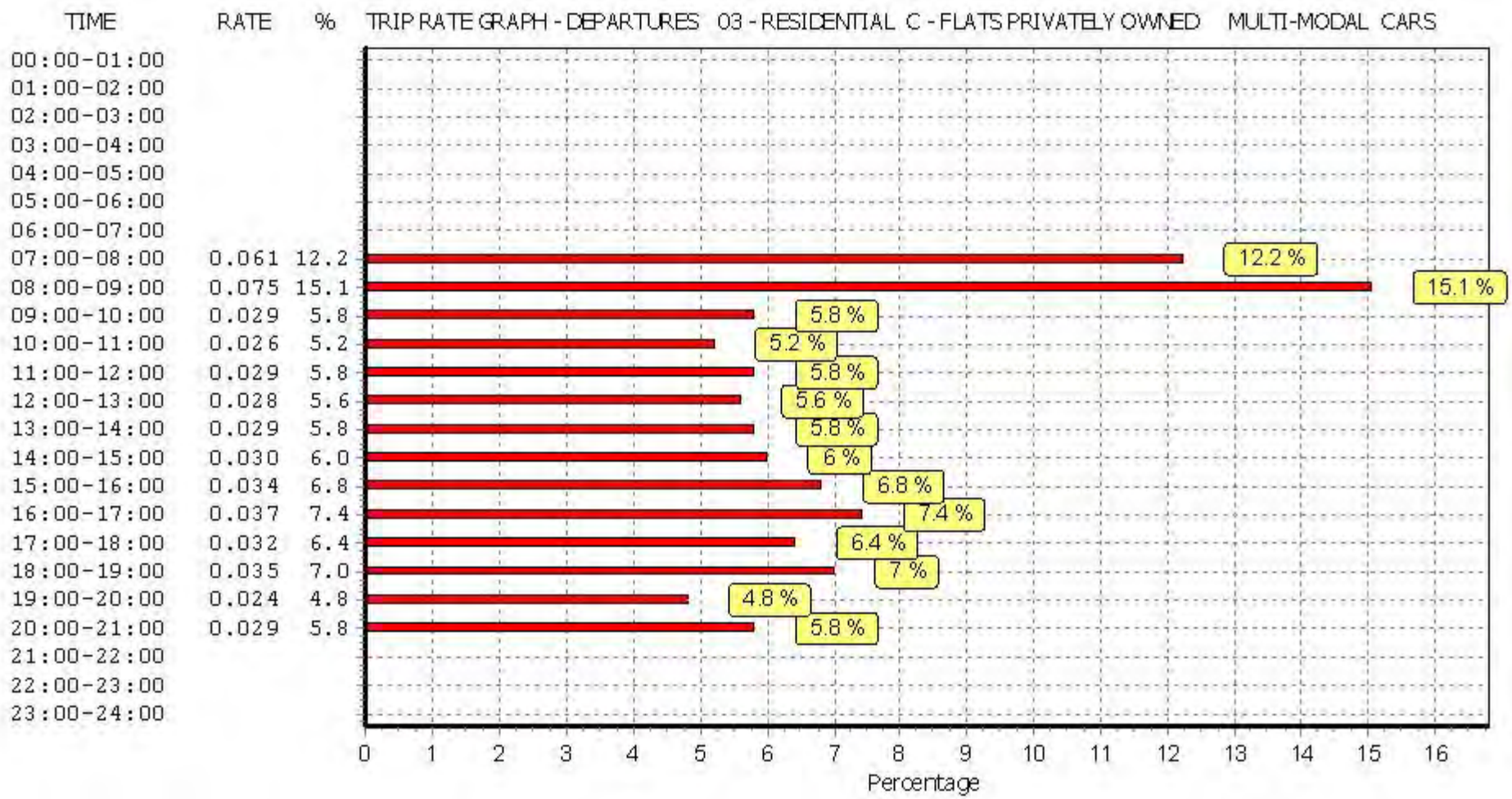
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.011	6	343	0.061	6	343	0.072
08:00 - 09:00	6	343	0.014	6	343	0.075	6	343	0.089
09:00 - 10:00	6	343	0.023	6	343	0.029	6	343	0.052
10:00 - 11:00	6	343	0.020	6	343	0.026	6	343	0.046
11:00 - 12:00	6	343	0.022	6	343	0.029	6	343	0.051
12:00 - 13:00	6	343	0.025	6	343	0.028	6	343	0.053
13:00 - 14:00	6	343	0.029	6	343	0.029	6	343	0.058
14:00 - 15:00	6	343	0.030	6	343	0.030	6	343	0.060
15:00 - 16:00	6	343	0.042	6	343	0.034	6	343	0.076
16:00 - 17:00	6	343	0.055	6	343	0.037	6	343	0.092
17:00 - 18:00	6	343	0.064	6	343	0.032	6	343	0.096
18:00 - 19:00	6	343	0.075	6	343	0.035	6	343	0.110
19:00 - 20:00	4	328	0.049	4	328	0.024	4	328	0.073
20:00 - 21:00	4	328	0.048	4	328	0.029	4	328	0.077
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.507			0.498			1.005

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.

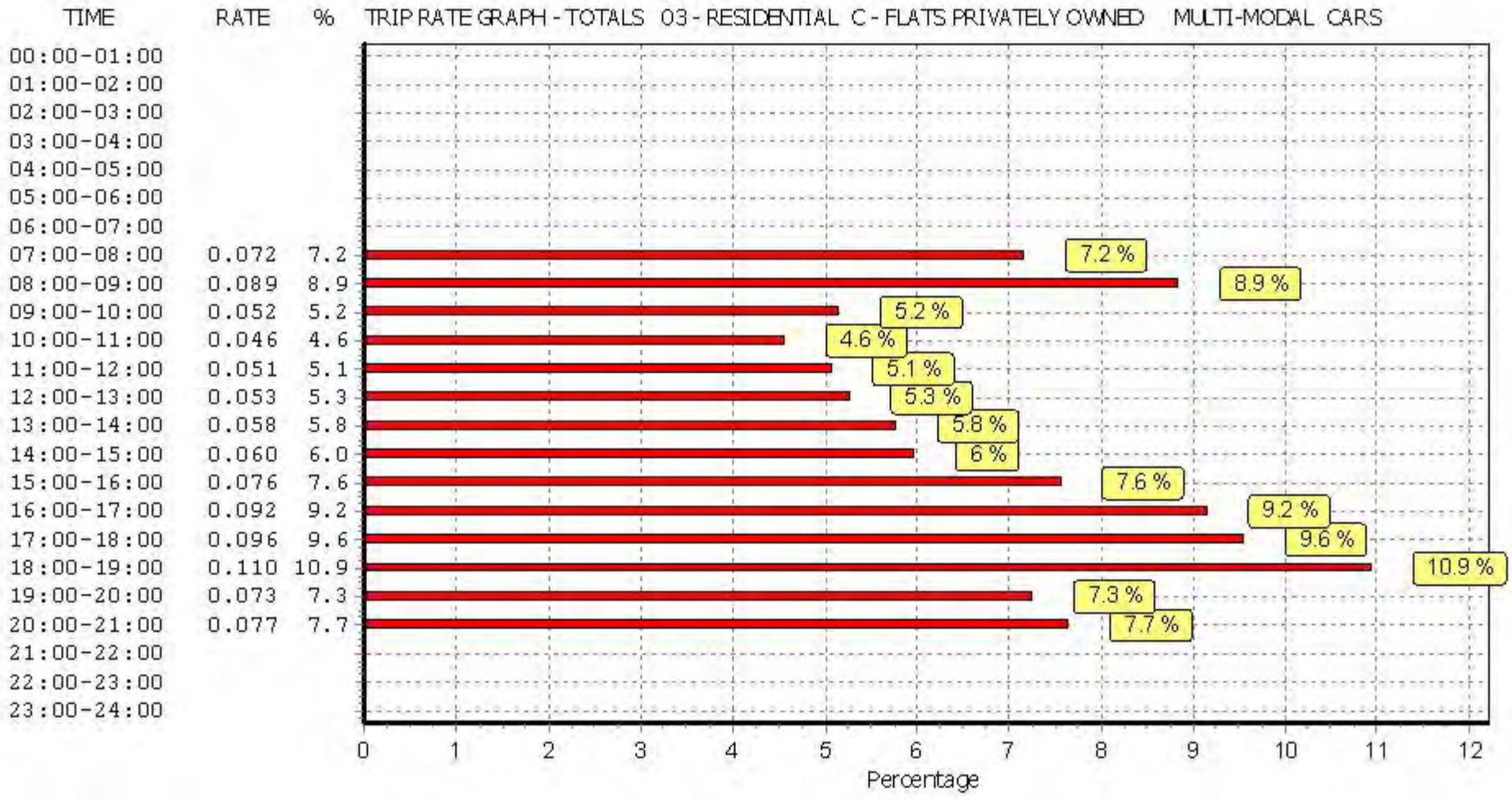
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



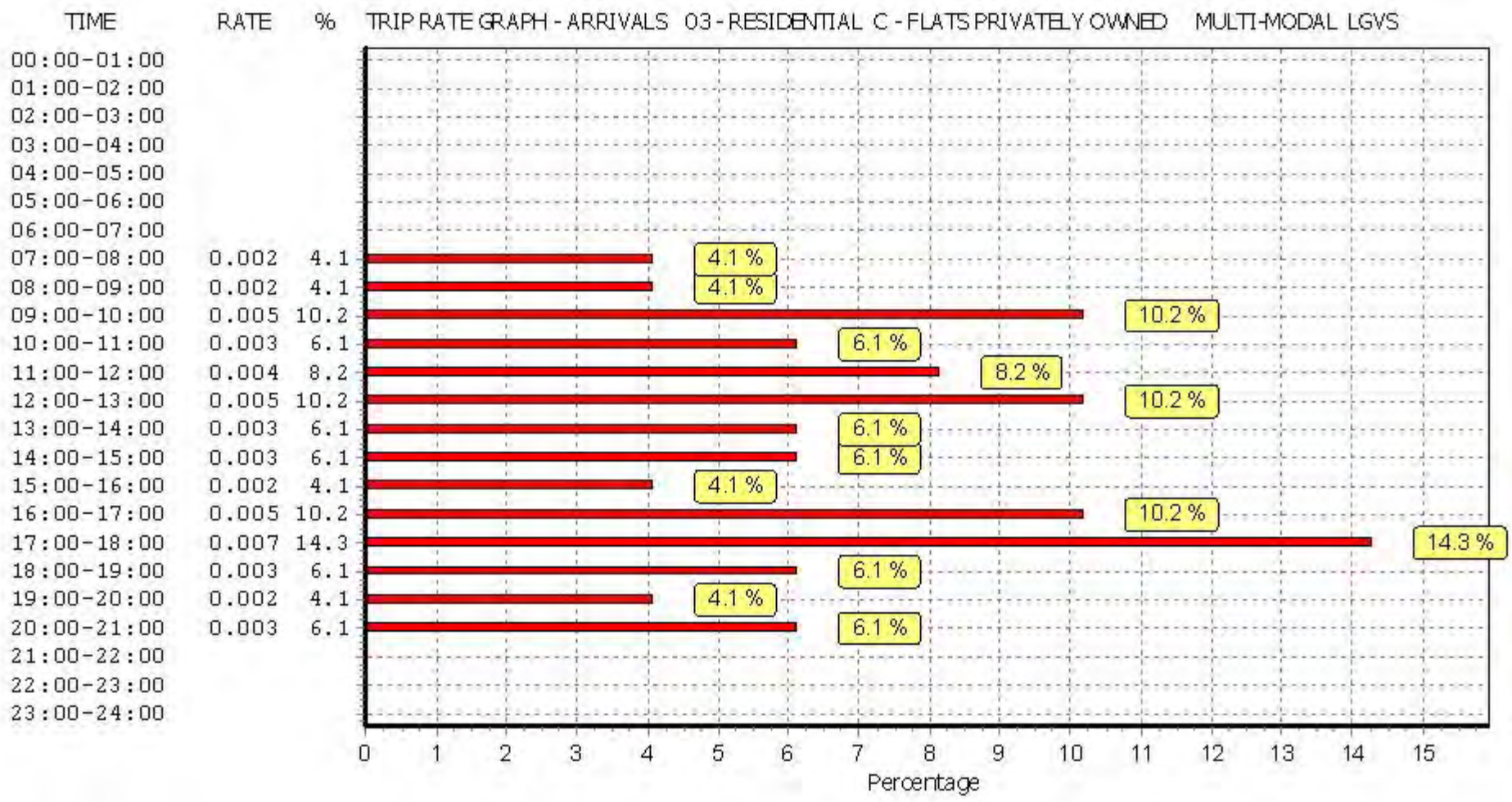
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

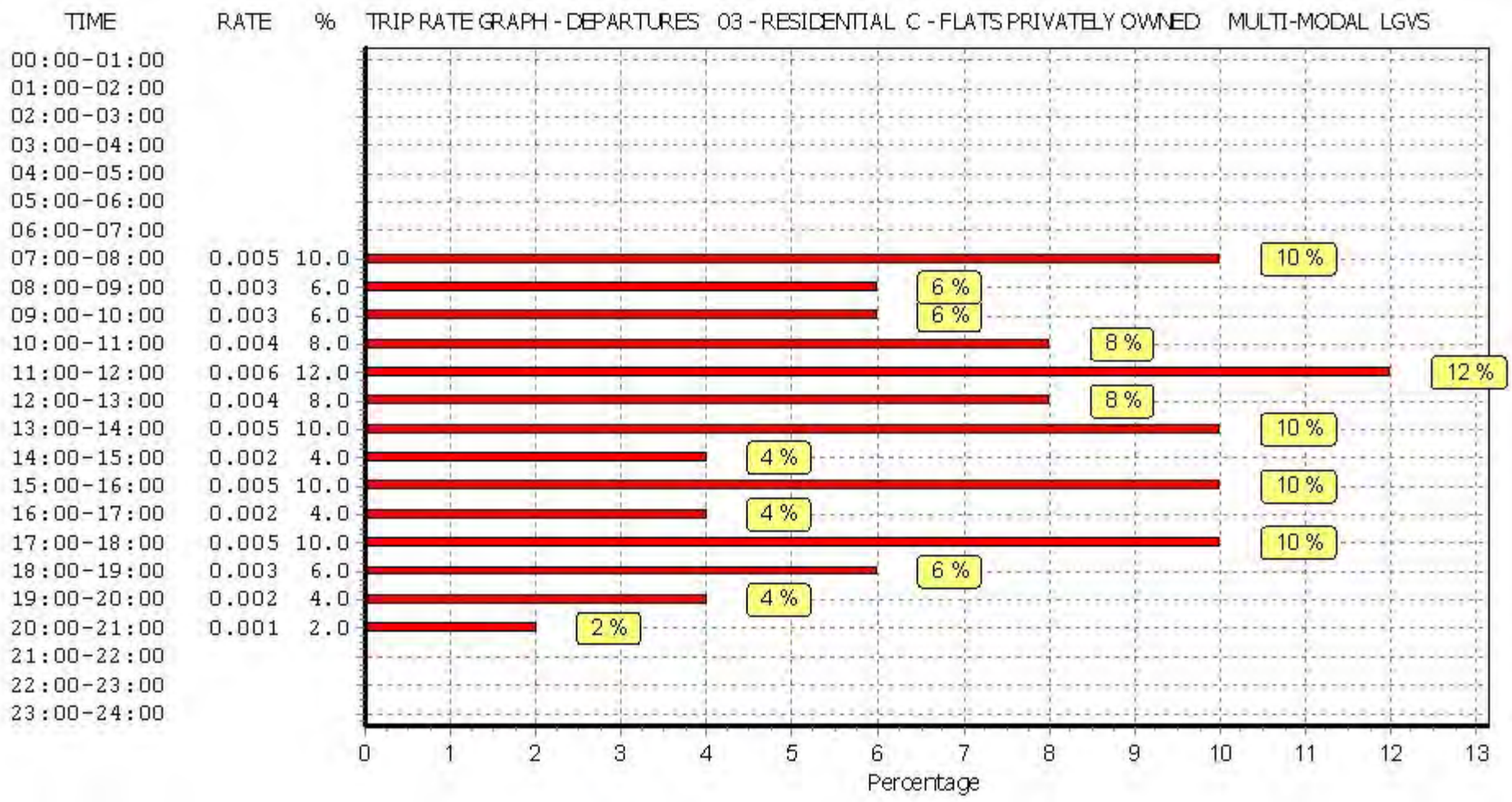
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.002	6	343	0.005	6	343	0.007
08:00 - 09:00	6	343	0.002	6	343	0.003	6	343	0.005
09:00 - 10:00	6	343	0.005	6	343	0.003	6	343	0.008
10:00 - 11:00	6	343	0.003	6	343	0.004	6	343	0.007
11:00 - 12:00	6	343	0.004	6	343	0.006	6	343	0.010
12:00 - 13:00	6	343	0.005	6	343	0.004	6	343	0.009
13:00 - 14:00	6	343	0.003	6	343	0.005	6	343	0.008
14:00 - 15:00	6	343	0.003	6	343	0.002	6	343	0.005
15:00 - 16:00	6	343	0.002	6	343	0.005	6	343	0.007
16:00 - 17:00	6	343	0.005	6	343	0.002	6	343	0.007
17:00 - 18:00	6	343	0.007	6	343	0.005	6	343	0.012
18:00 - 19:00	6	343	0.003	6	343	0.003	6	343	0.006
19:00 - 20:00	4	328	0.002	4	328	0.002	4	328	0.004
20:00 - 21:00	4	328	0.003	4	328	0.001	4	328	0.004
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.049			0.050			0.099

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

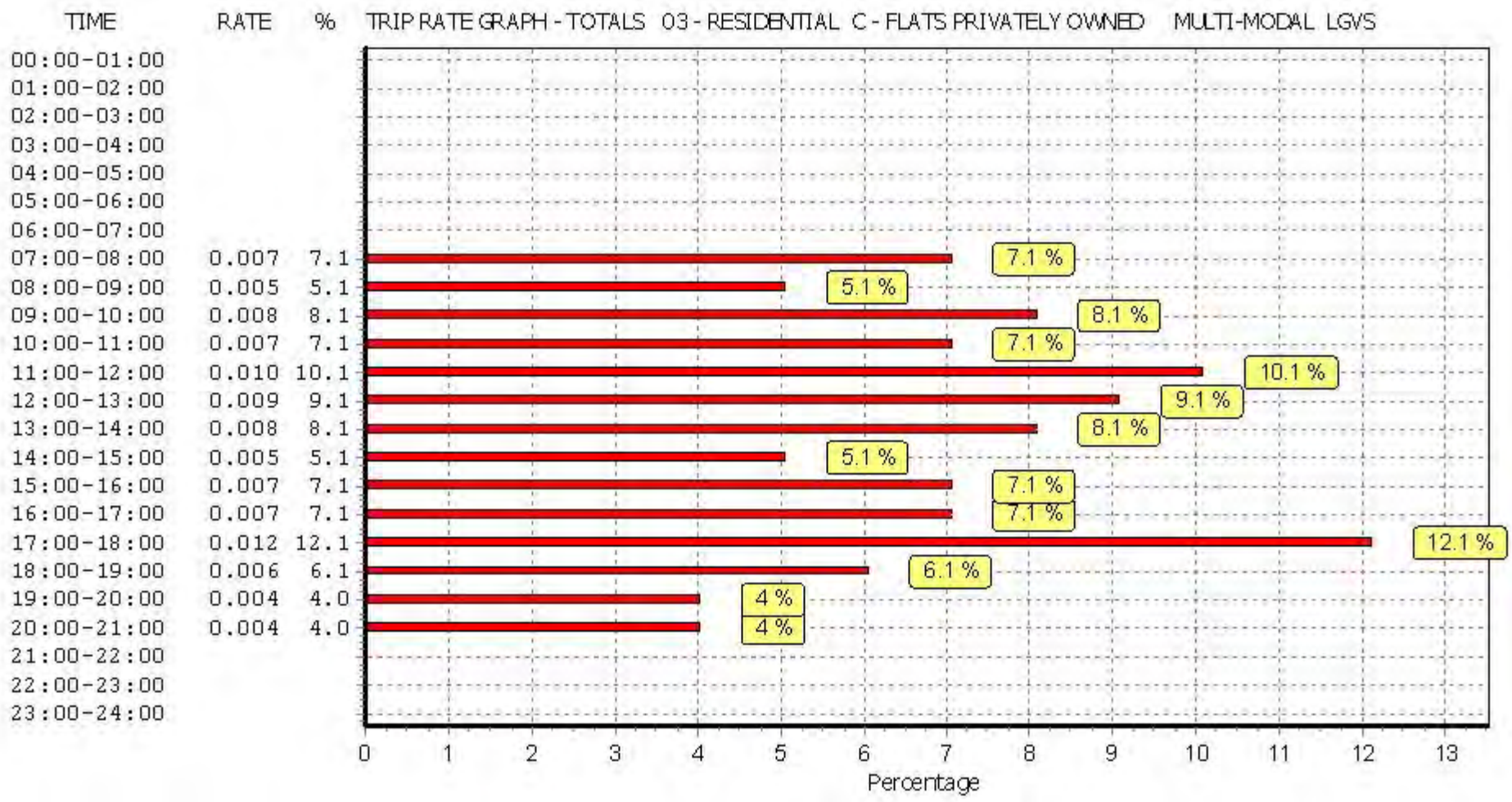
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



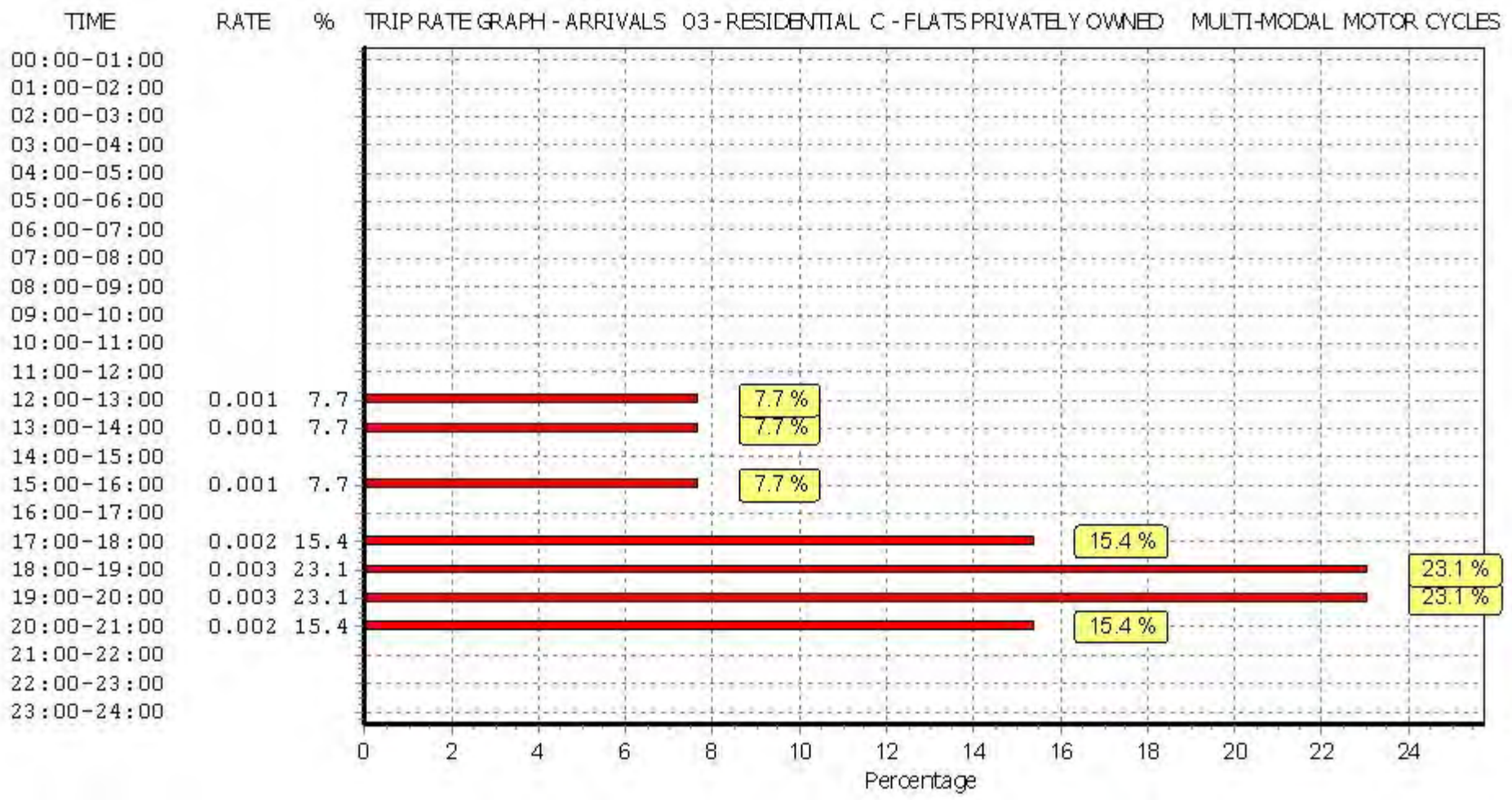
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

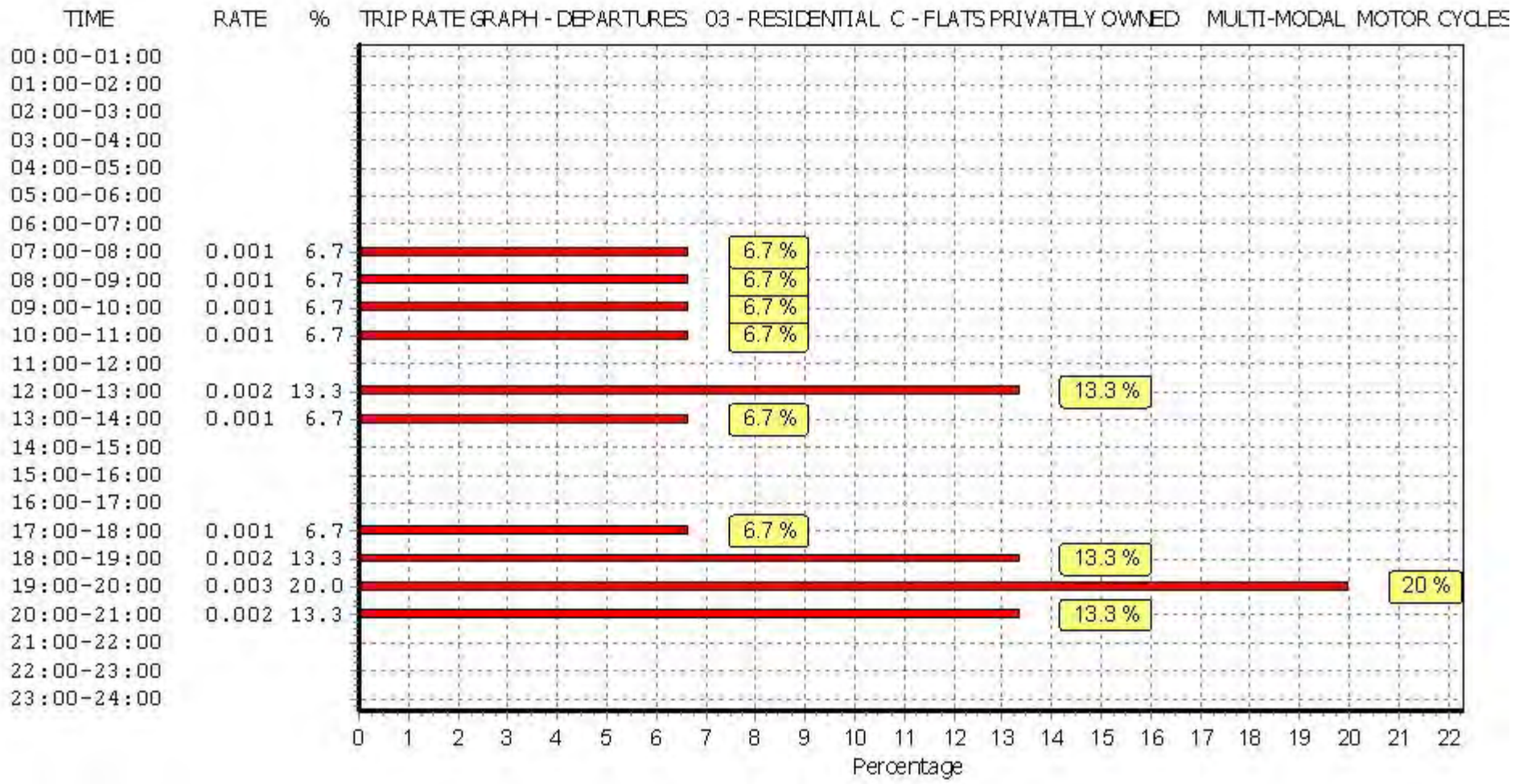
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.000	6	343	0.001	6	343	0.001
08:00 - 09:00	6	343	0.000	6	343	0.001	6	343	0.001
09:00 - 10:00	6	343	0.000	6	343	0.001	6	343	0.001
10:00 - 11:00	6	343	0.000	6	343	0.001	6	343	0.001
11:00 - 12:00	6	343	0.000	6	343	0.000	6	343	0.000
12:00 - 13:00	6	343	0.001	6	343	0.002	6	343	0.003
13:00 - 14:00	6	343	0.001	6	343	0.001	6	343	0.002
14:00 - 15:00	6	343	0.000	6	343	0.000	6	343	0.000
15:00 - 16:00	6	343	0.001	6	343	0.000	6	343	0.001
16:00 - 17:00	6	343	0.000	6	343	0.000	6	343	0.000
17:00 - 18:00	6	343	0.002	6	343	0.001	6	343	0.003
18:00 - 19:00	6	343	0.003	6	343	0.002	6	343	0.005
19:00 - 20:00	4	328	0.003	4	328	0.003	4	328	0.006
20:00 - 21:00	4	328	0.002	4	328	0.002	4	328	0.004
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.015			0.028

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

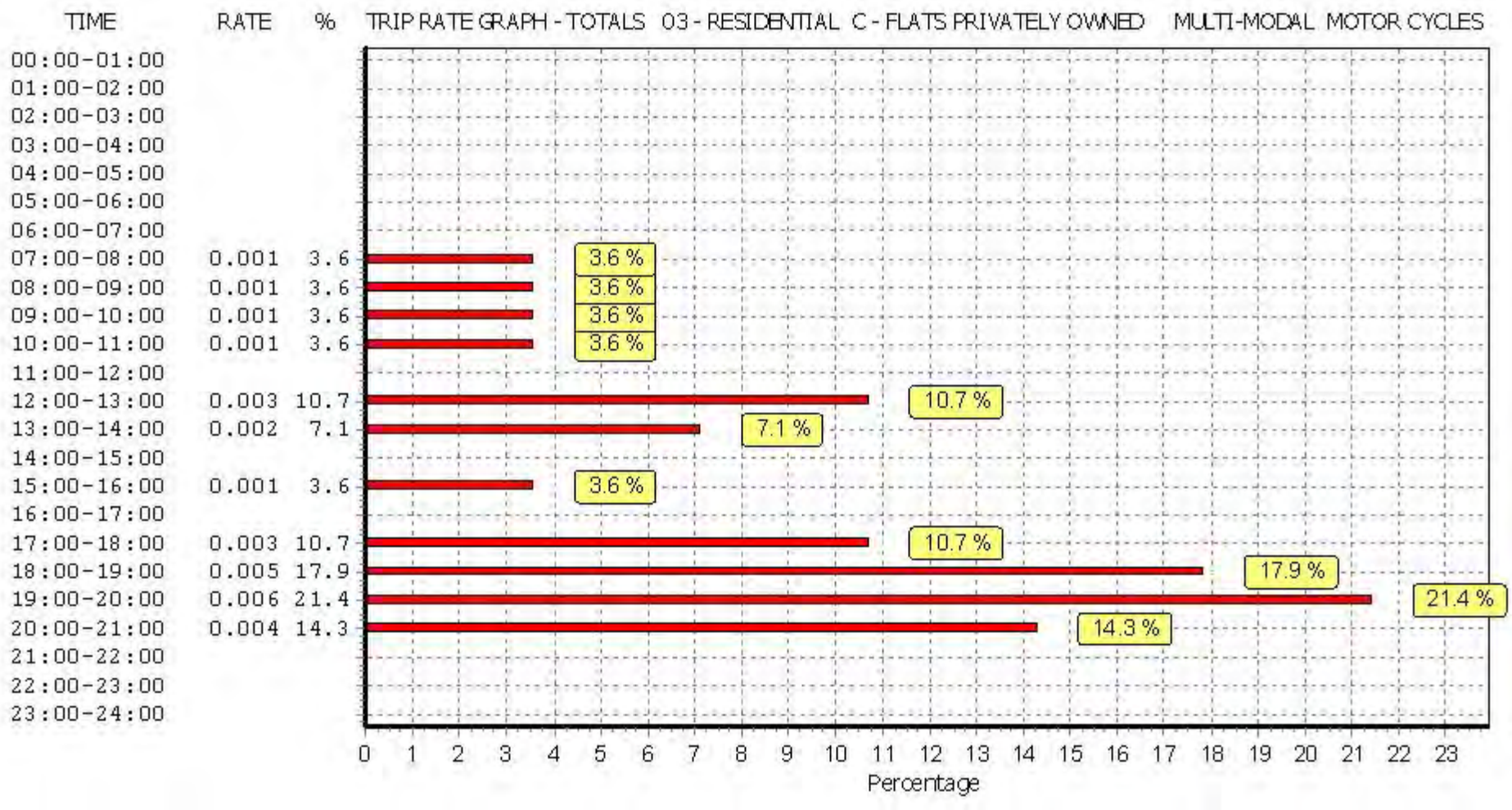
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



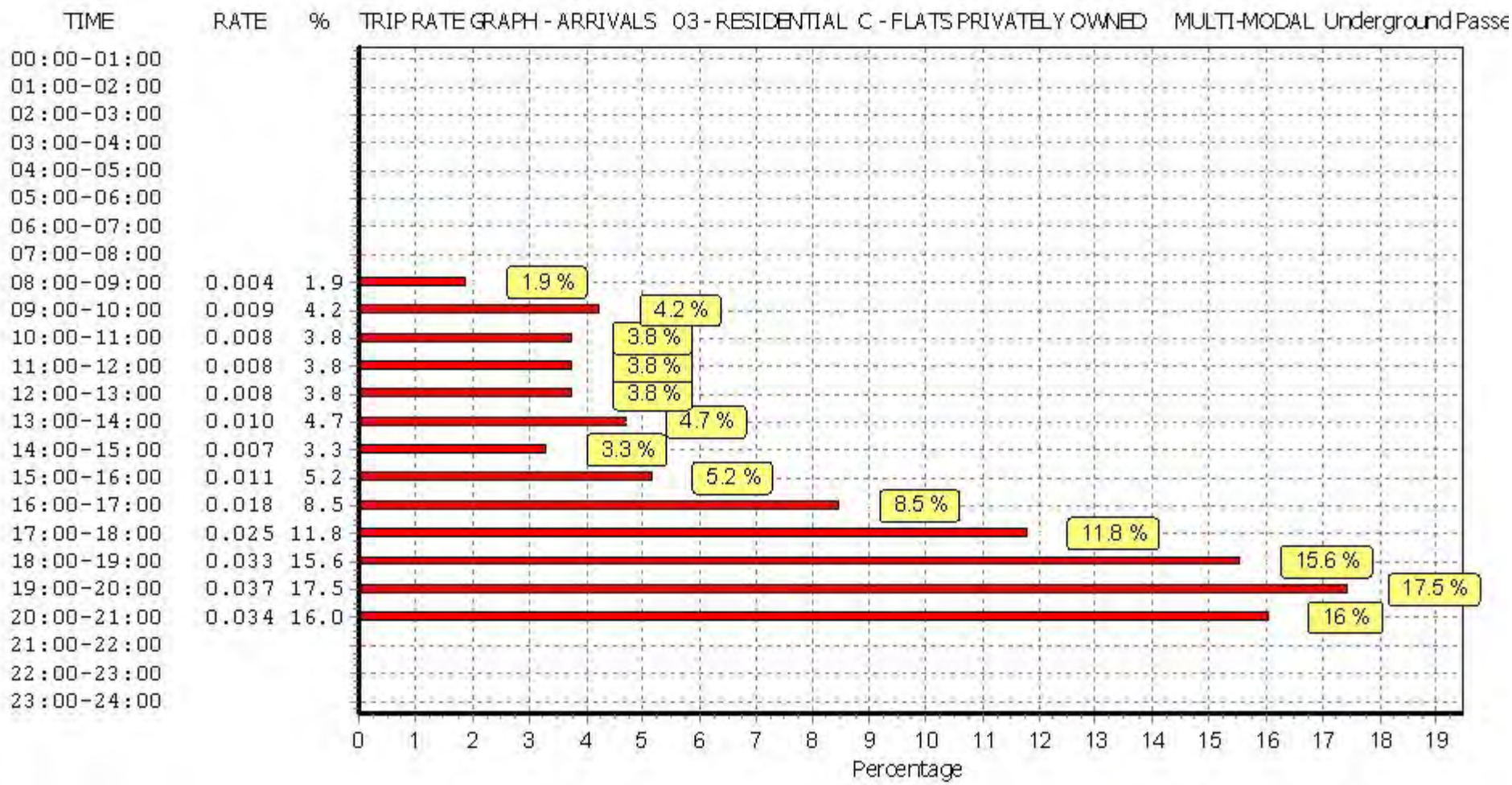
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

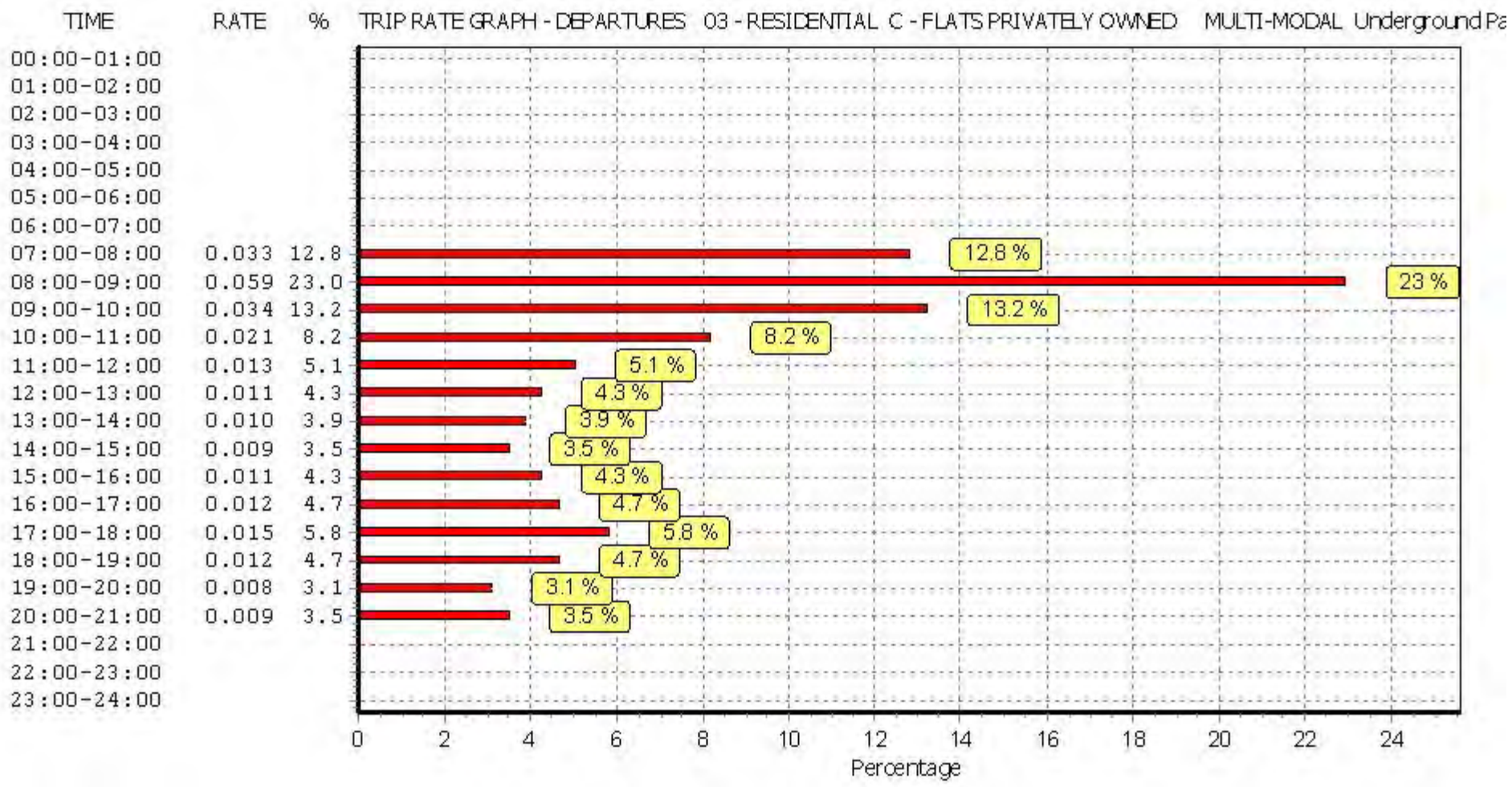
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.000	6	343	0.033	6	343	0.033
08:00 - 09:00	6	343	0.004	6	343	0.059	6	343	0.063
09:00 - 10:00	6	343	0.009	6	343	0.034	6	343	0.043
10:00 - 11:00	6	343	0.008	6	343	0.021	6	343	0.029
11:00 - 12:00	6	343	0.008	6	343	0.013	6	343	0.021
12:00 - 13:00	6	343	0.008	6	343	0.011	6	343	0.019
13:00 - 14:00	6	343	0.010	6	343	0.010	6	343	0.020
14:00 - 15:00	6	343	0.007	6	343	0.009	6	343	0.016
15:00 - 16:00	6	343	0.011	6	343	0.011	6	343	0.022
16:00 - 17:00	6	343	0.018	6	343	0.012	6	343	0.030
17:00 - 18:00	6	343	0.025	6	343	0.015	6	343	0.040
18:00 - 19:00	6	343	0.033	6	343	0.012	6	343	0.045
19:00 - 20:00	4	328	0.037	4	328	0.008	4	328	0.045
20:00 - 21:00	4	328	0.034	4	328	0.009	4	328	0.043
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.212			0.257			0.469

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

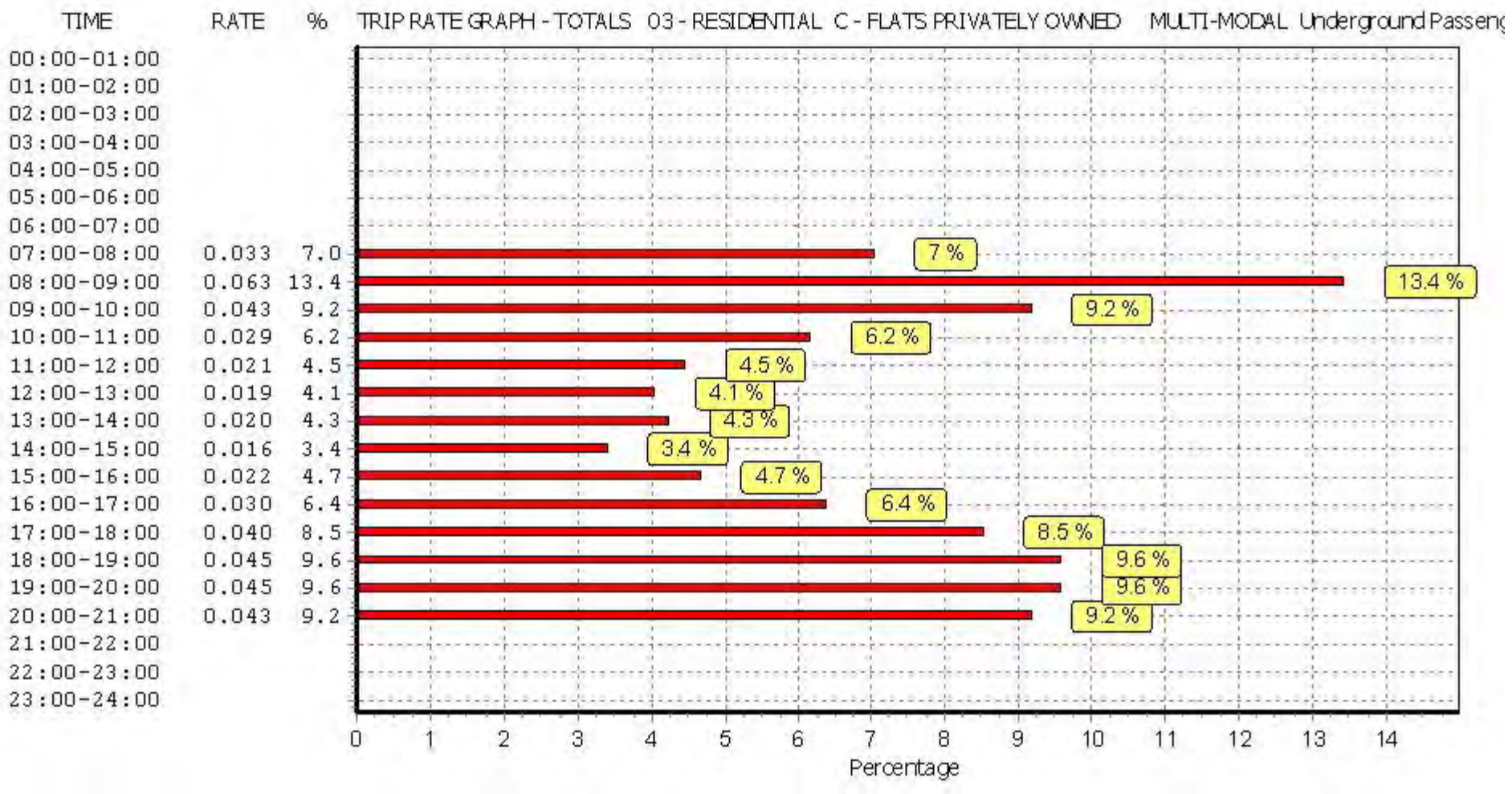
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



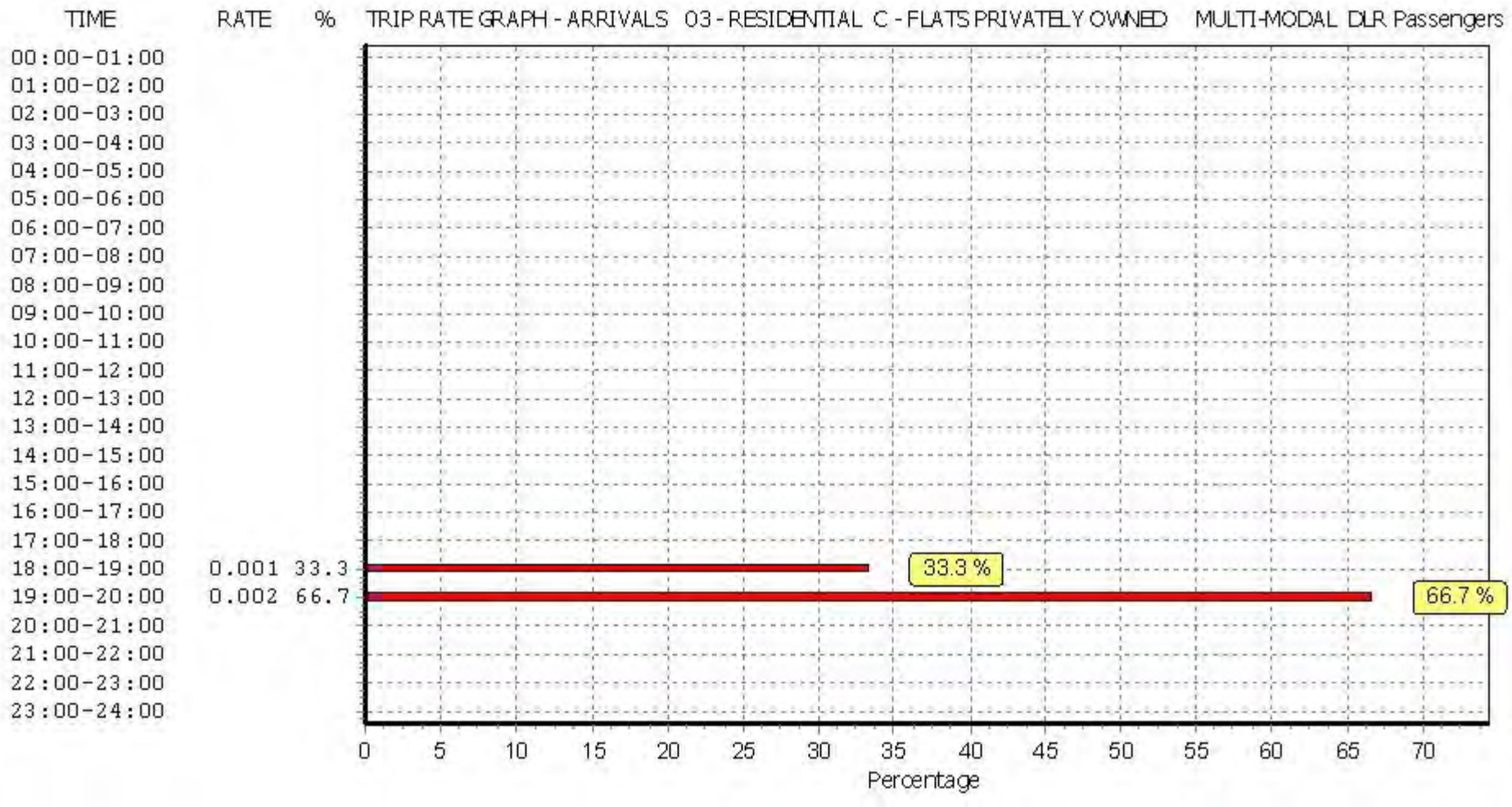
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

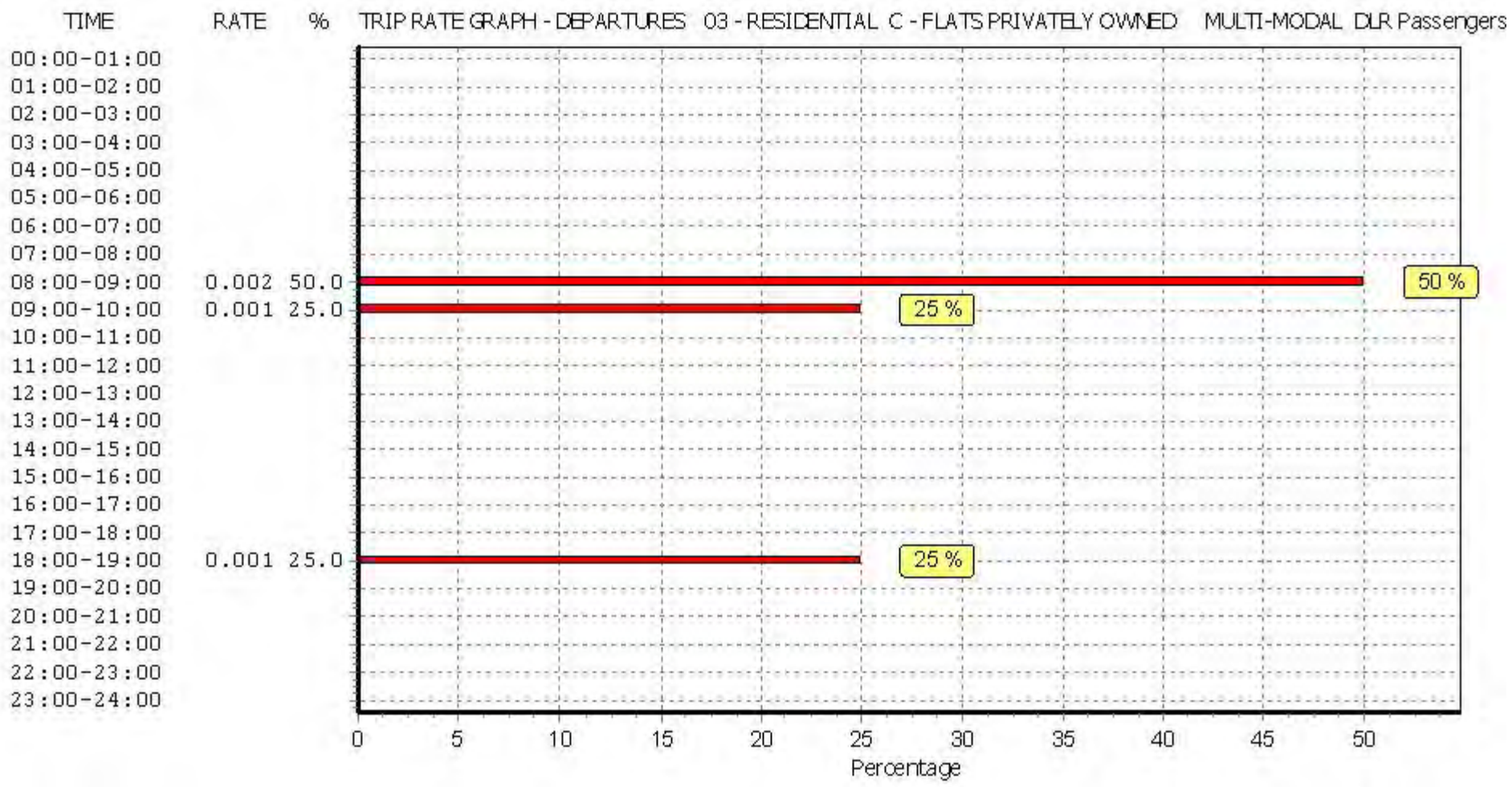
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.000	6	343	0.000	6	343	0.000
08:00 - 09:00	6	343	0.000	6	343	0.002	6	343	0.002
09:00 - 10:00	6	343	0.000	6	343	0.001	6	343	0.001
10:00 - 11:00	6	343	0.000	6	343	0.000	6	343	0.000
11:00 - 12:00	6	343	0.000	6	343	0.000	6	343	0.000
12:00 - 13:00	6	343	0.000	6	343	0.000	6	343	0.000
13:00 - 14:00	6	343	0.000	6	343	0.000	6	343	0.000
14:00 - 15:00	6	343	0.000	6	343	0.000	6	343	0.000
15:00 - 16:00	6	343	0.000	6	343	0.000	6	343	0.000
16:00 - 17:00	6	343	0.000	6	343	0.000	6	343	0.000
17:00 - 18:00	6	343	0.000	6	343	0.000	6	343	0.000
18:00 - 19:00	6	343	0.001	6	343	0.001	6	343	0.002
19:00 - 20:00	4	328	0.002	4	328	0.000	4	328	0.002
20:00 - 21:00	4	328	0.000	4	328	0.000	4	328	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.004			0.007

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

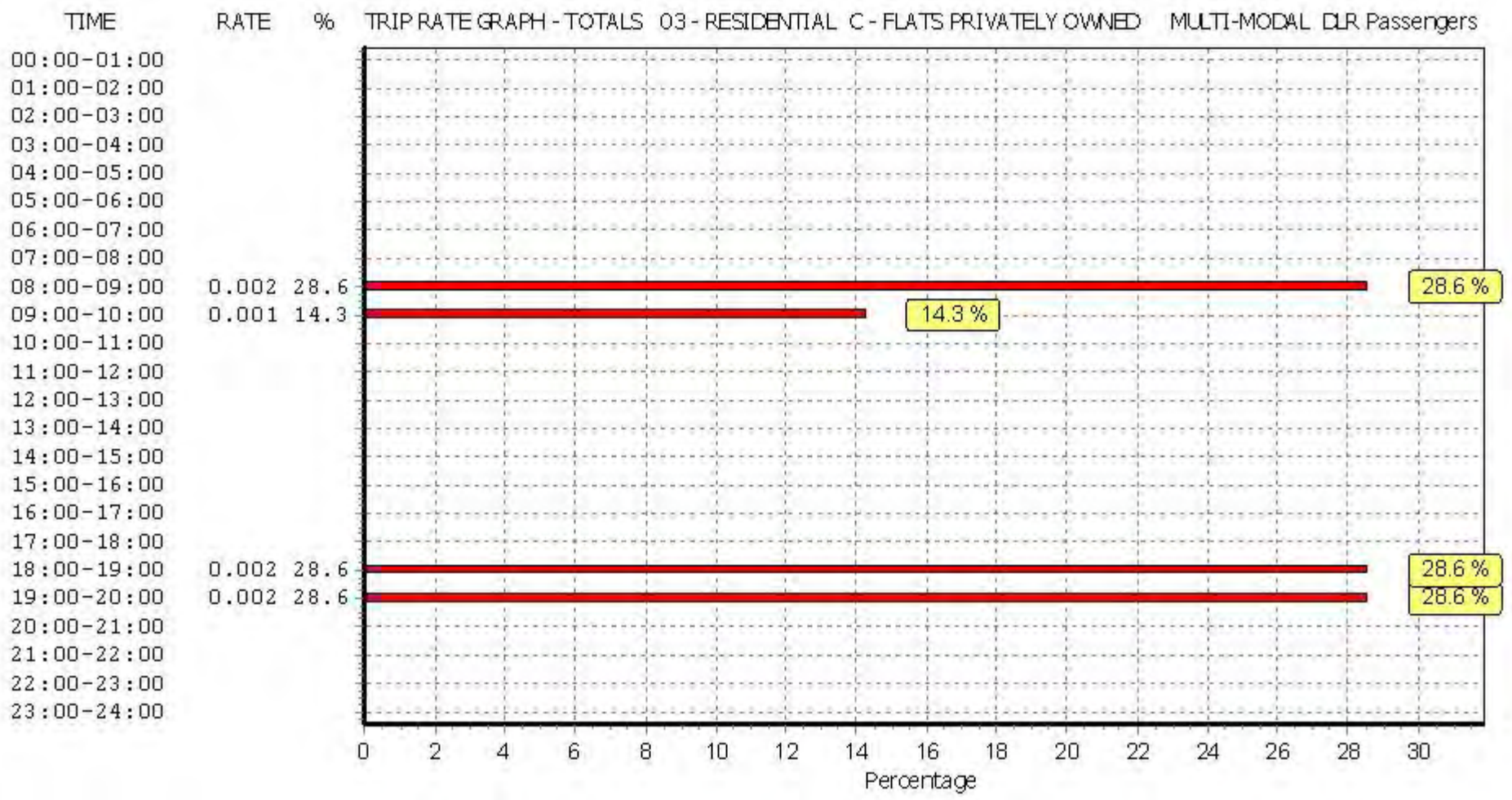
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



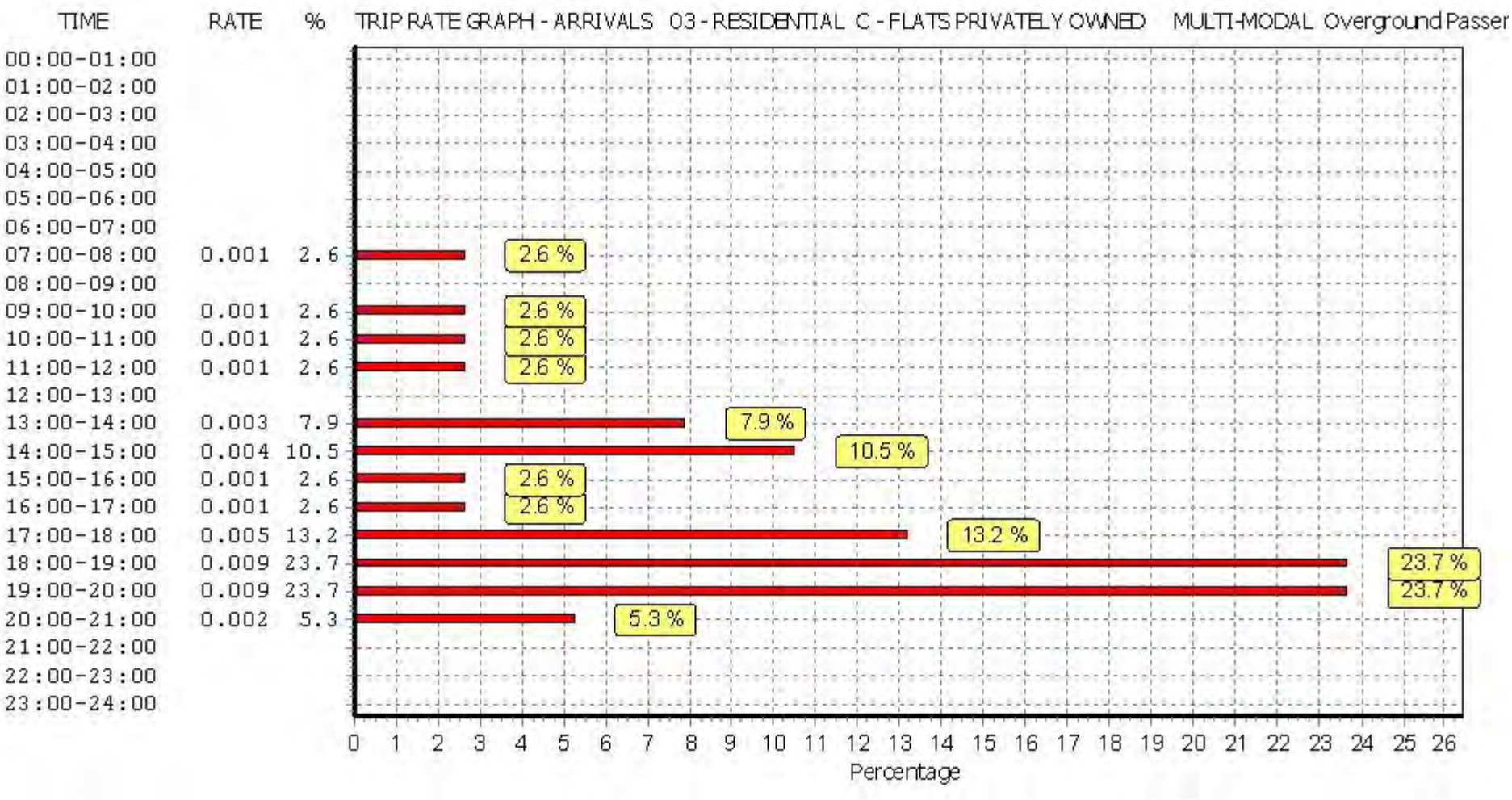
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

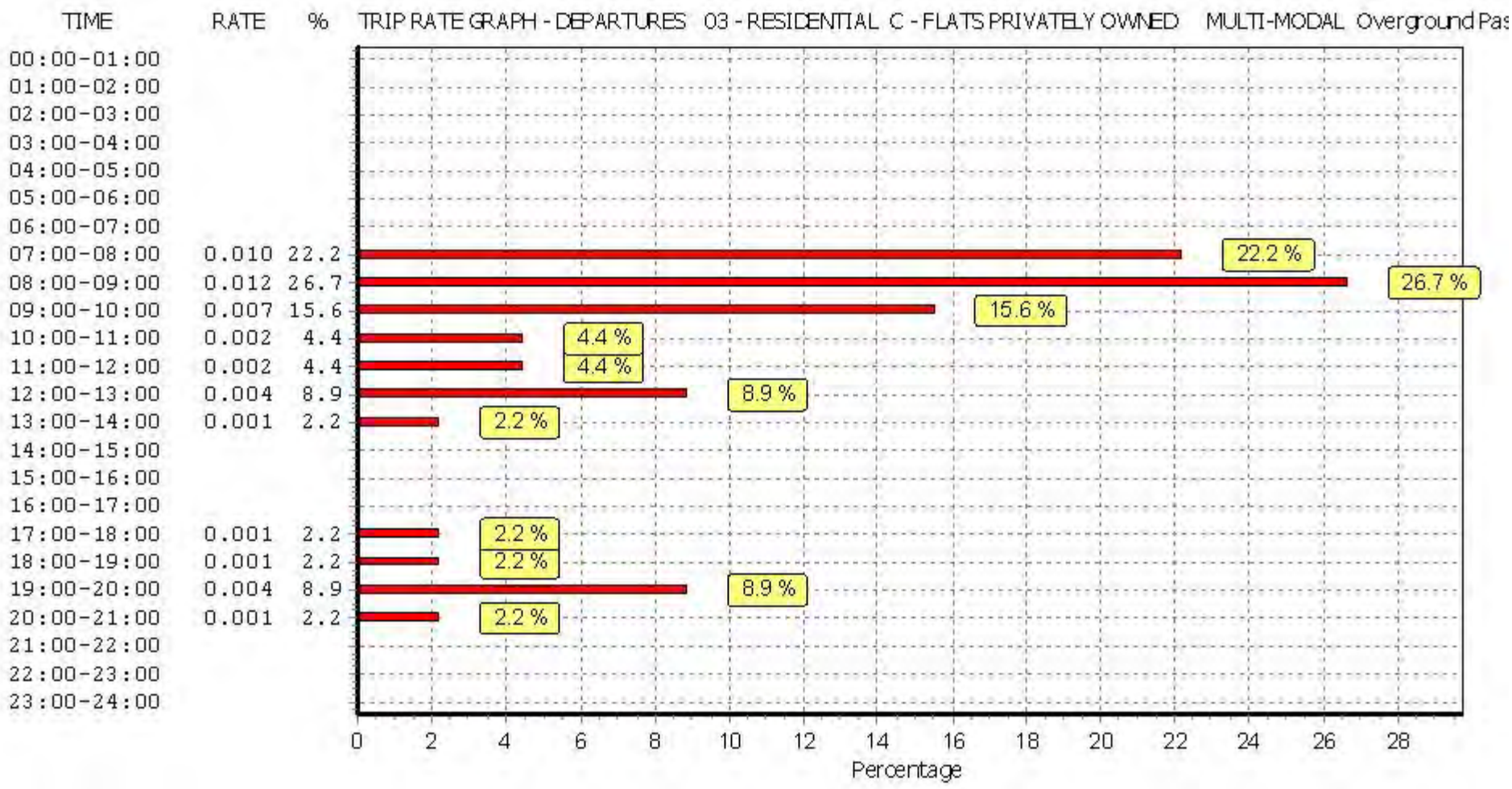
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.001	6	343	0.010	6	343	0.011
08:00 - 09:00	6	343	0.000	6	343	0.012	6	343	0.012
09:00 - 10:00	6	343	0.001	6	343	0.007	6	343	0.008
10:00 - 11:00	6	343	0.001	6	343	0.002	6	343	0.003
11:00 - 12:00	6	343	0.001	6	343	0.002	6	343	0.003
12:00 - 13:00	6	343	0.000	6	343	0.004	6	343	0.004
13:00 - 14:00	6	343	0.003	6	343	0.001	6	343	0.004
14:00 - 15:00	6	343	0.004	6	343	0.000	6	343	0.004
15:00 - 16:00	6	343	0.001	6	343	0.000	6	343	0.001
16:00 - 17:00	6	343	0.001	6	343	0.000	6	343	0.001
17:00 - 18:00	6	343	0.005	6	343	0.001	6	343	0.006
18:00 - 19:00	6	343	0.009	6	343	0.001	6	343	0.010
19:00 - 20:00	4	328	0.009	4	328	0.004	4	328	0.013
20:00 - 21:00	4	328	0.002	4	328	0.001	4	328	0.003
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.038			0.045			0.083

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

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



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



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

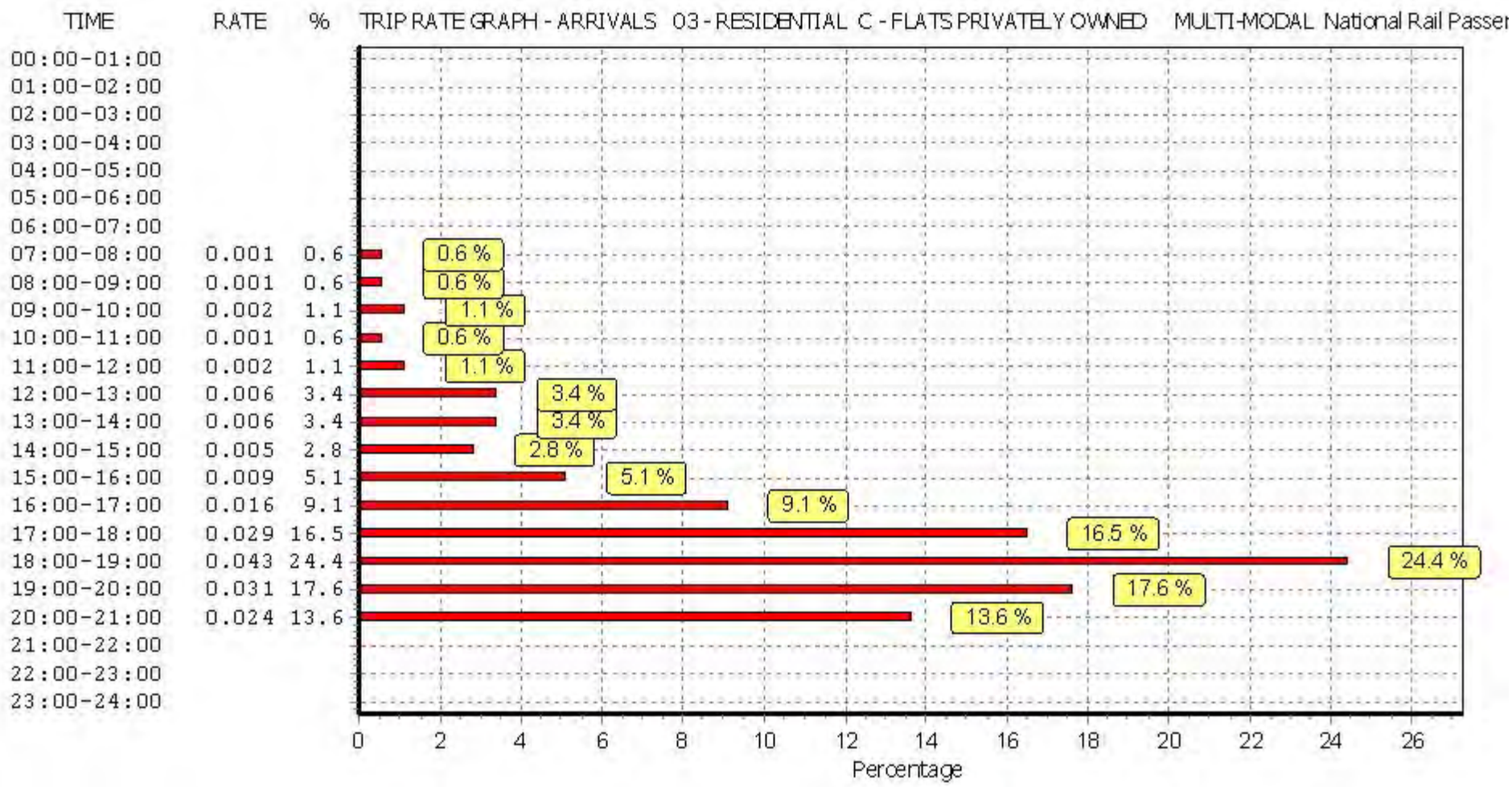
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

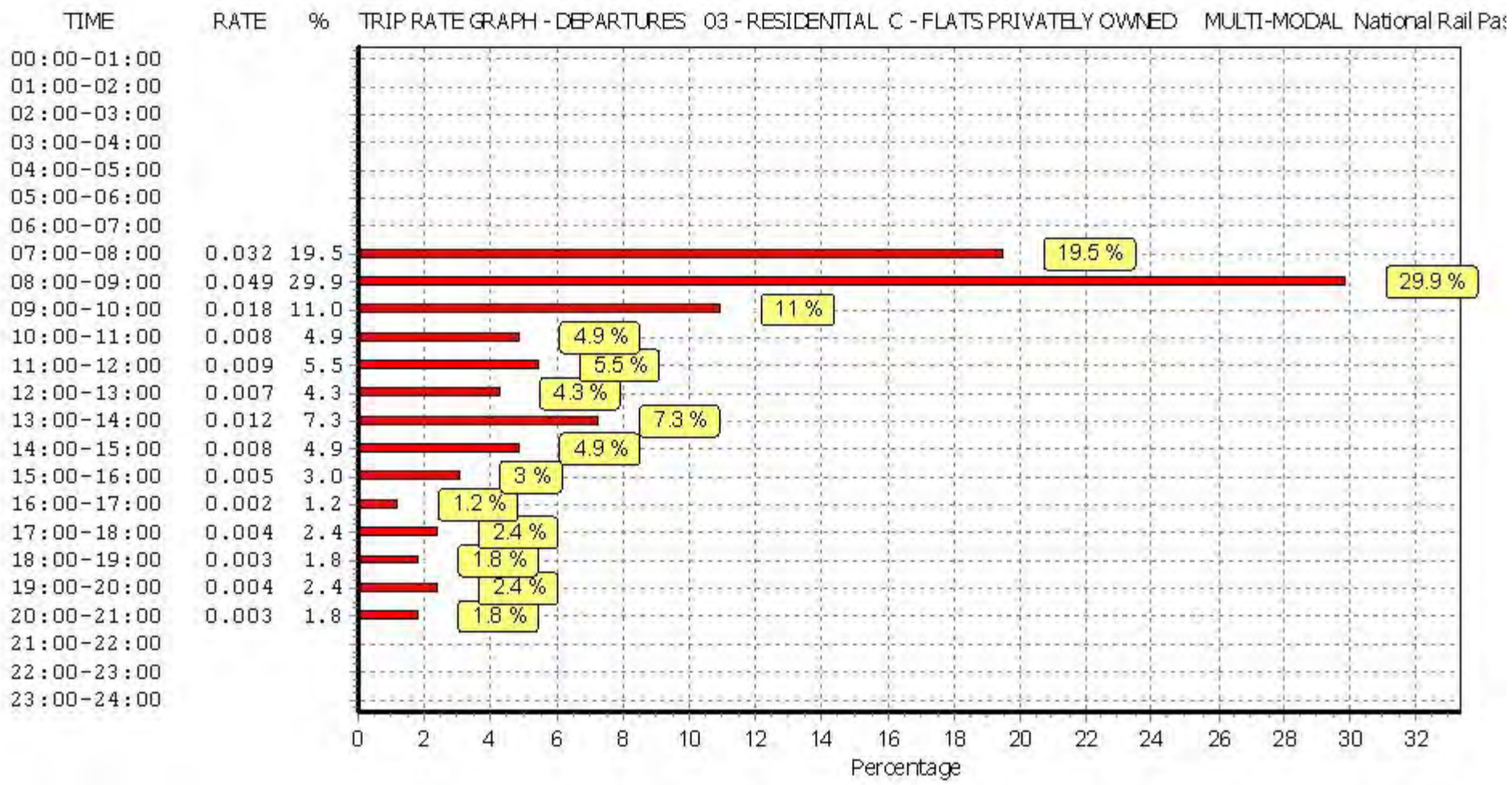
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.001	6	343	0.032	6	343	0.033
08:00 - 09:00	6	343	0.001	6	343	0.049	6	343	0.050
09:00 - 10:00	6	343	0.002	6	343	0.018	6	343	0.020
10:00 - 11:00	6	343	0.001	6	343	0.008	6	343	0.009
11:00 - 12:00	6	343	0.002	6	343	0.009	6	343	0.011
12:00 - 13:00	6	343	0.006	6	343	0.007	6	343	0.013
13:00 - 14:00	6	343	0.006	6	343	0.012	6	343	0.018
14:00 - 15:00	6	343	0.005	6	343	0.008	6	343	0.013
15:00 - 16:00	6	343	0.009	6	343	0.005	6	343	0.014
16:00 - 17:00	6	343	0.016	6	343	0.002	6	343	0.018
17:00 - 18:00	6	343	0.029	6	343	0.004	6	343	0.033
18:00 - 19:00	6	343	0.043	6	343	0.003	6	343	0.046
19:00 - 20:00	4	328	0.031	4	328	0.004	4	328	0.035
20:00 - 21:00	4	328	0.024	4	328	0.003	4	328	0.027
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.176			0.164			0.340

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

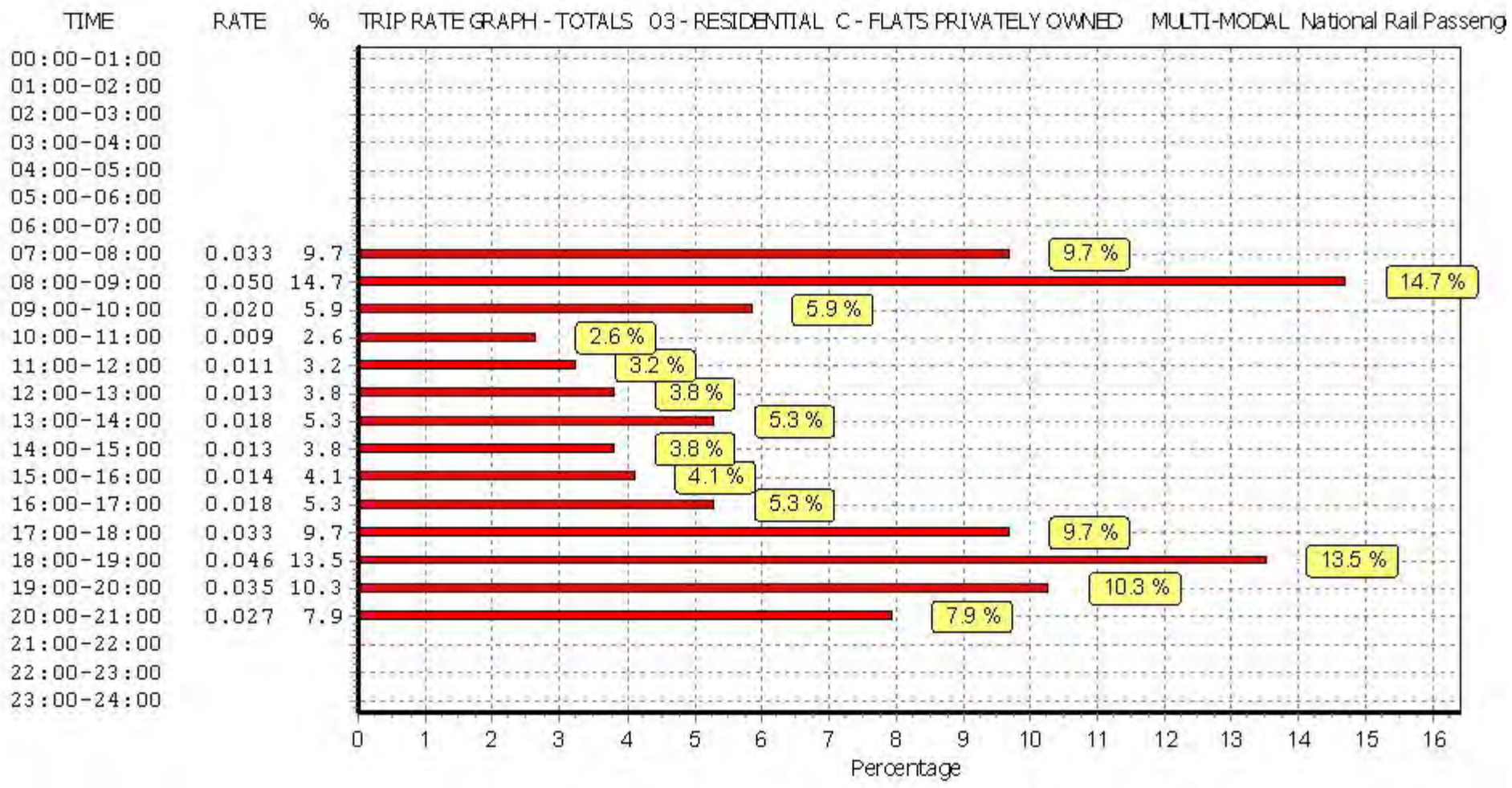
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected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



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



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



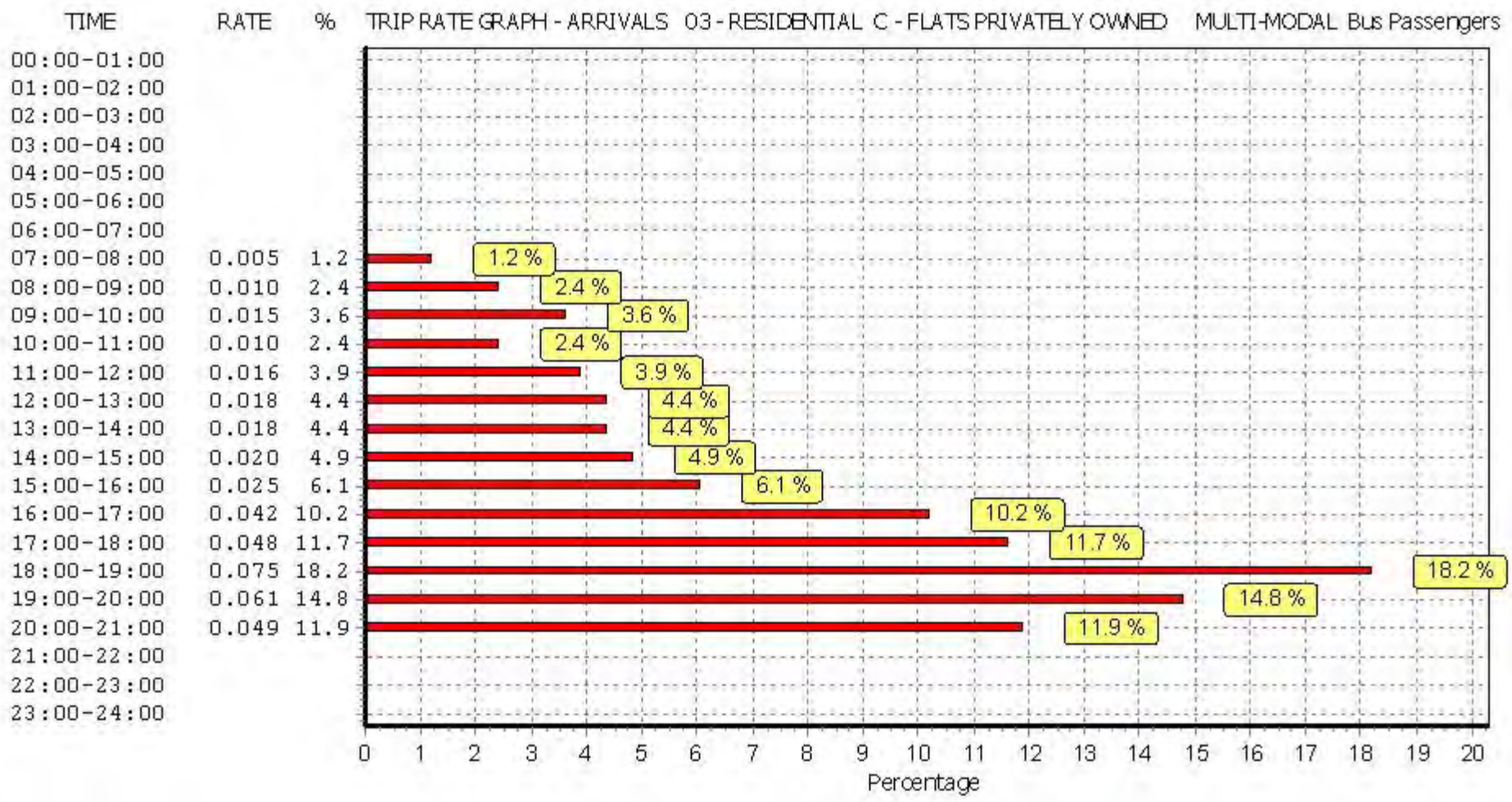
This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.005	6	343	0.046	6	343	0.051
08:00 - 09:00	6	343	0.010	6	343	0.073	6	343	0.083
09:00 - 10:00	6	343	0.015	6	343	0.044	6	343	0.059
10:00 - 11:00	6	343	0.010	6	343	0.021	6	343	0.031
11:00 - 12:00	6	343	0.016	6	343	0.029	6	343	0.045
12:00 - 13:00	6	343	0.018	6	343	0.025	6	343	0.043
13:00 - 14:00	6	343	0.018	6	343	0.034	6	343	0.052
14:00 - 15:00	6	343	0.020	6	343	0.023	6	343	0.043
15:00 - 16:00	6	343	0.025	6	343	0.021	6	343	0.046
16:00 - 17:00	6	343	0.042	6	343	0.023	6	343	0.065
17:00 - 18:00	6	343	0.048	6	343	0.021	6	343	0.069
18:00 - 19:00	6	343	0.075	6	343	0.019	6	343	0.094
19:00 - 20:00	4	328	0.061	4	328	0.021	4	328	0.082
20:00 - 21:00	4	328	0.049	4	328	0.017	4	328	0.066
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.412			0.417			0.829

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

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



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

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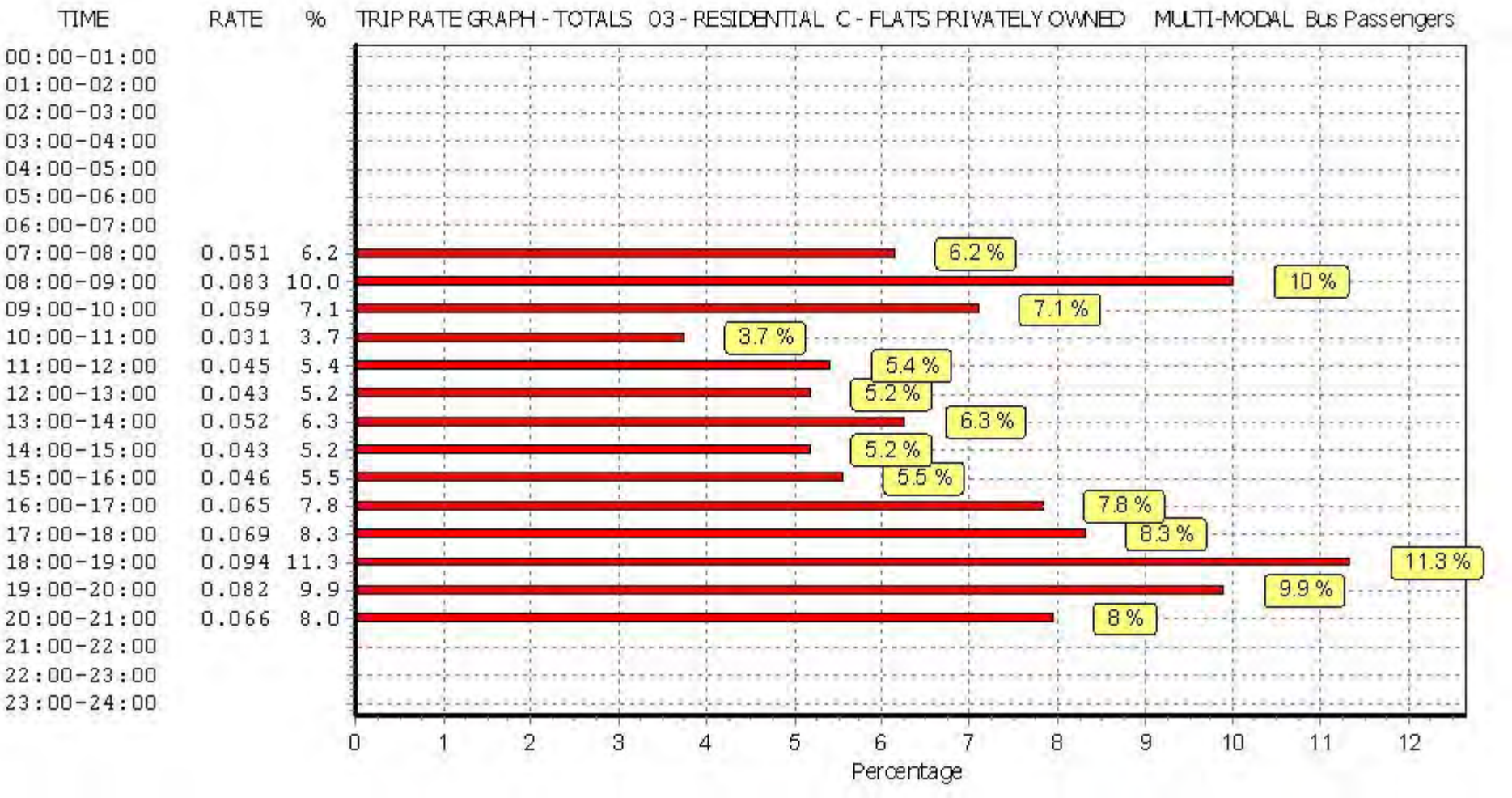

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL Water Service Passengers
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	343	0.000	6	343	0.000	6	343	0.000
08:00 - 09:00	6	343	0.000	6	343	0.000	6	343	0.000
09:00 - 10:00	6	343	0.000	6	343	0.000	6	343	0.000
10:00 - 11:00	6	343	0.000	6	343	0.000	6	343	0.000
11:00 - 12:00	6	343	0.000	6	343	0.000	6	343	0.000
12:00 - 13:00	6	343	0.000	6	343	0.000	6	343	0.000
13:00 - 14:00	6	343	0.000	6	343	0.000	6	343	0.000
14:00 - 15:00	6	343	0.000	6	343	0.000	6	343	0.000
15:00 - 16:00	6	343	0.000	6	343	0.000	6	343	0.000
16:00 - 17:00	6	343	0.000	6	343	0.000	6	343	0.000
17:00 - 18:00	6	343	0.000	6	343	0.000	6	343	0.000
18:00 - 19:00	6	343	0.000	6	343	0.000	6	343	0.000
19:00 - 20:00	4	328	0.001	4	328	0.000	4	328	0.001
20:00 - 21:00	4	328	0.000	4	328	0.000	4	328	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.000			0.001

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

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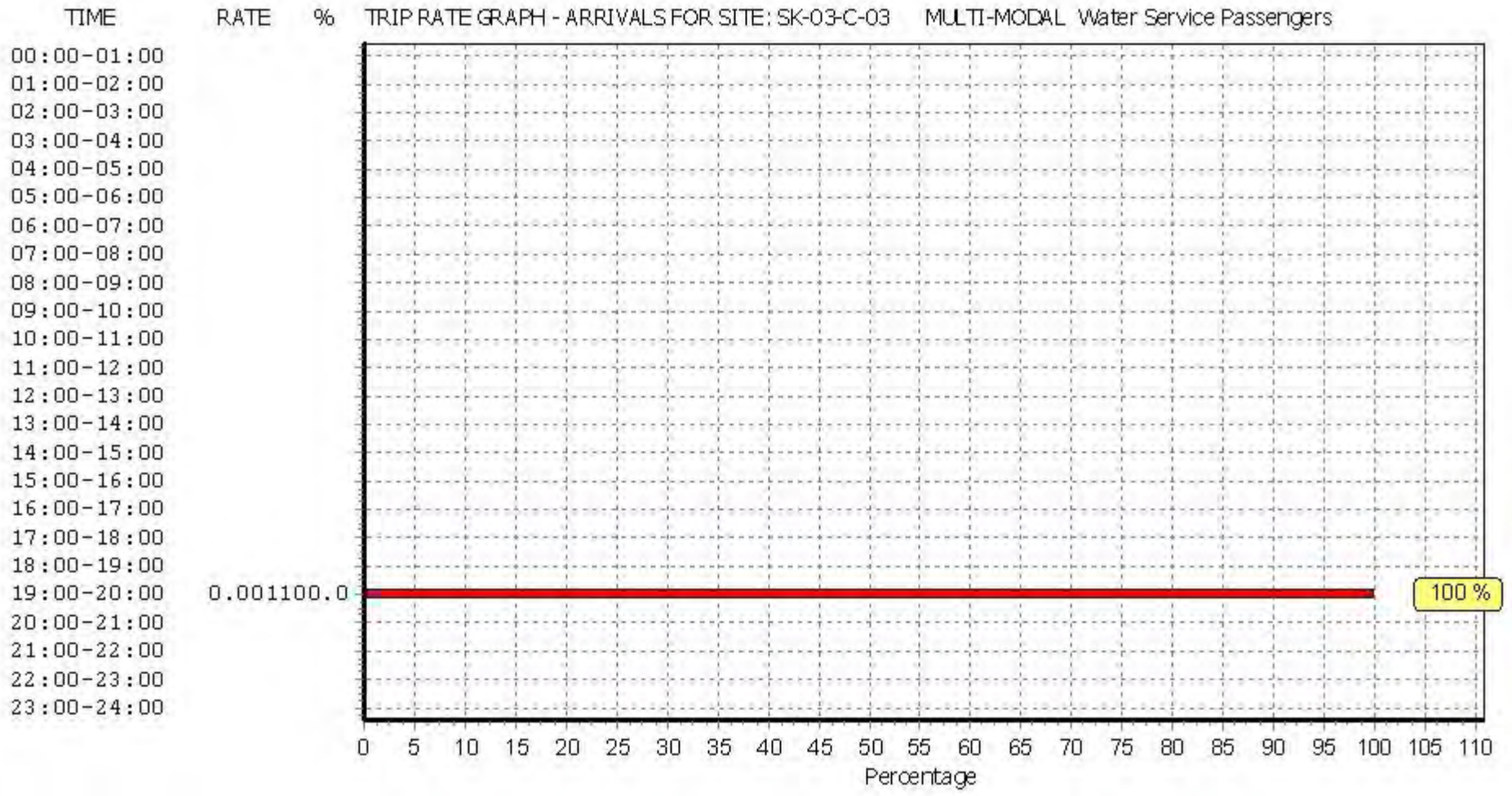

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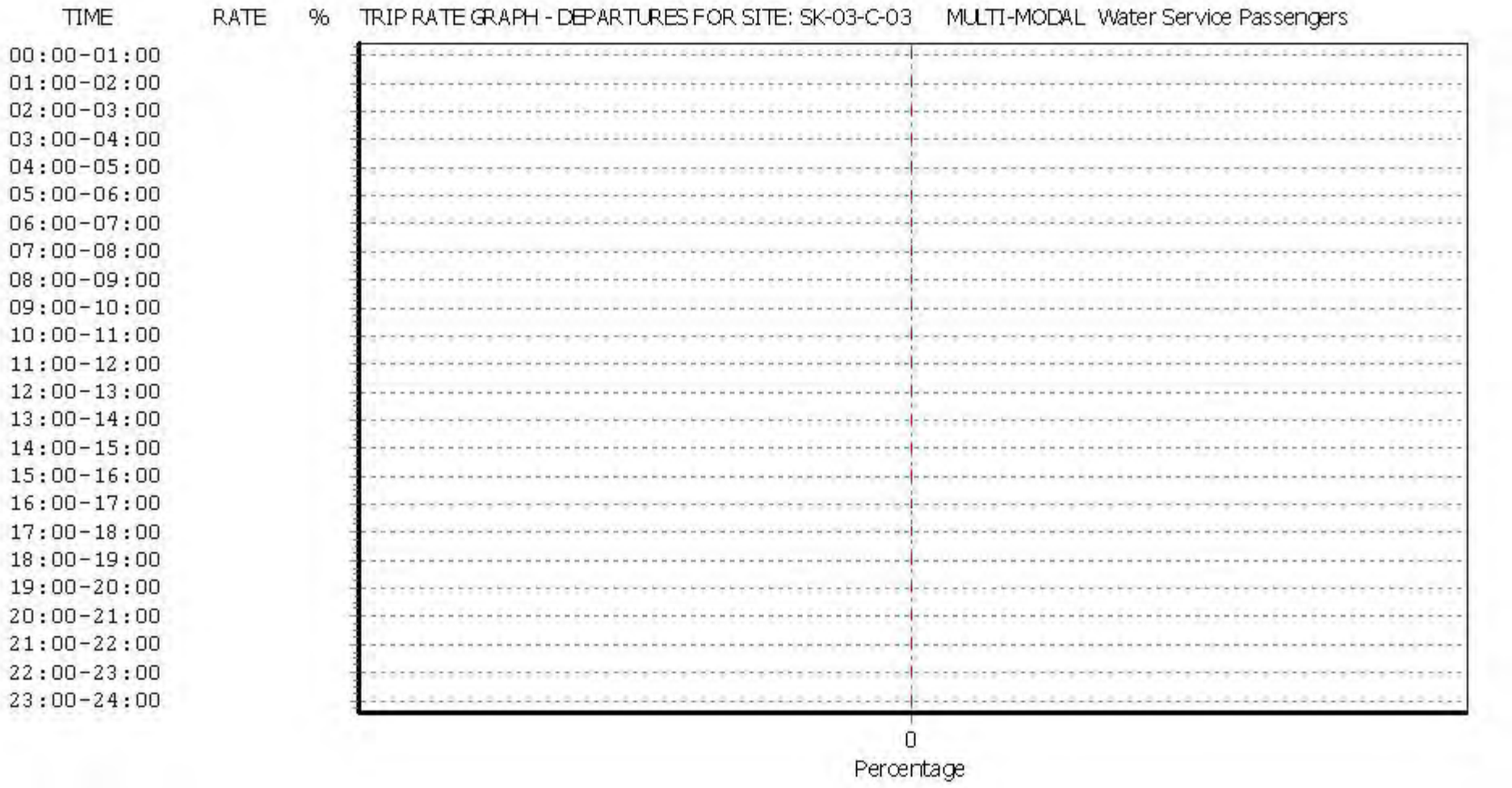

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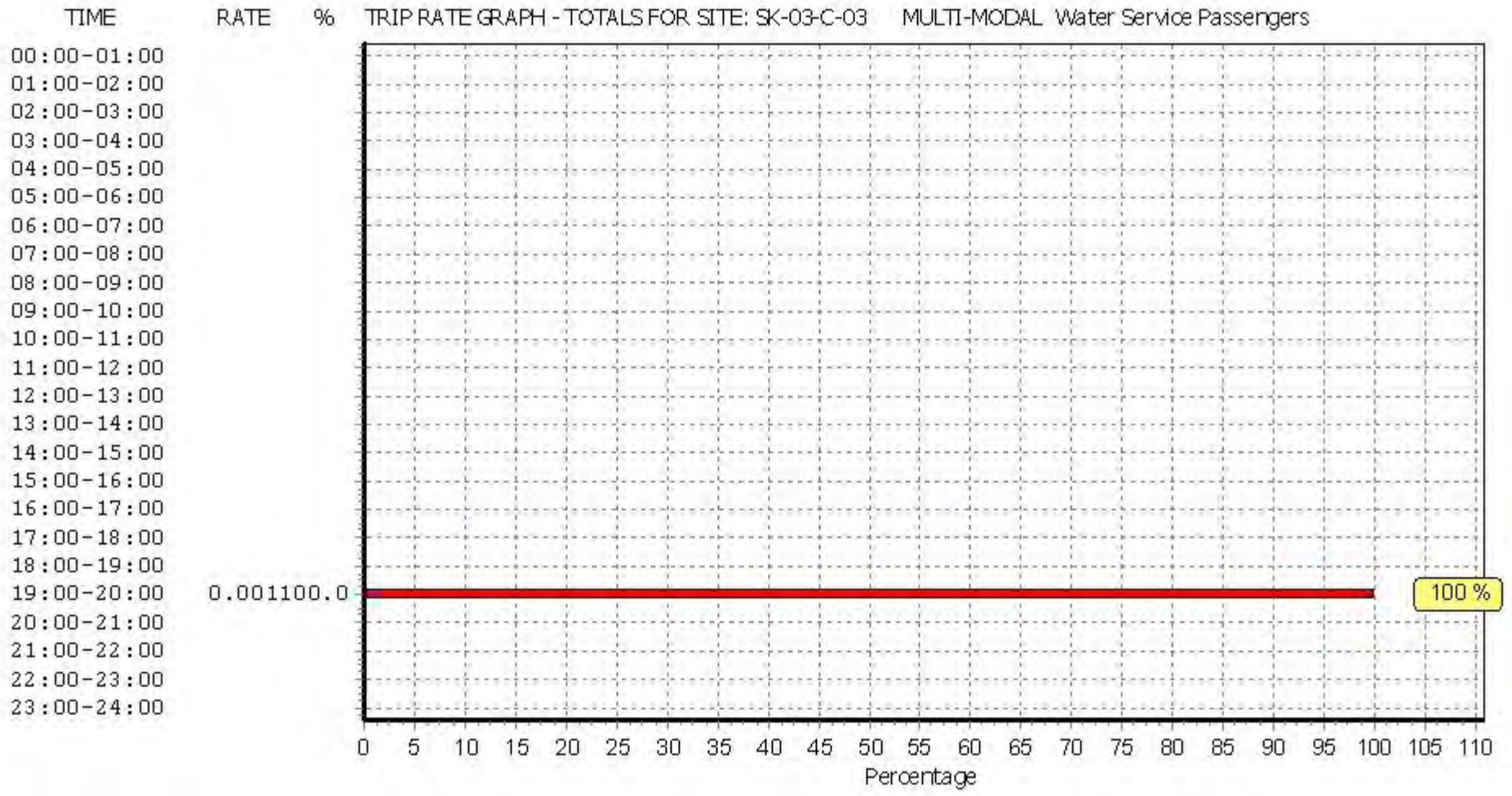

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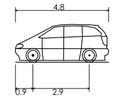

Standard Design Vehicle (SDV)	
Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m

Rev	Description	Date	Drawn	Checked	Apvd.
A	Swept Path Analysis updated to new layout.	21.06.21	LGM	PLC	-

Project

New Southgate, Royal Brunswick Park
London

Drawing Description

Swept Path Analysis
Block C & D Basement Floor

Project Number	*Drawing Number*			
ST-3013	09-B			
Scale	*Date*	*Drawn*	*Checked*	*Approved*
NTS@A2	09.06.21	LGM	PLC	-

Client

COMER HOMES GROUP

Architect

PLUS ARCHITECTURE

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Portmill Lane, Hitchin, Herts, SG5 1DJ

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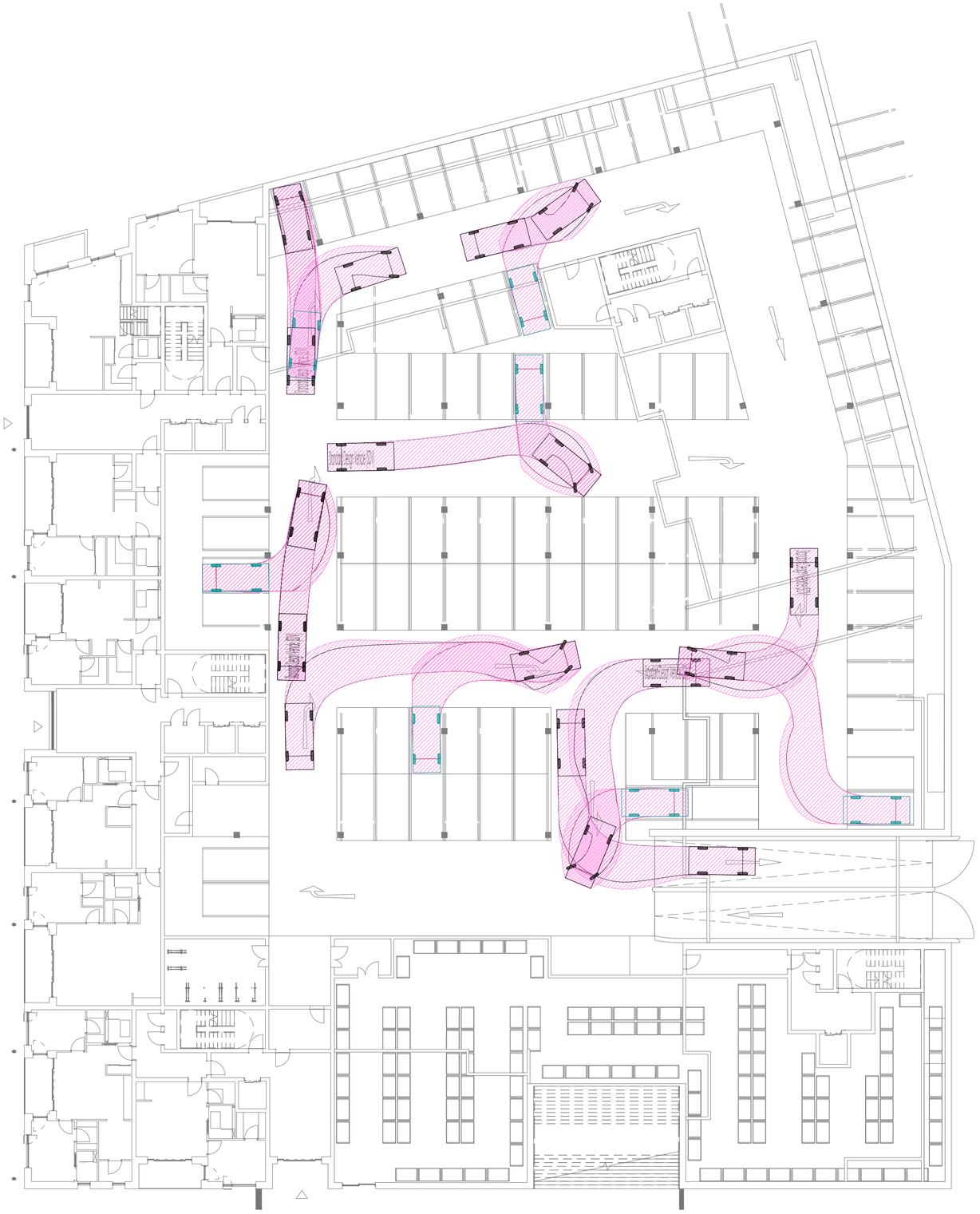

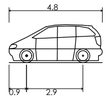

Standard Design Vehicle (SDV)	
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Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m

0 2.5 5 7.5 10 12.5m

SCALE BAR 1:250

Rev	Description	Date	Drawn	Checked	Apvd.
A	Swept Path Analysis updated to new layout.	21.06.21	LGM	PLC	-

Project

New Southgate, Royal Brunswick Park
London

Drawing Description

Swept Path Analysis
Block D Ground Floor

Project Number	*Drawing Number*			
ST-3013	08-A			
Scale	*Date*	*Drawn*	*Checked*	*Approved*
1:200@A2	09.06.21	LGM	PLC	-

Client

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Architect

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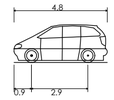
Block F

0 2.5 5 7.5 10 12.5m
SCALE BAR 1:250



Standard Design Vehicle (SDV)

Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m

Rev	Description	Date	Drawn	Checked	Apvd.

Project

New Southgate, Royal Brunswick Park
London

Drawing Description

Swept Path Analysis
Block F

Project Number	*Drawing Number*
ST-3013	05

Scale	*Date*	*Drawn*	*Checked*	*Approved*
1:250@A2	25.05.21	LGM	PLC	XXX

Client

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Architect

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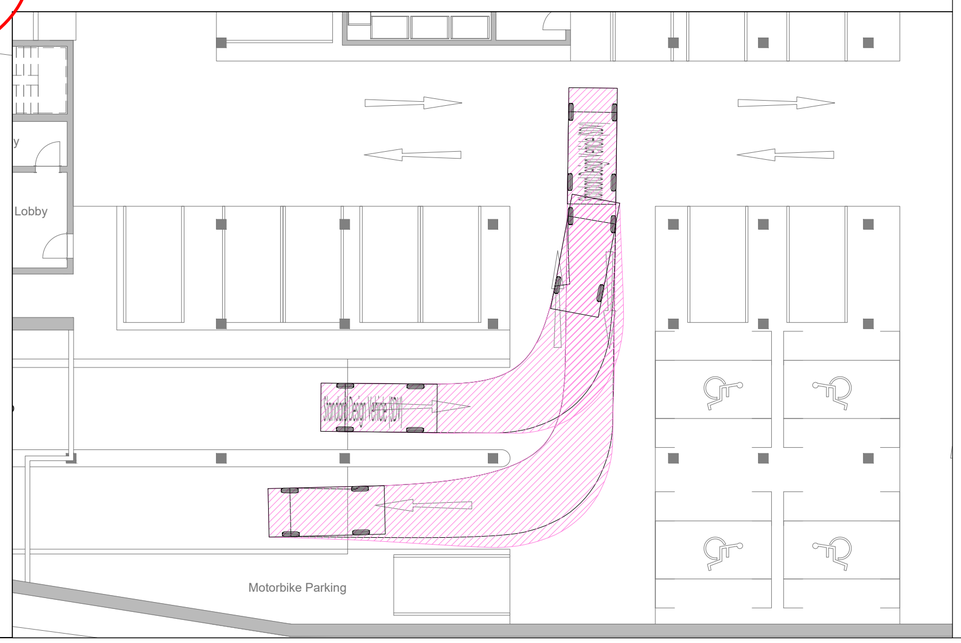
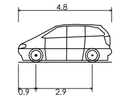
Block E



0 2 4 6 8 10m

SCALE BAR 1:200



Standard Design Vehicle (SDV)	
Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m

Rev	Description	Date	Drawn	Checked	Apvd.

Project

New Southgate, Royal Brunswick Park
London

Drawing Description

Swept Path Analysis
Block E

Project Number	Drawing Number			
ST-3013	04			
Scale	**Date**	**Drawn**	**Checked**	**Approved**
1:200@A2	25.05.21	LGM	PLC	XXX

Client: COMER HOMES GROUP

Architect: PLUSARCHITECTURE

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