# Water Orton School Relocation

## TRANSPORT STATEMENT

Submission

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Submission

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# Tables and Figures



# Appendices

# 1 Introduction

## BACKGROUND

1.1 JMP Consultants Ltd has been commissioned by Wilmott Dixon to provide a Transport Statement to support a planning application for the development of a new two form of entry (2FE) primary school on land north of Plank Lane in Water Orton, Warwickshire.

1.2 The new school will be a replacement of the existing 1.5 FE Water Orton Primary School, which is situated off Attleboro Lane, approximately 150m to the south of the proposed development site across a village green. The existing school will be demolished in connection with enabling works for the forthcoming High Speed 2 rail line

1.3 The contents of this Transport Statement have been produced in accordance with good practice guidelines as set out within the National Planning Practice Guidance (NPPG) on Travel Plans, Transport Assessments and Statements in Decision-Taking.

1.4 A framework Travel Plan has also been produced to support the planning application which should be read in conjunction with this document.

1.5 The scope of assessment has been discussed and agreed with Warwickshire County Council in their capacity as local highway authority.

## REPORT STRUCTURE

1.6 This report will incorporate a detailed consideration of the transport implications of the proposed development within the following ordered sections:

- Section **Two** provides an outline of national and local transportation related policies relevant to the proposed development;
- Section **Three** describes the existing conditions of the site and surrounding highway network, along with the location of the existing school plus an overview of the accessibility of the site by all modes;
- Section **Four** sets out the development proposals along with access and parking strategies;
- Section **Five** provides a summary of the traffic impacts of the development, highlighting the vehicle trip generating potential of the proposed development; and
- Section **Six** summarises and concludes the report.

# 2 Policy

## NATIONAL

### National Planning Policy Framework 2012

2.1 The National Planning Policy Framework (NPPF) was published and came into effect on March 27th 2012. The document constitutes guidance for local planning authorities and decision makers both in drawing up plans and as a material consideration in determining planning applications. The document sets out the Government's planning policies for England and how these are expected to be applied. The transport policies within the document supersede previous planning policies and guidance including PPG13.

2.2 The document reaffirms the status of local development plans as the starting point for decision making.

2.3 The document states that:

> *"All developments that generate significant amounts of movement should be supported by a Transport Assessment or a Travel Plan".*

2.4 Planning decisions should take account of:

- Whether the opportunities for sustainable travel have been taken up;
- If safe and sustainable access to the site can be achieved for all people; and
- If any significant impacts of the development can be cost effectively limited.

2.5 The document states that:

> *Development should only be prevented or refused on transport grounds where the residual cumulative impacts are severe.*

### National Planning Practice Guidance 2014

2.6 PPG sets out to describe typically what a Transport Statement is and what information should be included within it. It also sets out why Transport Statements are important focusing on key issues such as encouraging sustainable travel, creating inclusive, accessible and connected communities and improving road safety, all of which contribute to reducing carbon emissions and climate impacts and help to improve health outcomes and quality of life.

2.7 PPG advises that Transport Statements should be:

> *Proportionate to the size and scope of the development to which they relate;*
>
> *Tailored to particular local circumstances; and*
>
> *Brought forward through collaborative working between developers and local authorities*

2.8 PPG sets out that ultimately the local authority should determine the requirement for a Transport Assessment or Statement based on the local conditions and this decision should be formed on a case-by-case basis.

2.9 This TS has been prepared taking PPG into consideration.

### Transport White Paper

2.10 Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen, the Governments White Paper on the future of transport was published in January 2011. The White Paper actively promotes the Government's commitment to a future of building economic growth and a low carbon transport system in the UK.

2.11 The document stresses the importance of reducing congestion and promoting sustainable transport to create and develop active and healthy lifestyles and communities. The paper identifies that it is the role of local authorities, communities, companies, employees and individuals to actively engage in identifying transport needs and transport choices.

## LOCAL

### North Warwickshire Draft Local Plan 2016

2.12 North Warwickshire Borough Council (NWBC) are currently preparing a new Draft Local Plan which will merge together the Core Strategy, the Site Allocations Plan and the Development Management Plan (DMP).

2.13 The Draft Local contains planning policies to guide decisions on the type and scale of development in North Warwickshire in the period up to 2031. It also gives an indication of where and how development will take place beyond this time frame in order to ensure a continuous supply of land. It explains how much and what type of development there will be and where this will be located.

2.14 NWBC have prepared a Draft Local Plan document with a view to going out for public consultation in late 2016.

### North Warwickshire Local Plan 2006

2.15 The North Warwickshire Local Plan was developed between 2003 and 2006, and adopted on 4 July 2006. The plan set out the main suite of policies which govern and manage development across the Borough, including housing, commercial and industrial property, community facilities and services.

2.16 All but core Policies 4 (Green Belt) 7 (Housing Land Requirement) and 9 (Employment Land Requirement) were saved under Direction from the Secretary of State, and will be replaced as work progresses on the new Local Plan for North Warwickshire. The Core Strategy was adopted on 9th October and replaced some of the saved Policies of the Local Plan 2006.

### Core Strategy Development Plan 2014

2.17 The Core Strategy forms a key part of the Local Plan for North Warwickshire. It contains a vision and strategic objectives for the Borough, as well as Core Policies that will set the basis for directing development for the next 15 to 20 years.

2.18 Transport Policies saved which continued to be saved from the Local Plan 2006 include the following:

- TPT1 – Transport Considerations In New Development
- TPT2 – Traffic Management & Traffic Safety
- TPT3 – Access and Sustainable Travel and Transport
- TPT4 – Public Transport Improvements & New Facilities
- TPT6 – Vehicle Parking

2.19 These policies are likely to be up dated through a future Development Management Development Planning Document (DPD).

## Draft Development Management DPD – Draft Policies 2015

2.20 The Development Management DPD sets out draft policies, which will build on the Core Strategy and will include more detailed local policies for the management of development. It will provide a detailed set of policies, designed to contribute to achieving the Spatial Strategy and Core Planning Policies set out in the Core Strategy. Of particular significance for this Transport Statement are following policies in relation to transport.

*DM5 Development Matters*

*b) Travel Plans - Development will be expected to link with existing road, cycle and footpath networks. Larger development proposals as defined at DM14 will be expected to encourage the use of public and shared transport. This will be secured through a Travel Plan and/or financial contributions to enhance or to introduce new public or bespoke transport schemes.*

*c) Parking - Adequate vehicle and parking provision commensurate to the use will be expected, as guided by the standards at Appendix A. Greater emphasis will be placed on parking provision in areas not served by public transport, whilst lower provision within the main towns may be appropriate.*

*DM14 Transport Considerations*

*a) Transport Assessments - Transport Assessments will be required to accompany development proposals which will generate significant amounts of movement as outlined in Appendix D to this Plan. Assessments will also be required where there is a cumulative effect created by the floor space on the site or in the vicinity, or where there are demonstrable shortcomings in the adequacy of the local transport network to accommodate development of the scale proposed. Travel Plans will be required to be submitted alongside these Assessments, as set out in Policy DM5 of this Document.*

*b) Airport Parking - Proposals for remote car parking of passengers or visitor vehicles in the Borough will not be permitted.*

*c) High Speed Rail - The line of the High Speed 2 rail line through North Warwickshire will be safeguarded.*
*The line of the High Speed 3 rail line through North Warwickshire will be safeguarded when it is published by a Parliamentary Bill. Until this time, the line will be treated as a material planning consideration of significant weight.*

## Parking Standards

2.21 Parking standards for new development are currently set out by Appendix 4 of the North Warwickshire Local Plan.

**Table 2-1 North Warwickshire Parking Standards**

| Land Use | Maximum car parking provision | Minimum Cycle Parking Provision |
|---|---|---|
| **D1 (Schools & Colleges – non-residential)** | 1 per classroom or teaching area.<br>1 per 100 pupils.<br>Whichever is greater (together with facility for overflow) | 1 per 10 staff<br>1 per 5 students |

*North Warwickshire Local Plan*

2.22 There is no mention of provision for parent drop-off parking in local standards, it is therefore assumed that each site is considered by its own individual merits.

# 3 Existing Conditions

## SITE LOCATION AND SETTING

3.1 Water Orton is located in North Warwickshire, approximately 11km to the east of Birmingham City Centre and adjacent to the M6 and M42 motorways.

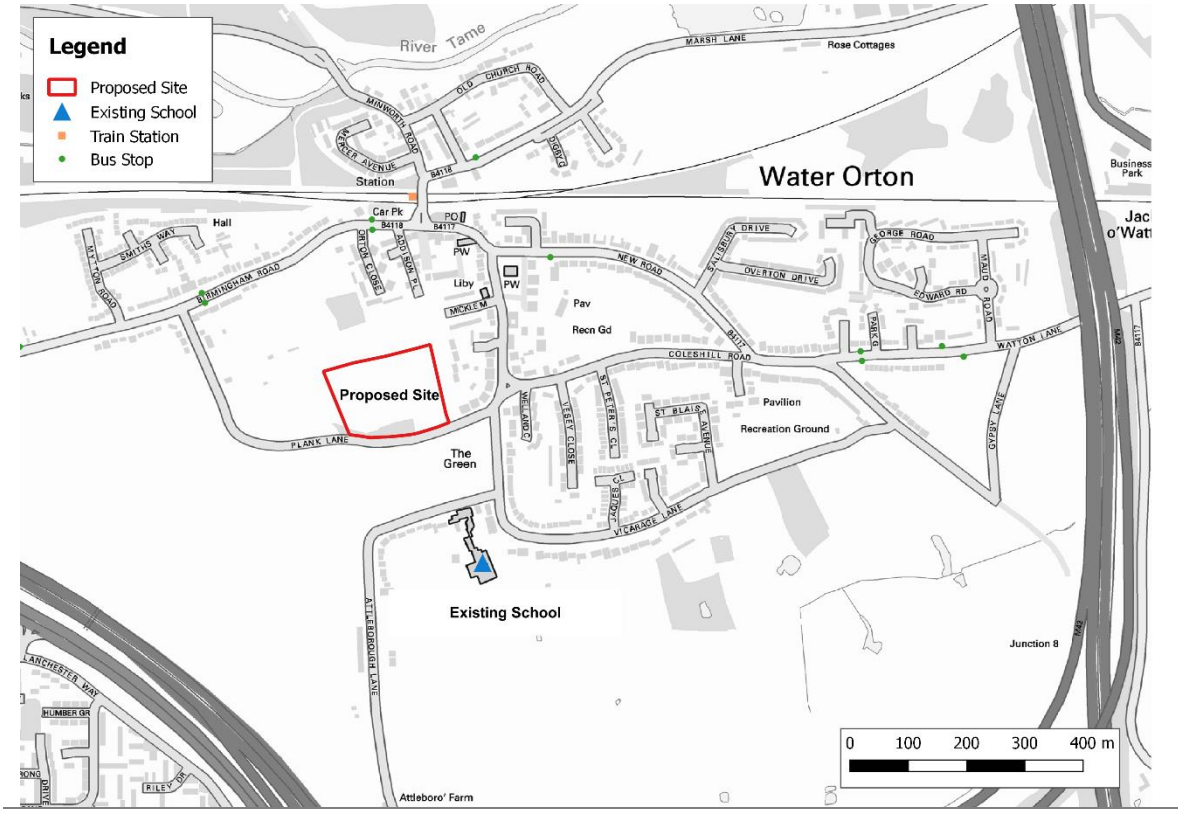
3.2 **Figure 3.1** provides an illustration of the location of the proposed development site and the location of the existing school site in relation to the local settings.

3.3 The proposed site fronts onto Plank Lane, a road with little existing frontage. To the south of Plank Lane is an area of open park land with play equipment, known as 'The Green', which also separates the development site from the existing school frontage.

3.4 An existing public right of way (PROW) provides a connection between the proposed site and Water Orton Railway Station to the north.

3.5 The remaining boundaries of the proposed site are made up of private, undeveloped land, to the north and west; and private residential dwellings to the east.

**Figure 3.1 Site Location**




*GIS*

# LOCAL HIGHWAY NETWORK

## B4118 (Birmingham Road, Marsh Lane)

3.6 The B4118 provides a connection from the A446 in the east to the Castle Bromwich area of Birmingham to the west via Water Orton.

3.7 The B4118 forms the western (Birmingham Road) and northern (Marsh Lane) arms of a priority junction in Water Orton adjacent to the railway station.

3.8 Within Water Orton the B4118 provides frontage access to a number of residential and commercial premises and is subject to a 30mph speed limit. Continuous footways and street lighting are provided along both sides of the road with crossing points provided at strategic locations. Traffic calming is present and includes local narrowing and speed humps.

## B4117 (New Road)

3.9 The B4117 provides a connection from Coleshill and the A446 in the east to Water Orton.

3.10 The B4117 forms the eastern (New Road) arm of a priority junction in Water Orton adjacent to the railway station.

3.11 Within Water Orton the B4117 provides frontage access to a number of residential and commercial premises and is subject to a 30mph speed limit. Continuous footways and street lighting are provided along both sides of the road with crossing points provided at strategic locations. Traffic calming is present and includes local narrowing and speed humps.

## Minworth Road / Water Orton Lane

3.12 Minworth Road and Water Orton Lane provides a connection from Water Orton in the east to the A4097 at Minworth in the west.

3.13 Minworth Road forms the northern arm of a priority junction with the B4118 Marsh Lane to the north of the railway station.

3.14 Within Water Orton Minworth Road provides frontage access to a number of residential and commercial premises and is subject to a 30mph speed limit. Continuous footways and street lighting are provided along both sides of the road. Traffic calming is present and includes local narrowing and speed humps.

3.15 Minworth Road passes over a weight and width restricted bridge over the river Tame to the north of Water Orton, to the west of which the road becomes Water Orton Lane which is predominantly rural in nature, connecting to Minworth to the west.

## Plank Lane

3.16 Plank Lane provides a connection between Coleshill Road in the east and Birmingham Road in the west within Water Orton.

3.17 The eastern section (close to Coleshill Road) provides access to a handful of residential properties, plus an access to a private drive (Christopher Way). Close to the junction with Coleshill Road, double yellow lines provide a restriction to on-street parking.

3.18 The western section is rural in nature, with a gated access to a field plus frontage access to a handful of residential properties at the far western end (close to Birmingham Road), plus a private driveway which provides rear-access to some properties.

3.19 Plank Lane is approximately 5.5m wide throughout with a continuous footway along the southern side of the road with intermittent footways along the northern side of the road.

3.20 Street lighting is provided throughout, indicating a speed limit of 30mph.

3.21 Access to the proposed school site will be taken off Plank Lane to the west of Christopher Way.

### Vicarage Lane, Coleshill Road and Attleboro Lane

3.22 Vicarage Lane, Coleshill Road and Attleboro Lane are residential streets in the vicinity of the proposed site. Vicarage Lane connects Plank Lane and Attleboro Lane and runs along the southern edge of Water Orton connecting to Coleshill Road to the east. Coleshill Road connects the B4117 New Road in Water Orton village centre to Plank Lane and to the eastern part of Water Orton and Attleboro Lane provides access to the existing school site.

## STRATEGIC ROAD NETWORK

3.23 Water Orton is located reasonably close to Junction 9 of the M42 (via the A446) and junction 5 of the M6. The A38 at Minworth is also reasonably close by.

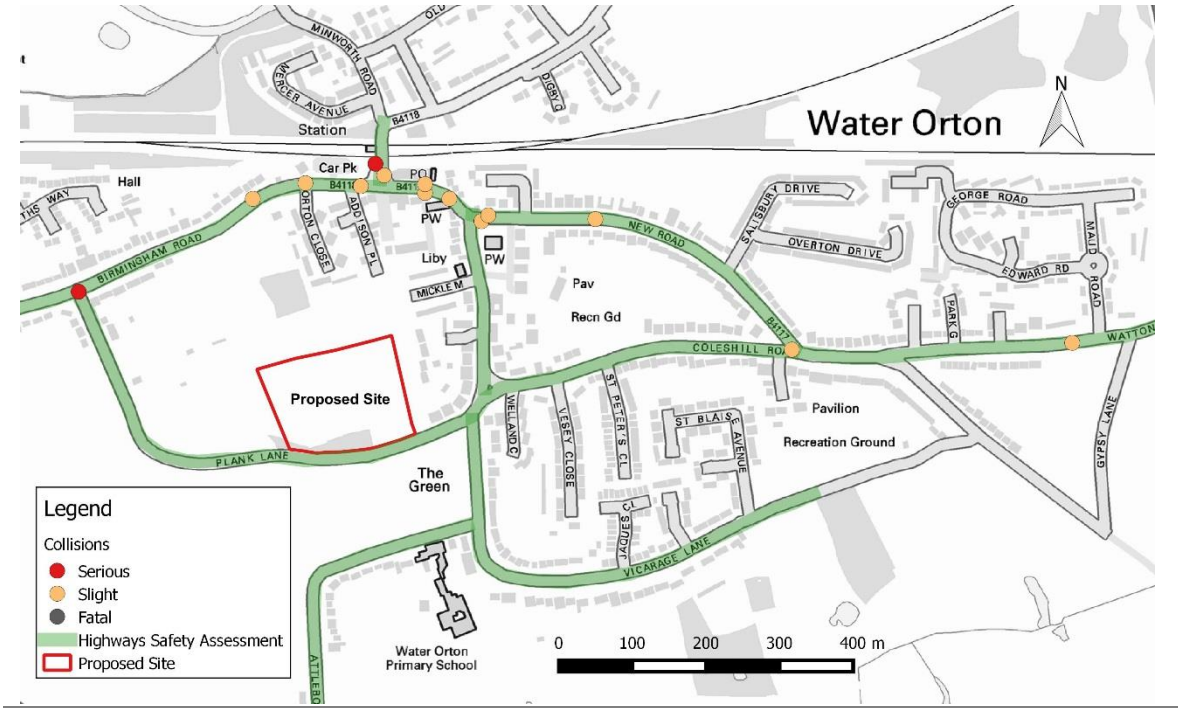
3.24 Given the nature of the proposed development it is not considered that there would be any significant impacts on the SRN in the locality.

## HIGHWAY SAFETY

3.25 Crashmap's online database has been consulted to examine recorded collisions in the vicinity of the site. The database provides the most recently published Department fort Transport (DfT) collision data from 2011 – 2015 – the most recent five year time period available.

3.26 As depicted by **Figure 3.2**, within the study area agreed during scoping with there were 14 recorded collisions during the most recently available five year time period.

**Figure 3.2 Collision Map**




*CrashMap*

3.27 Of the 14 recorded collisions within the cordon illustrated in **Figure 3.2**, two were classified as serious, with the remaining 12 categorised as slight in severity. There were no fatal collisions recorded.

3.28 None of the collisions recorded were located in immediate proximity to either the current or proposed site. The main cluster of incidents were recorded within the village at and around the main priority junctions adjacent to the railway station.

3.29 Following a review of relevant collision data, no abnormal trends have been identified on the respective routes and are unlikely to be affected by trips generated by the proposed application.

# SUSTAINABLE ACCESSIBILITY

## Pedestrian Facilities

3.30 Continuous footway links are provided connecting the both the existing and proposed sites to the surrounding residential areas and Water Orton village centre and railway station.

3.31 The proposed site location is on open green space, which benefits from an unpaved public right of way. Currently this provides access for Non-Motorised Users (NMUs) from Plank Lane towards St Pauls Court and the railway station to the north.

3.32 'The Green' – an area of green space located between the current and proposed site, currently features a diagonal path running from the northeast to southwest corner.

## Cyclist Facilities

3.33 There are no local or national cycle routes in the immediate vicinity of the site. The nearest section of the National Cycle Network, Route 534, is located approximately 4.6km northwest of the proposed site. The route runs alongside Plants Brook, and is part of an extensive new route between Sutton Coldfield and Castle Vale.

3.34 Cyclists are able to utilise the road network surrounding the site and connecting to the local residential areas

## Public Transport - Bus

3.35 The nearest bus stops are located on Birmingham Road, opposite and adjacent to the railway station. The proposed development site will be approximately 300m from the nearest bus stop, 150m closer than the current school site.

3.36 Three services are available from these stops - including one school service. A summary of these services is provided in **Table 3-1**.

**Table 3-1 Bus Services**

| Number | Operator | Route | Buses Per Hour (daytime) |
|---|---|---|---|
| **16S** | Central Buses | Kingsbury – Water Orton – Castle Bromwich | 1 (only during 08:00-09:00 & 15:00 – 16:00) |
| **X70** | National Express West Midlands (Platinum) | Birmingham – Castle Bromwich – Water Orton – Chelmsley Wood | 2 |
| **75** | Central Buses | Birmingham International – Coleshill – Water Orton – Minworth – Sutton Coldfield | 1 |

*Central Buses / National Express*

## Public Transport - Rail

3.37 Water Orton Railway Station is situated in the centre of the village, approximately 400m north of the proposed site. The station is served by Cross Country trains to Birmingham and Leicester, which run two-hourly throughout the day Monday to Saturday with additional services in the peak periods. Despite no London Midland trains serving the station, the station is operated by London Midland.

3.38 **Table 3-2** provides a summary of service provision at the station.

**Table 3-2 Train Services**

| Destination | Approximate travel time (minutes) | Number of services per day (Monday-Friday) |
|---|---|---|
| **Birmingham New Street** | 12 | 8 |
| **Coleshill Parkway** | 4 | 9 |
| **Nuneaton** | 20 | 9 |
| **Hinckley** | 27 | 8 |
| **Narborough** | 35 | 9 |
| **Leicester** | 45 | 9 |

*National Rail*

# 4 Proposed Development

## DESCRIPTION

4.1 The proposed development is to be comprised of a new Two Form Entry (2FE) primary school on land north of Plank Lane in Water Orton, Warwickshire. The new school will be a replacement of the existing 1.5FE Water Orton Primary School, which is situated off Attleboro Lane, approximately 150m to the south of the proposed development site. The existing school is to be demolished in connection with enabling works for the forthcoming High Speed 2 (HS2) rail line.

4.2 The masterplan for the proposed development site is depicted by **Figure 4.1**.

**Figure 4.1 Proposed Development**


*Hunter South Architects*

# ACCESS STRATEGY

4.3 Vehicular access into the site will be taken off Plank Lane to the west of Christopher Way.

## Staff Vehicles

4.4 It is anticipated that staff vehicles would access the site before and after the school pupil arrival and departure peaks, respectively. Vehicular access to the site would be taken from Plank Lane.

## Parent Vehicles

4.5 Proposed access arrangements and parking restrictions on Plank Lane would foremost encourage parents to walk or cycle with their children to school, made possible also by the relatively local catchment for the school.

**Drop-off / Collection**

4.6 For parents who do need to drive, for example as part of an onward journey, limited on-site drop-off / collection provision is made.

4.7 Vehicles able to display a disabled blue badge would be exempt from any restrictions and would therefore be able to park close to the school entrance.

**Park and Stride**

4.8 Some parents currently park on the car park of the Digby Hotel approximately 300m to the north of the existing site on Coleshill Road and walk their children the remainder of the journey to school.

4.9 It is envisaged that this arrangement will continue following the move of the school to the new site.

## Servicing and Delivery Vehicles

4.10 It is anticipated that service and delivery vehicles would access the site using Plank Lane. These vehicles would be encouraged to arrive outside of the school peak hours and enter and leave Plank Lane from Birmingham Road, in order to reduce the impact on the nearby residents.

## Non-Motorised Users

4.11 Pedestrian and cycle access will be taken off Plank Lane.

4.12 A formalised crossing point will be provided on Plank Lane with a new footway on the northern side of the carriageway and associated traffic calming. This will link to the existing footway along the southern side of the carriageway and pedestrian-only links through ‘The Green’.

# PARKING STRATEGY

4.13 Parking provision at the proposed development will be in accordance with standards set out in Appendix 4 of the North Warwickshire Local Plan, which are set out in **Table 2-1**

## Staff Parking

4.14 There are currently 42 spaces in the staff car park accessed via a gate with an intercom off Vicarage Lane. The proposed layout for the new site will provide a similar level of parking provision on site for staff.

## Drop-Off and Pick-Up Provision

4.15 Limited on-site drop-off / collection provision is made for parents who need to drop their children to school a part of an onward journey.

4.16 Some parents will continue to park and stride via the car park at the Digby Hotel off Coleshill Road approximately 250m from the proposed new school site.

## Cycle & Scooter Parking

4.17 The North Warwickshire parking standards set out a minimum cycle parking provision of 1 per 10 staff and 1 per 5 students.

4.18 It is estimated that the site will employ approximately 40 full-time equivalent members of staff. This will require four cycle parking spaces, in the form of two Sheffield stands. These will be located on-site in a secure and prominent location.

4.19 It is envisaged that by expanding the new school to 2FE, approximately 420 pupils will attend the school. In accordance with the cycle parking standards included in the Local Plan, 84 parking spaces will be provided to accommodate cycles and scooters for pupils.

# 5 Traffic Assessment

## TRIP RATES

5.1 Following the relocation of the school, an increase to 2FE will see an additional 105 pupils, spread across the full age range of the school, traveling to the site on a regular basis.

### TRICS Assessment

5.2 In order to forecast the likely increase in trip generation associated with the proposed development the TRICS database (V 7.3.2) has been interrogated in order to establish trip rates associated with primary schools in similar settings across the UK (excluding sites in the Republic of Ireland and Greater London) on the basis of having similar pupil numbers to the proposed site.

5.3 **Table 5-1** illustrates the trip rates obtained from the TRICS database, covering the traditional highway network morning and afternoon peaks, plus the afternoon school peak. The full TRICS output is provided in **Appendix B**.

**Table 5-1 Trip Rates (TRICS)**

| Time Period | AM peak (08:00-09:00) | | | PM School peak (15:00-16:00) | | | PM peak (17:00-18:00) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Arr. | Dep. | Total | Arr. | Dep. | Total | Arr. | Dep. | Total |
| **Trip rates (per pupil)** | 0.219 | 0.139 | 0.358 | 0.099 | 0.139 | 0.238 | 0.020 | 0.034 | 0.054 |

*TRICS (V 7.3.2)*

### Traffic Survey

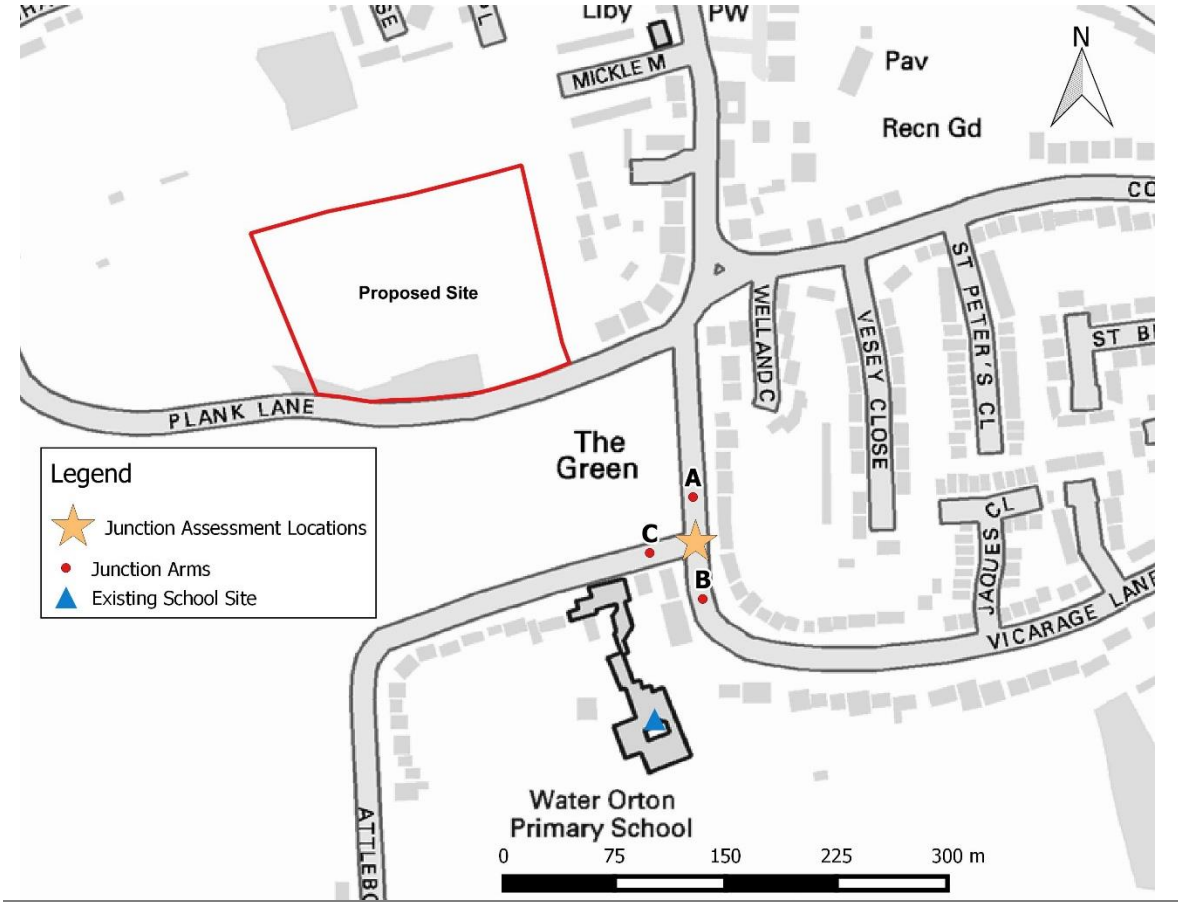
5.4 In order to validate the trip rates obtained from the TRICS data, Manual Classified Counts (MCC) were undertaken at the Attleboro Lane / Vicarage Lane T-Junction, as depicted by **Figure 5.1**.

5.5 Data was collected on Thursday 20th October 2016 – a neutral weekday during school term time, during the peak periods for traffic associated with the school - the AM Peak (08:00-09:00) and PM School Peak (15:00 – 16:00).

5.6 For the purpose of this assessment it has been assumed that all vehicles turning into and out of Attleboro Lane are associated with the existing school. In reference to **Figure 5.1**, the following movements have been assessed:

- Vicarage Road (southbound) right turn into Attleboro Lane – Arm A to Arm C
- Vicarage Road (northbound) left turn into Attleboro Lane – Arm B to Arm C
- Attleboro Lane left turn onto Vicarage Road – Arm C to Arm A
- Attleboro Lane right turn onto Vicarage Road – Arm C to Arm B

**Figure 5.1 Location of Traffic Survey**




*GIS*

5.6.1 **Table 5-2** provides an overview of trip rates associated with existing school site based on the traffic survey data, along with a comparison with trip rates obtained from the TRICS database.

**Table 5-2 Trip Rates (Traffic Survey)**

| Time Period | AM peak (08:00-09:00) | | | PM School peak (15:00-16:00) | | |
|---|---|---|---|---|---|---|
| | Arr. | Dep. | Total | Arr. | Dep. | Total |
| **Traffic Survey – Trip Rates (per pupil)** | 0.219 | 0.139 | 0.358 | 0.099 | 0.139 | 0.238 |
| **TRICS Assessment – Trip Rates (per pupil)** | 0.137 | 0.146 | 0.283 | 0.025 | 0.073 | 0.098 |
| **Variation** | 0.082 | -0.007 | 0.075 | 0.074 | 0.066 | 0.140 |

5.7 The trip rates obtained from the TRICS database are generally higher than those obtained from the traffic survey data. It is therefore considered that the trip rates obtained from the TRICS database provide a robust assessment of traffic associated with the existing school.

## TRIP GENERATION

5.8 Utilising the trip rates from **Table 5-1**, the number of pupils at the school has been used as a calculation factor to forecast the vehicle trip generation associated with the existing and proposed school sites.

5.9 The proposals will see the school capacity increase from 1.5FE to 2FE. Based on the assumption that each form group contains 30 pupils, the capacity of the proposed school would increase from 315 to 420.

5.10 **Table 5-3** provides an overview of the trips associated with the current and proposed site.

**Table 5-3 Vehicle Trip Generation**

| Time Period | AM peak (08:00-09:00) | | | PM School peak (15:00-16:00) | | |
|---|---|---|---|---|---|---|
| | Arr. | Dep. | Total | Arr. | Dep. | Total |
| **Existing School (315 Pupils)** | 69 | 44 | 113 | 31 | 44 | 75 |
| **Proposed School (420 Pupils)** | 92 | 58 | 150 | 42 | 58 | 100 |
| **Net Change** | +23 | +14 | +37 | +11 | +14 | +25 |

5.11 In reality, it is considered that this approach is robust, given there is likelihood that a number of the new pupils at the school would be siblings and therefore would travel to the school together. This assessment has not taken joint journeys into consideration.

## TRIP DISTRIBUTION

5.12 Due to the close proximity of the school sites, coupled with the marginal increase in the predicted number of trips, it is not considered that there will be any significant change in trip distribution associated with the school.

## TRAFFIC IMPACT

5.13 The relatively modest increase in trips forecast to be associated with the proposals when compared with the existing school site are unlikely to result in any material impacts on the operation of the local highways network or any junctions in the area.

# 6 Summary & Conclusion

## SUMMARY

6.1 This Transport Statement has been prepared in support of a planning application for the development of a new Primary school in Water Orton, Warwickshire. The proposed development will replace an existing school due to be lost to the HS2 project.

6.2 Footway provision in the vicinity of the site provides adequate connections for pedestrians from surrounding residential areas. The proposed site also benefits from a public right of way, which provides access for NMUs north towards the railway station and existing bus stops.

6.3 Vehicular access will be taken off Plank Lane.

6.4 Following the relocation of the school, an increase to 2FE will result in an increase of approximately 105 pupils at the site. In order to understand the likely increase in vehicle trips, trip rates have been obtained from the TRICS database, and validated using MCCs undertaken at the existing school site. The trip rates obtained from the TRICS database were generally higher than those calculated using the MCC data. It is therefore considered that the TRICS database provides a robust assessment of potential development traffic.

6.5 The trip rates obtained from the TRICS database suggest that the proposed development will result in an additional 37 two-way trips during the AM Peak (08:00 – 09:00) and 25 two-way trips during the PM Peak (17:00 – 18:00). This is not envisaged to have a severe impact on the operation and functionality of the surrounding highway network.

## CONCLUSION

6.5.1 Based on the information contained within this Transport Statement, it is considered that the proposed development does not pose a ‘severe’ impact on the surrounding highway network and therefore should not be rejected on highway grounds.

# Appendix A

## TRICS DATA

Calculation Reference: AUDIT-846412-160816-0804

**TRIP RATE CALCULATION SELECTION PARAMETERS:**

Land Use : 04 - EDUCATION
Category : A - PRIMARY

## VEHICLES

Selected regions and areas:

| | | | |
|---|---|---|---|
| **02** | **SOUTH EAST** | | |
| | SC | SURREY | 1 days |
| **05** | **EAST MIDLANDS** | | |
| | DS | DERBYSHIRE | 1 days |
| | LE | LEICESTERSHIRE | 1 days |
| | LN | LINCOLNSHIRE | 1 days |
| | NR | NORTHAMPTONSHIRE | 1 days |
| **08** | **NORTH WEST** | | |
| | MS | MERSEYSIDE | 1 days |
| **11** | **SCOTLAND** | | |
| | DU | DUNDEE CITY | 1 days |
| | FA | FALKIRK | 2 days |
| | FI | FIFE | 1 days |
| | SR | STIRLING | 1 days |

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

**Filtering Stage 2 selection:**

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

Parameter: Number of pupils
Actual Range: 264 to 452 (units: )
Range Selected by User: 250 to 500 (units: )

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/06 to 20/10/15

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

Selected survey days:

| | |
|---|---|
| Monday | 3 days |
| Wednesday | 4 days |
| Thursday | 4 days |

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

Selected survey types:

| | |
|---|---|
| Manual count | 11 days |
| Directional ATC Count | 0 days |

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

Selected Locations:

| | |
|---|---|
| Suburban Area (PPS6 Out of Centre) | 3 |
| Edge of Town | 4 |
| Neighbourhood Centre (PPS6 Local Centre) | 4 |

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

Selected Location Sub Categories:

| | |
|---|---|
| Residential Zone | 8 |
| Village | 3 |

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

**Filtering Stage 3 selection:**

Use Class:

| | |
|---|---|
| C2 | 1 days |
| D1 | 10 days |

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

Population within 1 mile:

| | |
|---|---|
| 1,001 to 5,000 | 2 days |
| 5,001 to 10,000 | 2 days |
| 10,001 to 15,000 | 4 days |
| 15,001 to 20,000 | 3 days |

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

Population within 5 miles:

| | |
|---|---|
| 50,001 to 75,000 | 2 days |
| 75,001 to 100,000 | 3 days |
| 100,001 to 125,000 | 1 days |
| 125,001 to 250,000 | 3 days |
| 250,001 to 500,000 | 2 days |

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

Car ownership within 5 miles:

| | |
|---|---|
| 0.6 to 1.0 | 5 days |
| 1.1 to 1.5 | 6 days |

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

Travel Plan:

| | |
|---|---|
| Yes | 1 days |
| No | 10 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.

LIST OF SITES relevant to selection parameters

**1** **DS-04-A-01** **PRIMARY SCHOOL** **DERBYSHIRE**
VICARAGE ROAD
MICKLEOVER
DERBY
Edge of Town
Residential Zone
Total Number of pupils: 387
Survey date: THURSDAY 25/06/15 Survey Type: MANUAL

**2** **DU-04-A-01** **PRIMARY SCHOOL** **DUNDEE CITY**
FALKLAND CRESCENT
BROUGHTY FERRY
DUNDEE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 412
Survey date: MONDAY 21/05/12 Survey Type: MANUAL

**3** **FA-04-A-02** **PRIMARY SCHOOL** **FALKIRK**
NEW HALLGLEN ROAD
HALLGLEN
NEAR FALKIRK
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of pupils: 304
Survey date: WEDNESDAY 25/04/07 Survey Type: MANUAL

**4** **FA-04-A-03** **PRIMARY SCHOOL** **FALKIRK**
GLENDEVON DRIVE
MADDISTON
FALKIRK
Edge of Town
Residential Zone
Total Number of pupils: 452
Survey date: MONDAY 03/06/13 Survey Type: MANUAL

**5** **FI-04-A-01** **PRIMARY SCHOOL** **FIFE**
NORTHBANK ROAD
CAIRNEYHILL
NEAR DUNFERMLINE
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of pupils: 285
Survey date: WEDNESDAY 27/05/15 Survey Type: MANUAL

**6** **LE-04-A-02** **PRIMARY SCHOOL** **LEICESTERSHIRE**
BEAUFORT WAY
OADBY
LEICESTER
Edge of Town
Residential Zone
Total Number of pupils: 380
Survey date: THURSDAY 30/10/14 Survey Type: MANUAL

**7** **LN-04-A-01** **PRIMARY SCHOOL** **LINCOLNSHIRE**
GONERBY HILL FOOT

GRANTHAM
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of pupils: 312
Survey date: WEDNESDAY 12/06/13 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

**8** **MS-04-A-02** **PRIMARY SCHOOL** **MERSEYSIDE**
BOOKER AVENUE
ALVERTON
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 264
Survey date: THURSDAY 13/06/13 Survey Type: MANUAL

**9** **NR-04-A-02** **PRIMARY SCHOOL** **NORTHAMPTONSHIRE**
DAYRELL ROAD

NORTHAMPTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 400
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

**10** **SC-04-A-01** **PRIMARY SCHOOL** **SURREY**
SCHOOL LANE
PIRBRIGHT
NEAR WOKING
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of pupils: 414
Survey date: THURSDAY 22/11/12 Survey Type: MANUAL

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

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

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

## VEHICLES

## Calculation factor: 1 PUPILS

**BOLD print indicates peak (busiest) period**

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. Days | Ave. PUPILS | Trip Rate | No. Days | Ave. PUPILS | Trip Rate | No. Days | Ave. PUPILS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 06:00 - 07:00 | 1 | 312 | 0.013 | 1 | 312 | 0.003 | 1 | 312 | 0.016 |
| 07:00 - 08:00 | 11 | 363 | 0.028 | 11 | 363 | 0.009 | 11 | 363 | 0.037 |
| 08:00 - 09:00 | **11** | **363** | **0.219** | **11** | **363** | **0.139** | **11** | **363** | **0.358** |
| 09:00 - 10:00 | 11 | 363 | 0.045 | 11 | 363 | 0.065 | 11 | 363 | 0.110 |
| 10:00 - 11:00 | 11 | 363 | 0.016 | 11 | 363 | 0.013 | 11 | 363 | 0.029 |
| 11:00 - 12:00 | 11 | 363 | 0.029 | 11 | 363 | 0.024 | 11 | 363 | 0.053 |
| 12:00 - 13:00 | 11 | 363 | 0.032 | 11 | 363 | 0.037 | 11 | 363 | 0.069 |
| 13:00 - 14:00 | 11 | 363 | 0.016 | 11 | 363 | 0.022 | 11 | 363 | 0.038 |
| 14:00 - 15:00 | 11 | 363 | 0.058 | 11 | 363 | 0.024 | 11 | 363 | 0.082 |
| 15:00 - 16:00 | 11 | 363 | 0.099 | 11 | 363 | 0.139 | 11 | 363 | 0.238 |
| 16:00 - 17:00 | 11 | 363 | 0.039 | 11 | 363 | 0.082 | 11 | 363 | 0.121 |
| 17:00 - 18:00 | 11 | 363 | 0.020 | 11 | 363 | 0.034 | 11 | 363 | 0.054 |
| 18:00 - 19:00 | 9 | 366 | 0.015 | 9 | 366 | 0.015 | 9 | 366 | 0.030 |
| 19:00 - 20:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 20:00 - 21:00 | 1 | 312 | 0.000 | 1 | 312 | 0.032 | 1 | 312 | 0.032 |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.629 | | | 0.638 | | | 1.267 |

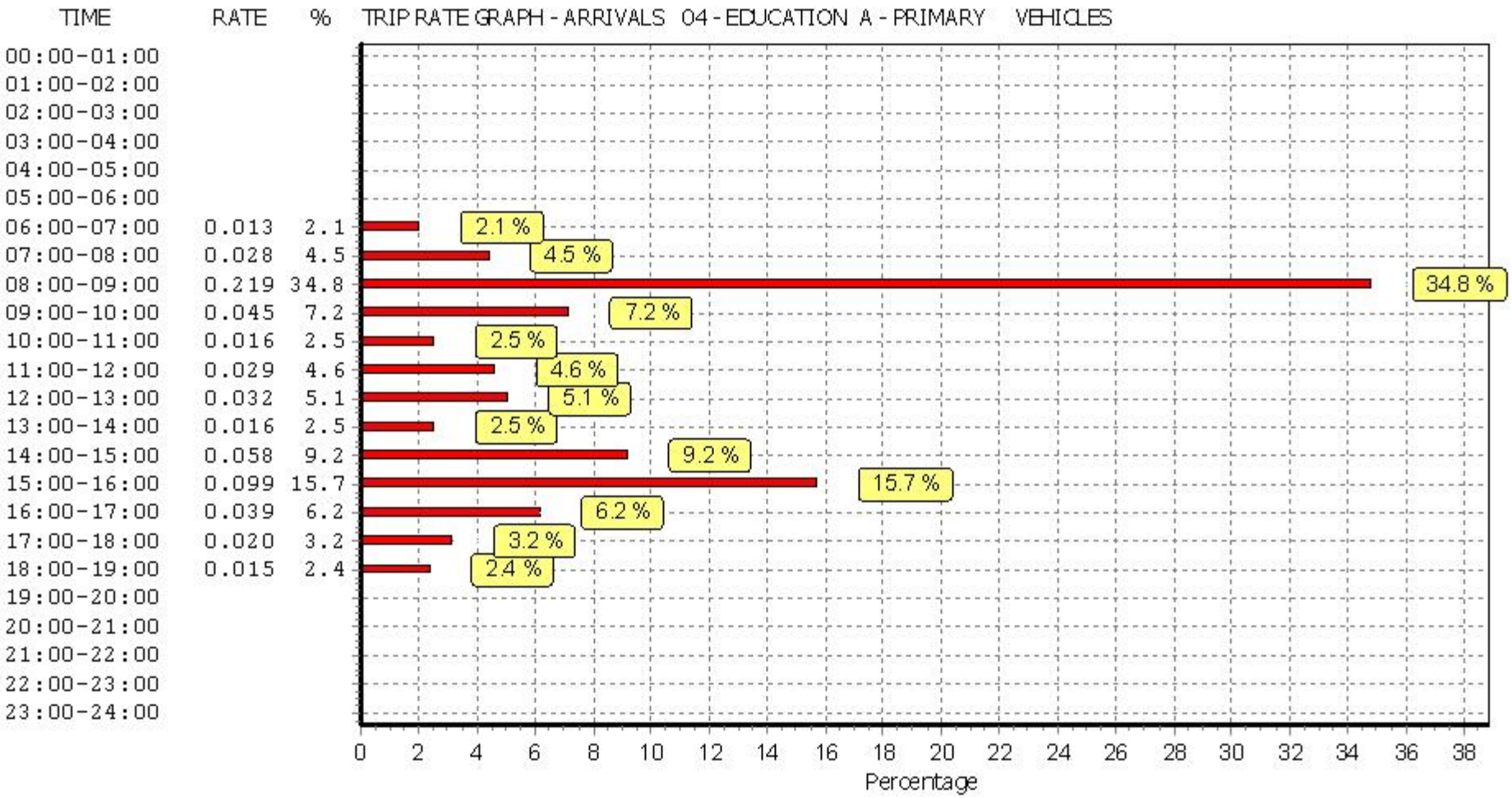
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

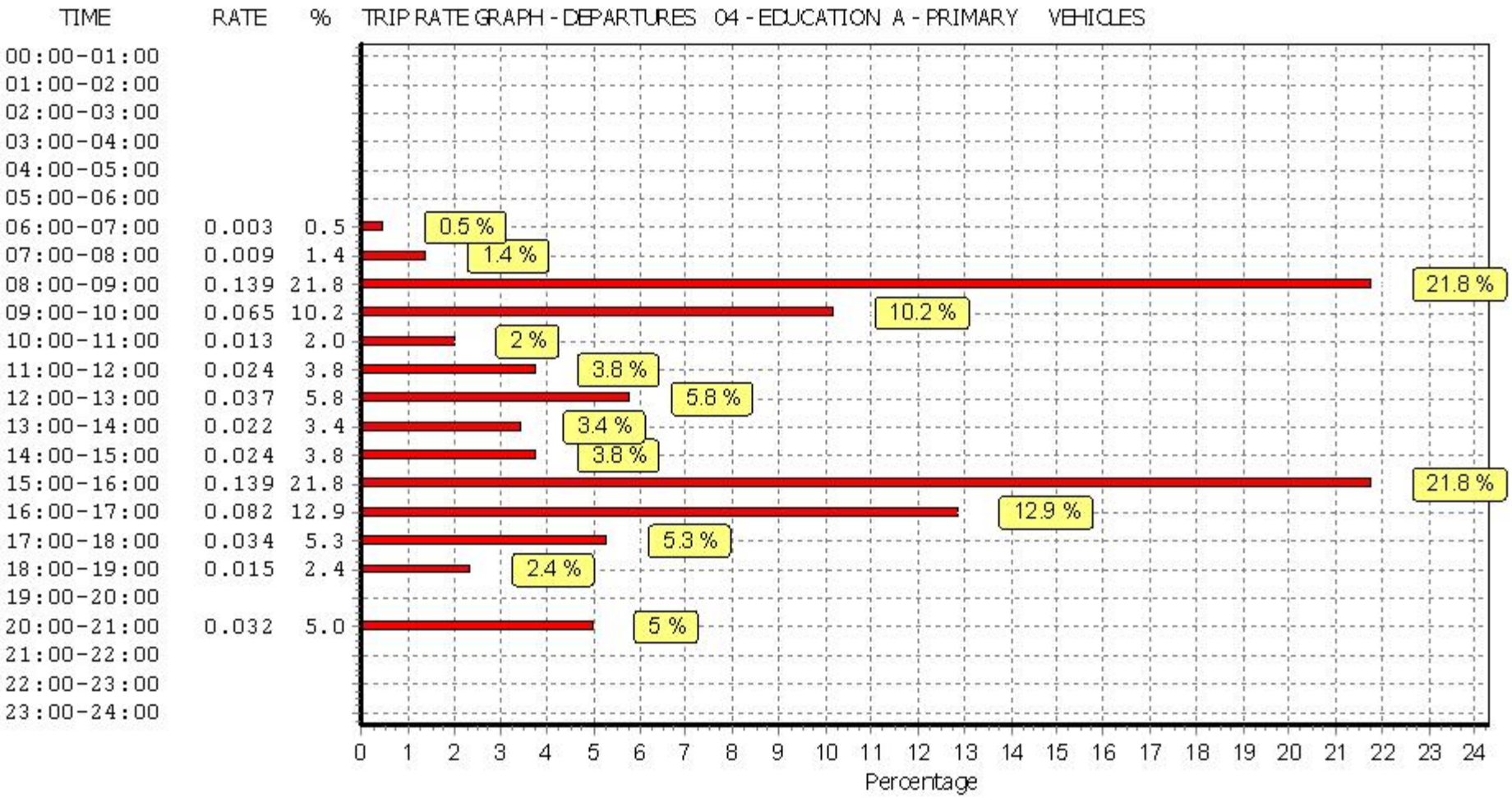
### Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 264 - 452 (units: ) |
| Survey date date range: | 01/01/06 - 20/10/15 |
| Number of weekdays (Monday-Friday): | 11 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 0 |

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




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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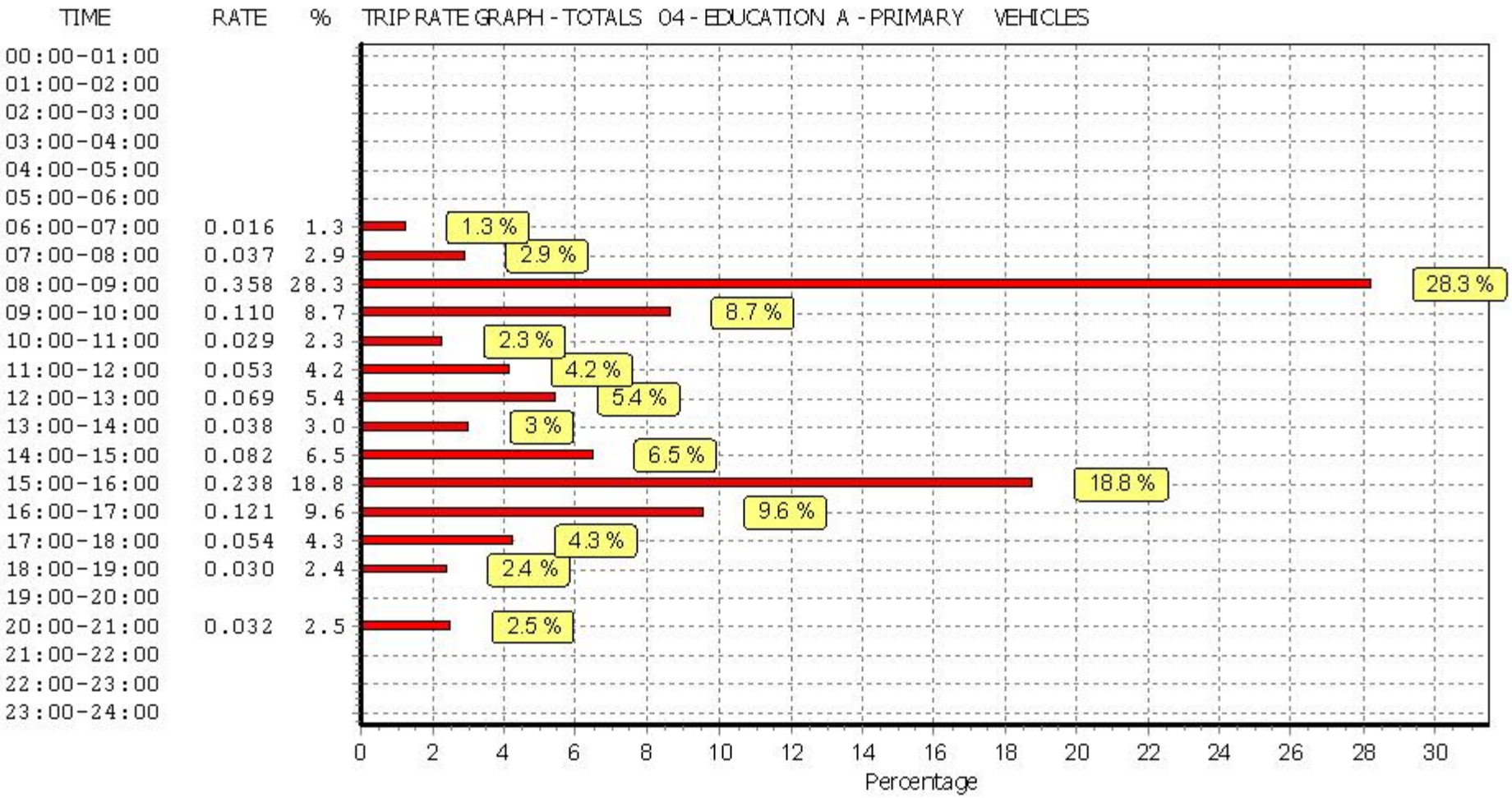


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TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

## TAXIS

## Calculation factor: 1 PUPILS

**BOLD print indicates peak (busiest) period**

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. Days | Ave. PUPILS | Trip Rate | No. Days | Ave. PUPILS | Trip Rate | No. Days | Ave. PUPILS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 06:00 - 07:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 07:00 - 08:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 08:00 - 09:00 | **11** | **363** | **0.004** | 11 | 363 | 0.003 | **11** | **363** | **0.007** |
| 09:00 - 10:00 | 11 | 363 | 0.001 | 11 | 363 | 0.002 | 11 | 363 | 0.003 |
| 10:00 - 11:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 11:00 - 12:00 | 11 | 363 | 0.001 | 11 | 363 | 0.000 | 11 | 363 | 0.001 |
| 12:00 - 13:00 | 11 | 363 | 0.001 | 11 | 363 | 0.001 | 11 | 363 | 0.002 |
| 13:00 - 14:00 | 11 | 363 | 0.001 | 11 | 363 | 0.001 | 11 | 363 | 0.002 |
| 14:00 - 15:00 | 11 | 363 | 0.002 | 11 | 363 | 0.001 | 11 | 363 | 0.003 |
| 15:00 - 16:00 | 11 | 363 | 0.002 | **11** | **363** | **0.003** | 11 | 363 | 0.005 |
| 16:00 - 17:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 17:00 - 18:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 18:00 - 19:00 | 10 | 360 | 0.000 | 10 | 360 | 0.000 | 10 | 360 | 0.000 |
| 19:00 - 20:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 20:00 - 21:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.012 | | | 0.011 | | | 0.023 |

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

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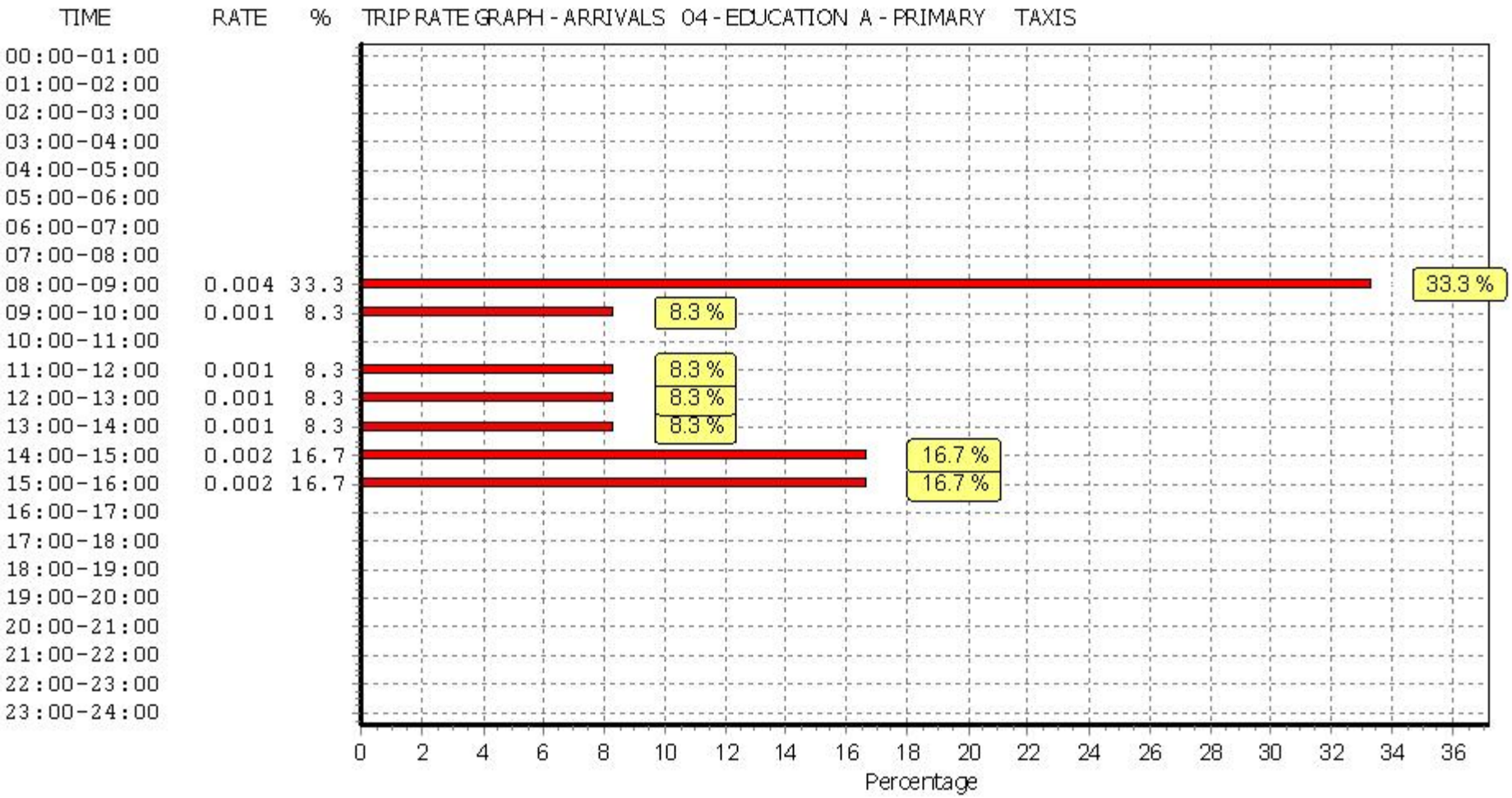
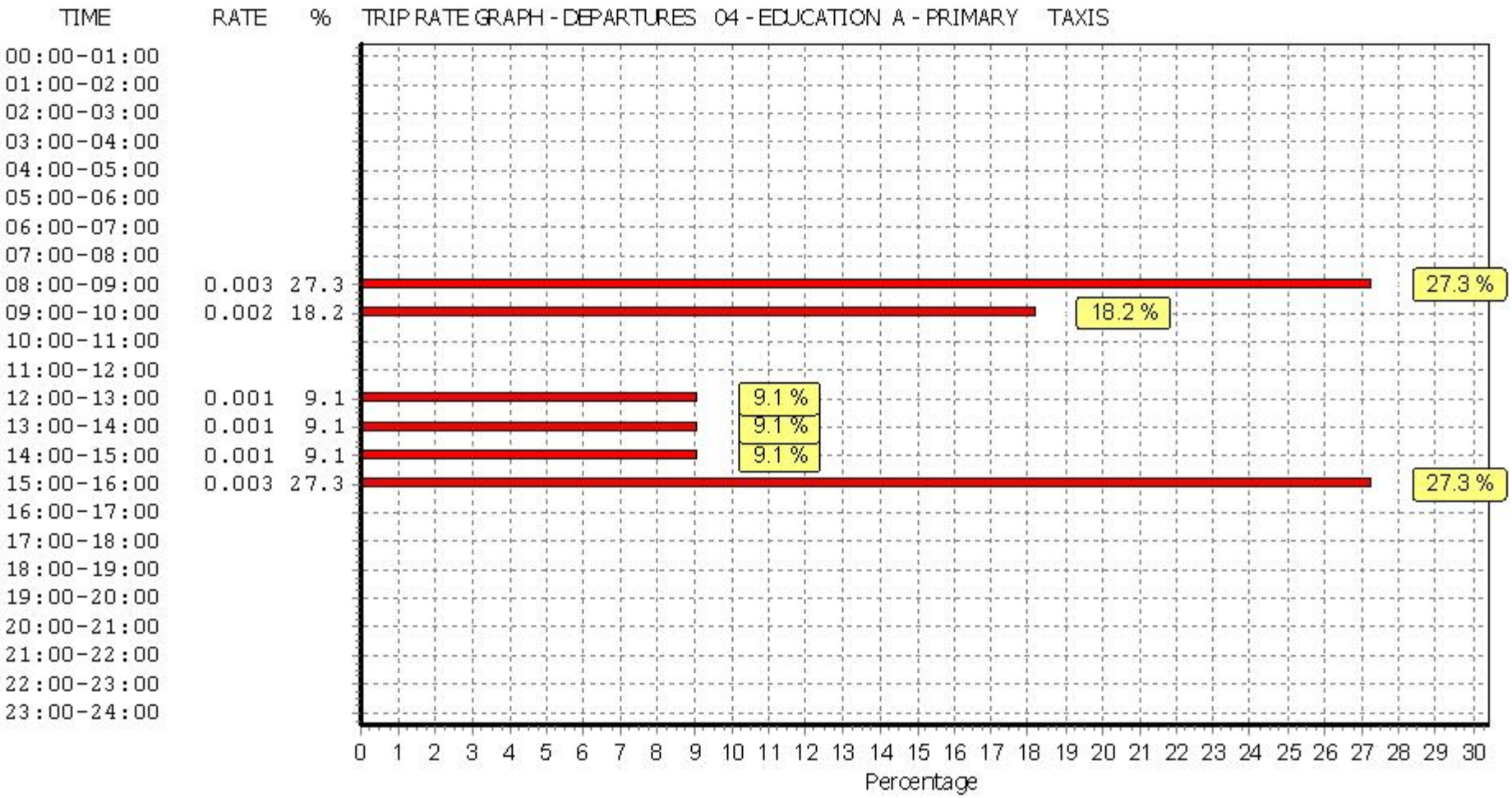
### Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 264 - 452 (units: ) |
| Survey date date range: | 01/01/06 - 20/10/15 |
| Number of weekdays (Monday-Friday): | 11 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 0 |

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




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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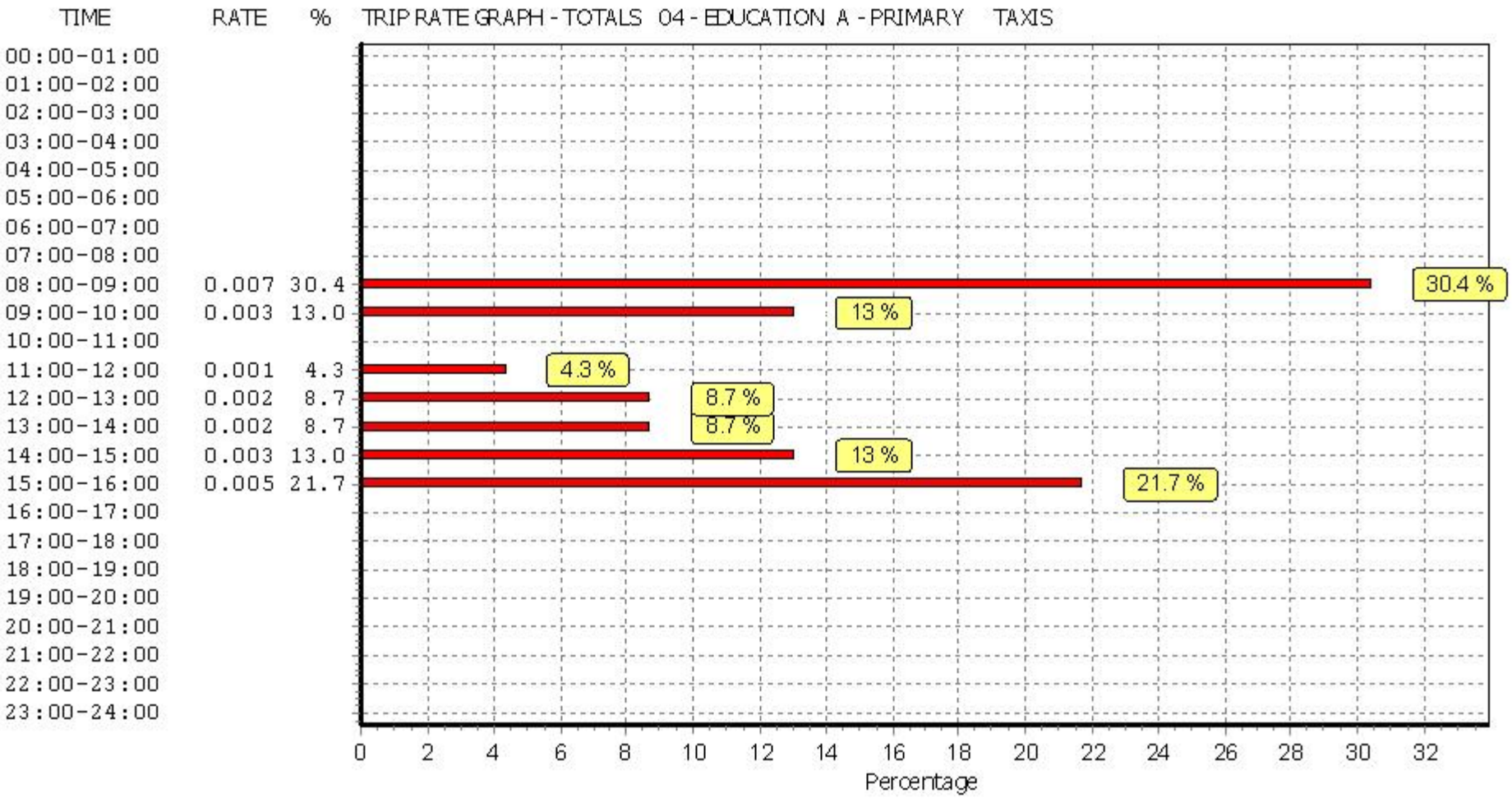


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TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

## OGVS

## Calculation factor: 1 PUPILS

**BOLD print indicates peak (busiest) period**

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. Days | Ave. PUPILS | Trip Rate | No. Days | Ave. PUPILS | Trip Rate | No. Days | Ave. PUPILS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 06:00 - 07:00 | **1** | **312** | **0.003** | **1** | **312** | **0.003** | **1** | **312** | **0.006** |
| 07:00 - 08:00 | 11 | 363 | 0.001 | 11 | 363 | 0.001 | 11 | 363 | 0.002 |
| 08:00 - 09:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 09:00 - 10:00 | 11 | 363 | 0.001 | 11 | 363 | 0.001 | 11 | 363 | 0.002 |
| 10:00 - 11:00 | 11 | 363 | 0.001 | 11 | 363 | 0.000 | 11 | 363 | 0.001 |
| 11:00 - 12:00 | 11 | 363 | 0.000 | 11 | 363 | 0.001 | 11 | 363 | 0.001 |
| 12:00 - 13:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 13:00 - 14:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 14:00 - 15:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 15:00 - 16:00 | 11 | 363 | 0.000 | 11 | 363 | 0.001 | 11 | 363 | 0.001 |
| 16:00 - 17:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 17:00 - 18:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 18:00 - 19:00 | 9 | 366 | 0.000 | 9 | 366 | 0.000 | 9 | 366 | 0.000 |
| 19:00 - 20:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 20:00 - 21:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.006 | | | 0.007 | | | 0.013 |

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

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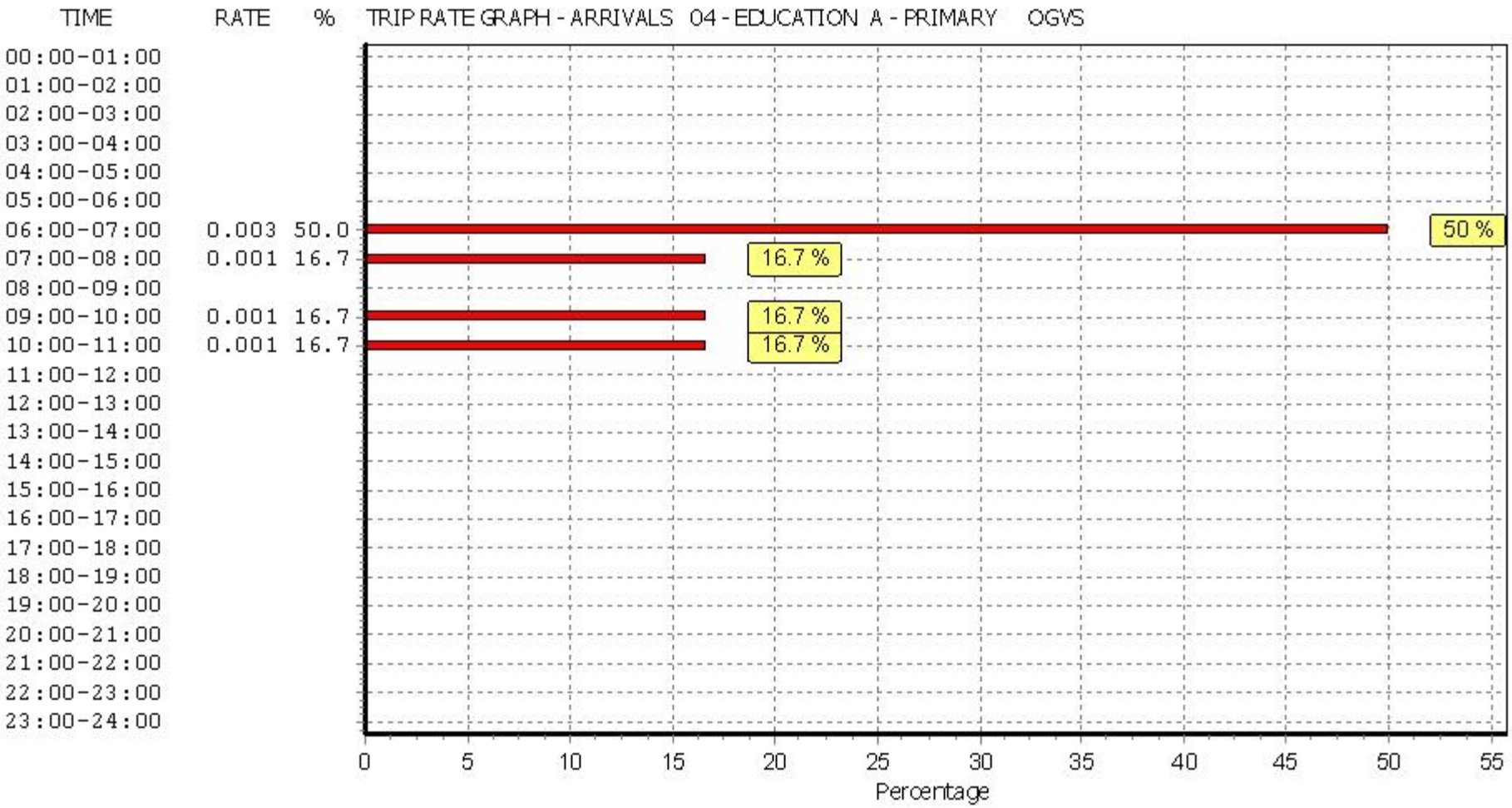
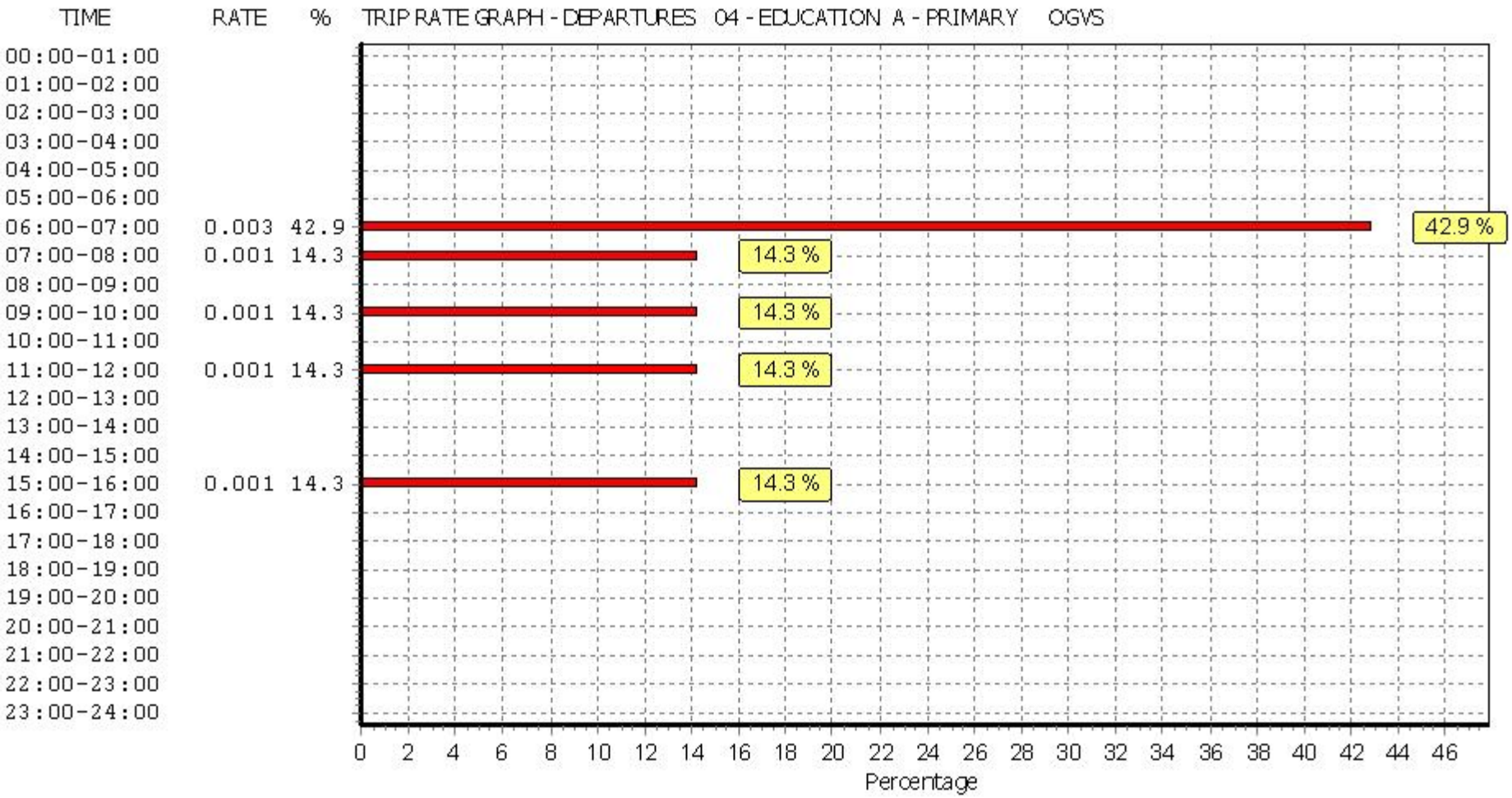
### Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 264 - 452 (units: ) |
| Survey date date range: | 01/01/06 - 20/10/15 |
| Number of weekdays (Monday-Friday): | 11 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 0 |

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




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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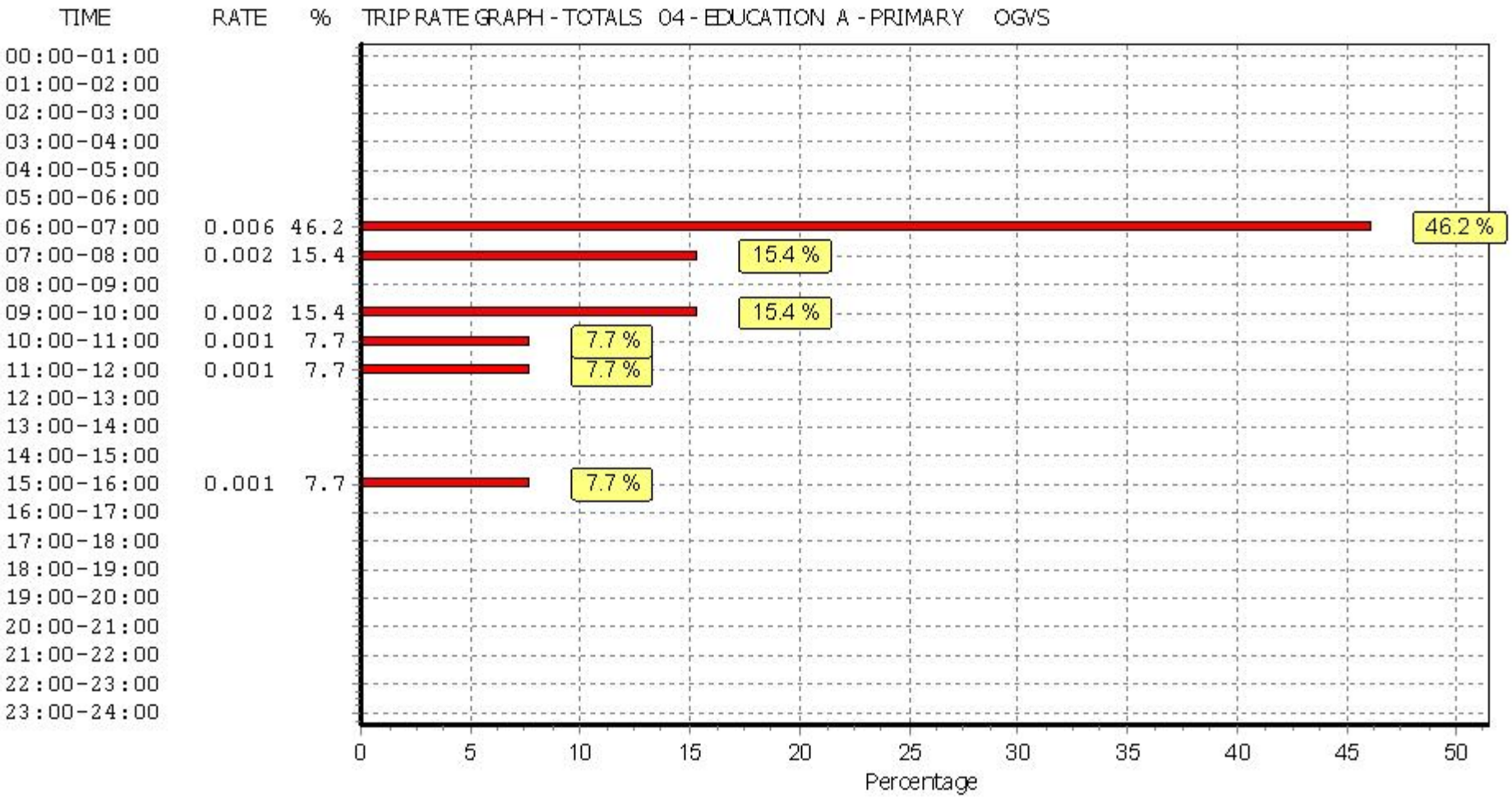


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TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

## PSVS

## Calculation factor: 1 PUPILS

**BOLD print indicates peak (busiest) period**

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. Days | Ave. PUPILS | Trip Rate | No. Days | Ave. PUPILS | Trip Rate | No. Days | Ave. PUPILS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 06:00 - 07:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 07:00 - 08:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 08:00 - 09:00 | 11 | 363 | 0.001 | 11 | 363 | 0.001 | 11 | 363 | 0.002 |
| 09:00 - 10:00 | 11 | 363 | 0.001 | 11 | 363 | 0.001 | 11 | 363 | 0.002 |
| 10:00 - 11:00 | 11 | 363 | 0.000 | 11 | 363 | 0.001 | 11 | 363 | 0.001 |
| 11:00 - 12:00 | **11** | **363** | **0.001** | 11 | 363 | 0.001 | 11 | 363 | 0.002 |
| 12:00 - 13:00 | 11 | 363 | 0.000 | 11 | 363 | 0.001 | 11 | 363 | 0.001 |
| 13:00 - 14:00 | 11 | 363 | 0.001 | 11 | 363 | 0.001 | 11 | 363 | 0.002 |
| 14:00 - 15:00 | 11 | 363 | 0.001 | 11 | 363 | 0.000 | 11 | 363 | 0.001 |
| 15:00 - 16:00 | 11 | 363 | 0.001 | **11** | **363** | **0.002** | **11** | **363** | **0.003** |
| 16:00 - 17:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 17:00 - 18:00 | 11 | 363 | 0.000 | 11 | 363 | 0.000 | 11 | 363 | 0.000 |
| 18:00 - 19:00 | 9 | 366 | 0.000 | 9 | 366 | 0.000 | 9 | 366 | 0.000 |
| 19:00 - 20:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 20:00 - 21:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.006 | | | 0.008 | | | 0.014 |

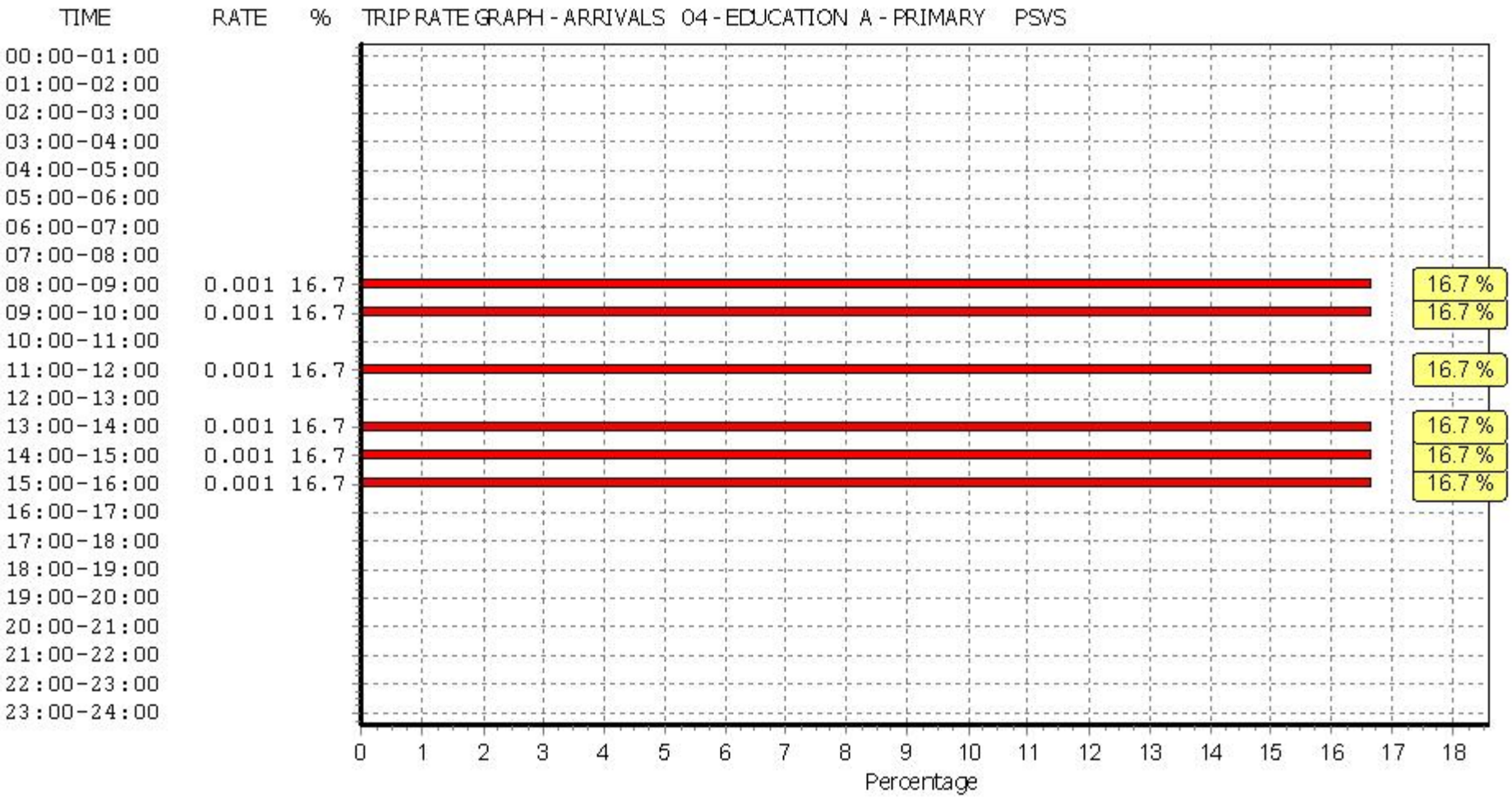
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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.

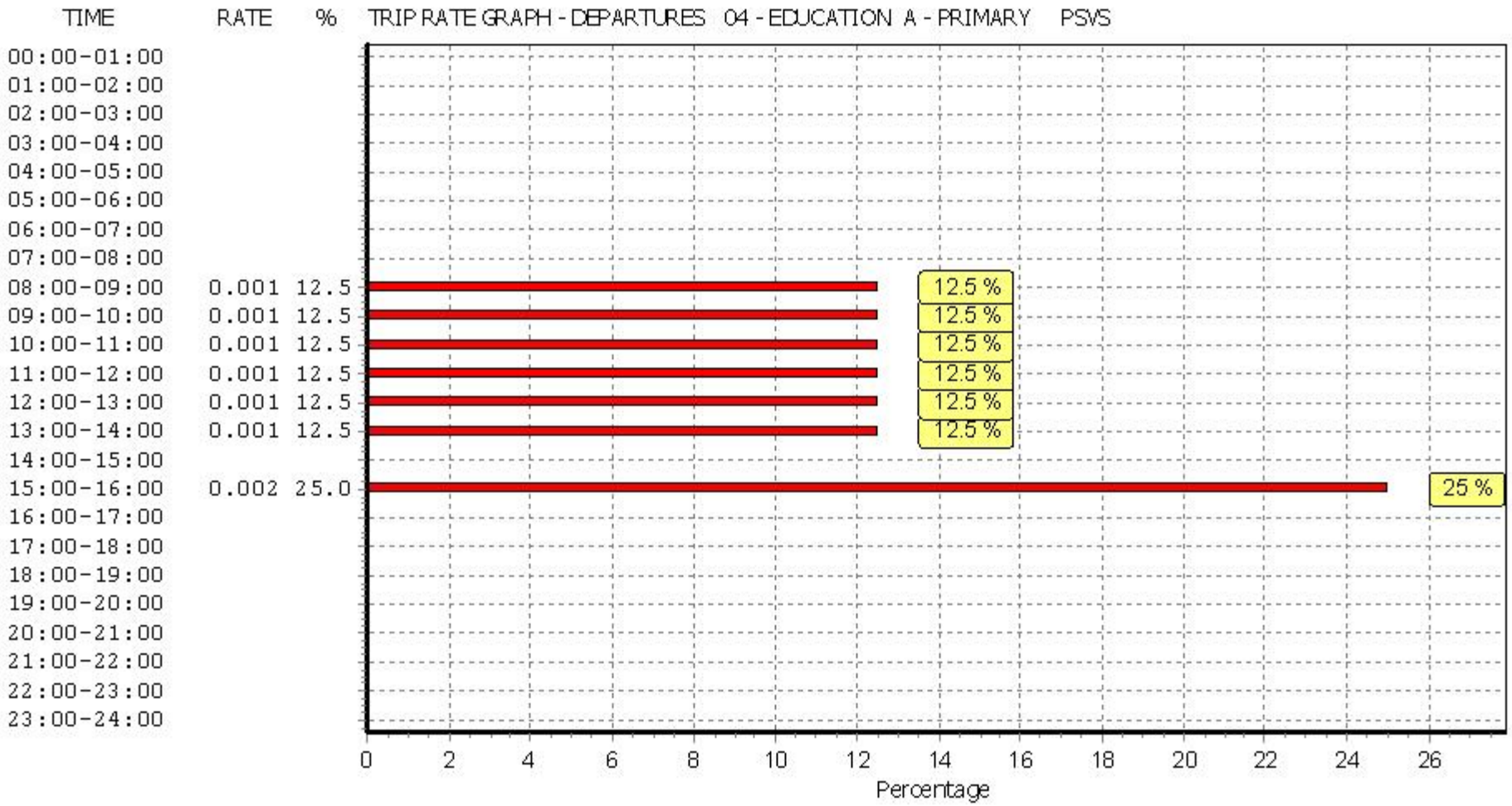
### Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 264 - 452 (units: ) |
| Survey date date range: | 01/01/06 - 20/10/15 |
| Number of weekdays (Monday-Friday): | 11 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 0 |

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




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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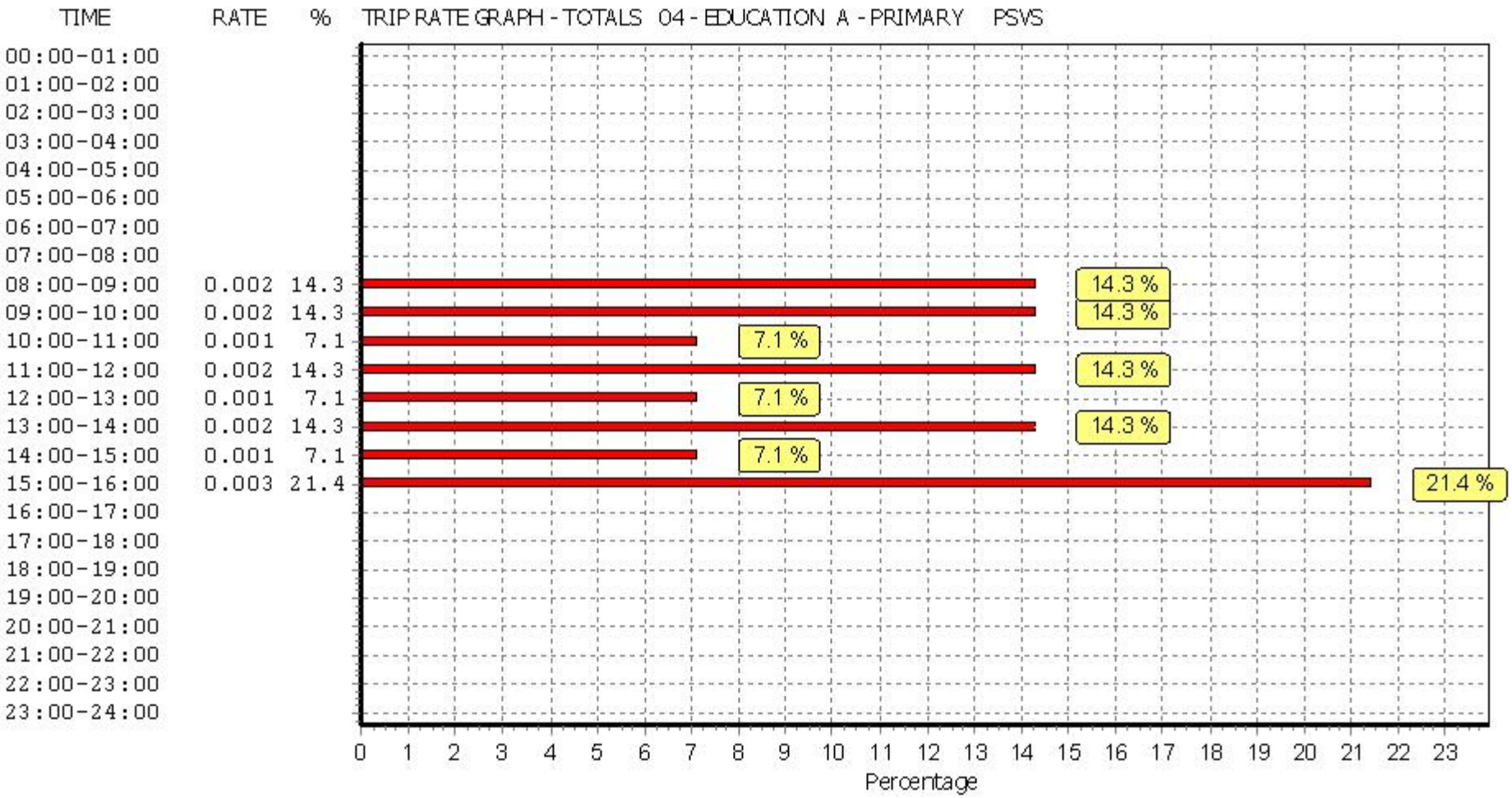


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TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

## CYCLISTS

## Calculation factor: 1 PUPILS

**BOLD print indicates peak (busiest) period**

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. Days | Ave. PUPILS | Trip Rate | No. Days | Ave. PUPILS | Trip Rate | No. Days | Ave. PUPILS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 06:00 - 07:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 07:00 - 08:00 | 11 | 363 | 0.002 | 11 | 363 | 0.000 | 11 | 363 | 0.002 |
| 08:00 - 09:00 | **11** | **363** | **0.024** | 11 | 363 | 0.003 | **11** | **363** | **0.027** |
| 09:00 - 10:00 | 11 | 363 | 0.003 | 11 | 363 | 0.005 | 11 | 363 | 0.008 |
| 10:00 - 11:00 | 11 | 363 | 0.000 | 11 | 363 | 0.001 | 11 | 363 | 0.001 |
| 11:00 - 12:00 | 11 | 363 | 0.000 | 11 | 363 | 0.001 | 11 | 363 | 0.001 |
| 12:00 - 13:00 | 11 | 363 | 0.001 | 11 | 363 | 0.002 | 11 | 363 | 0.003 |
| 13:00 - 14:00 | 11 | 363 | 0.001 | 11 | 363 | 0.000 | 11 | 363 | 0.001 |
| 14:00 - 15:00 | 11 | 363 | 0.002 | 11 | 363 | 0.001 | 11 | 363 | 0.003 |
| 15:00 - 16:00 | 11 | 363 | 0.003 | **11** | **363** | **0.020** | 11 | 363 | 0.023 |
| 16:00 - 17:00 | 11 | 363 | 0.001 | 11 | 363 | 0.004 | 11 | 363 | 0.005 |
| 17:00 - 18:00 | 11 | 363 | 0.000 | 11 | 363 | 0.001 | 11 | 363 | 0.001 |
| 18:00 - 19:00 | 9 | 366 | 0.000 | 9 | 366 | 0.000 | 9 | 366 | 0.000 |
| 19:00 - 20:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 20:00 - 21:00 | 1 | 312 | 0.000 | 1 | 312 | 0.000 | 1 | 312 | 0.000 |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.037 | | | 0.038 | | | 0.075 |

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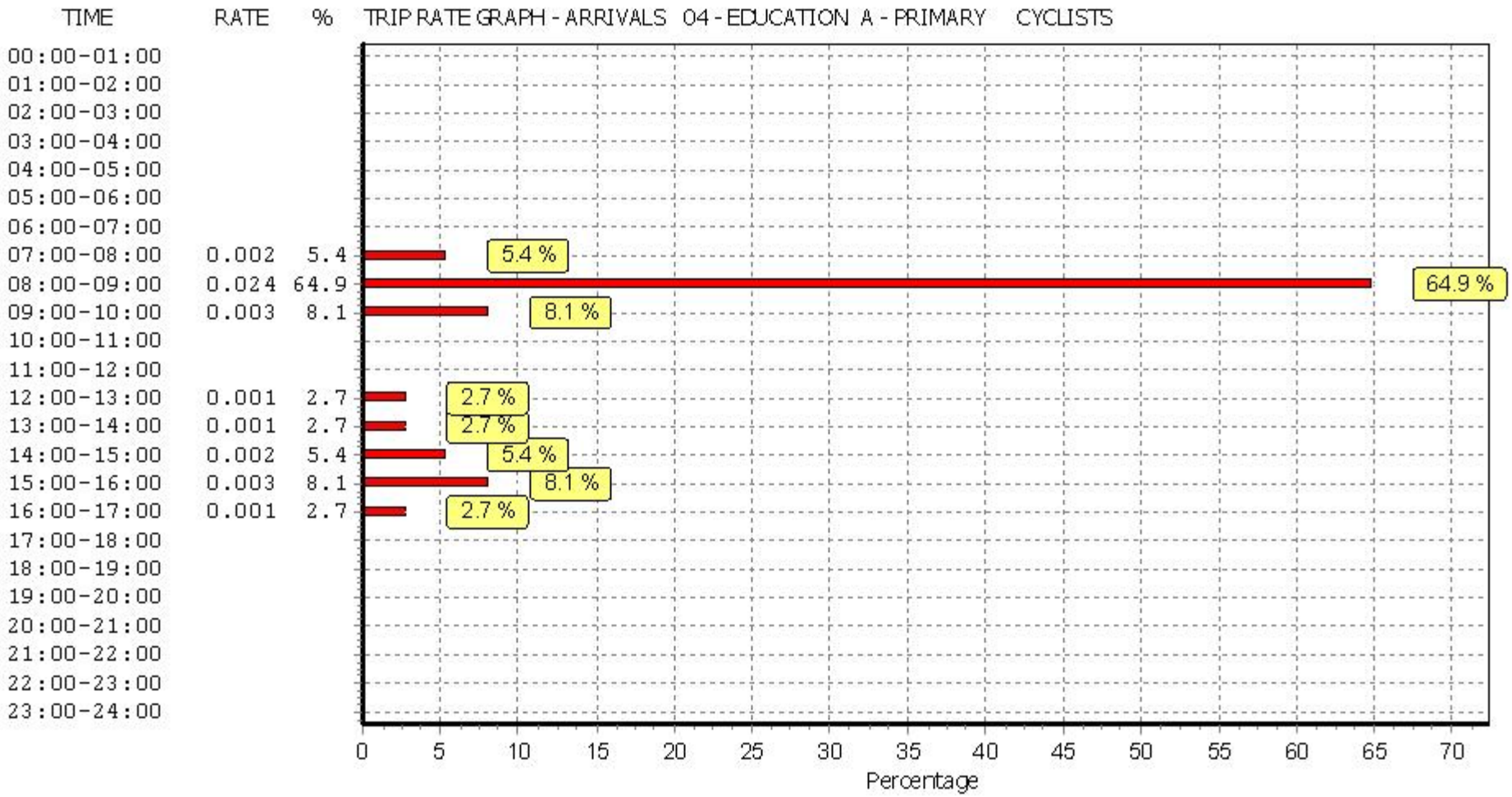


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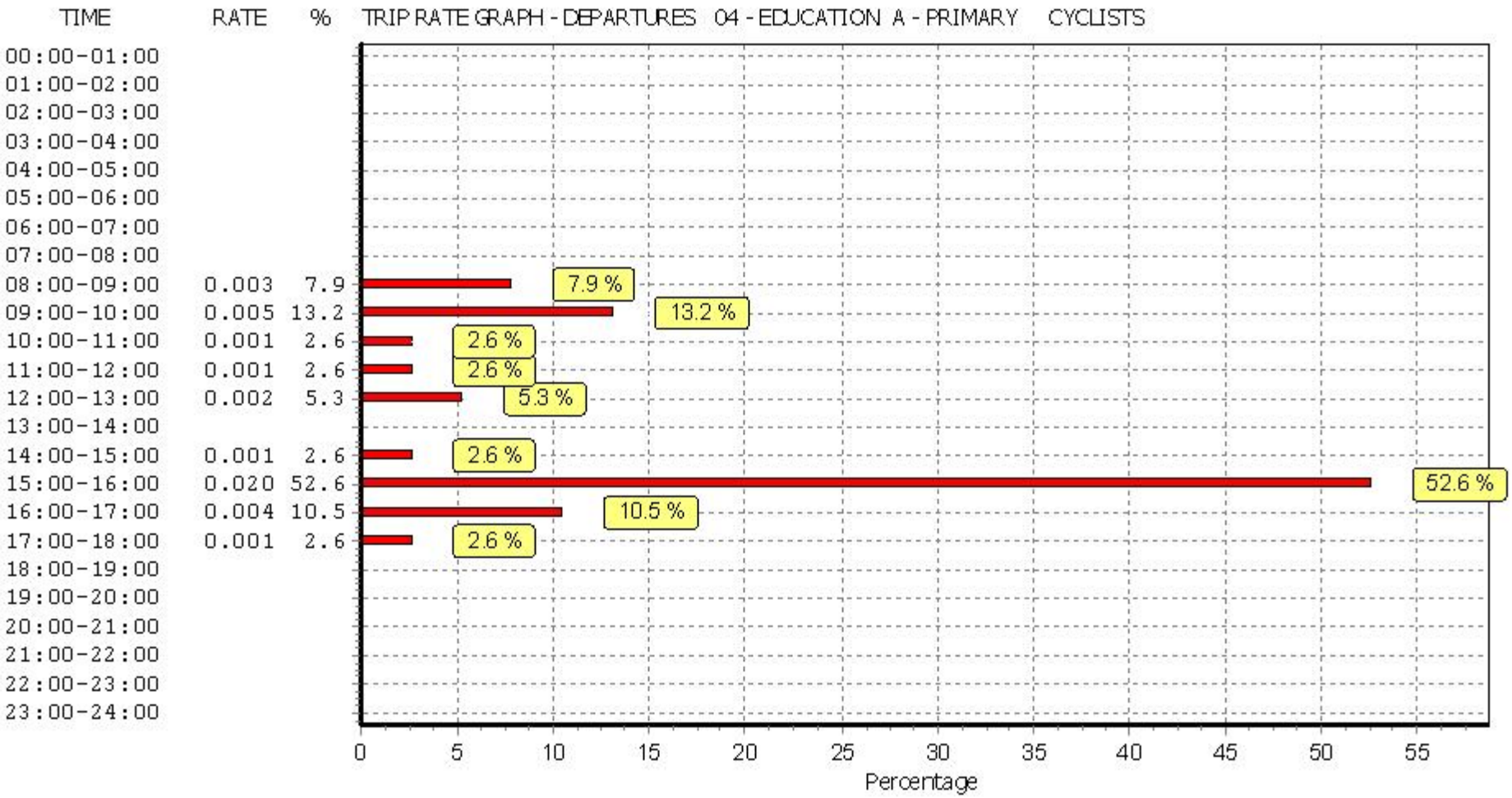


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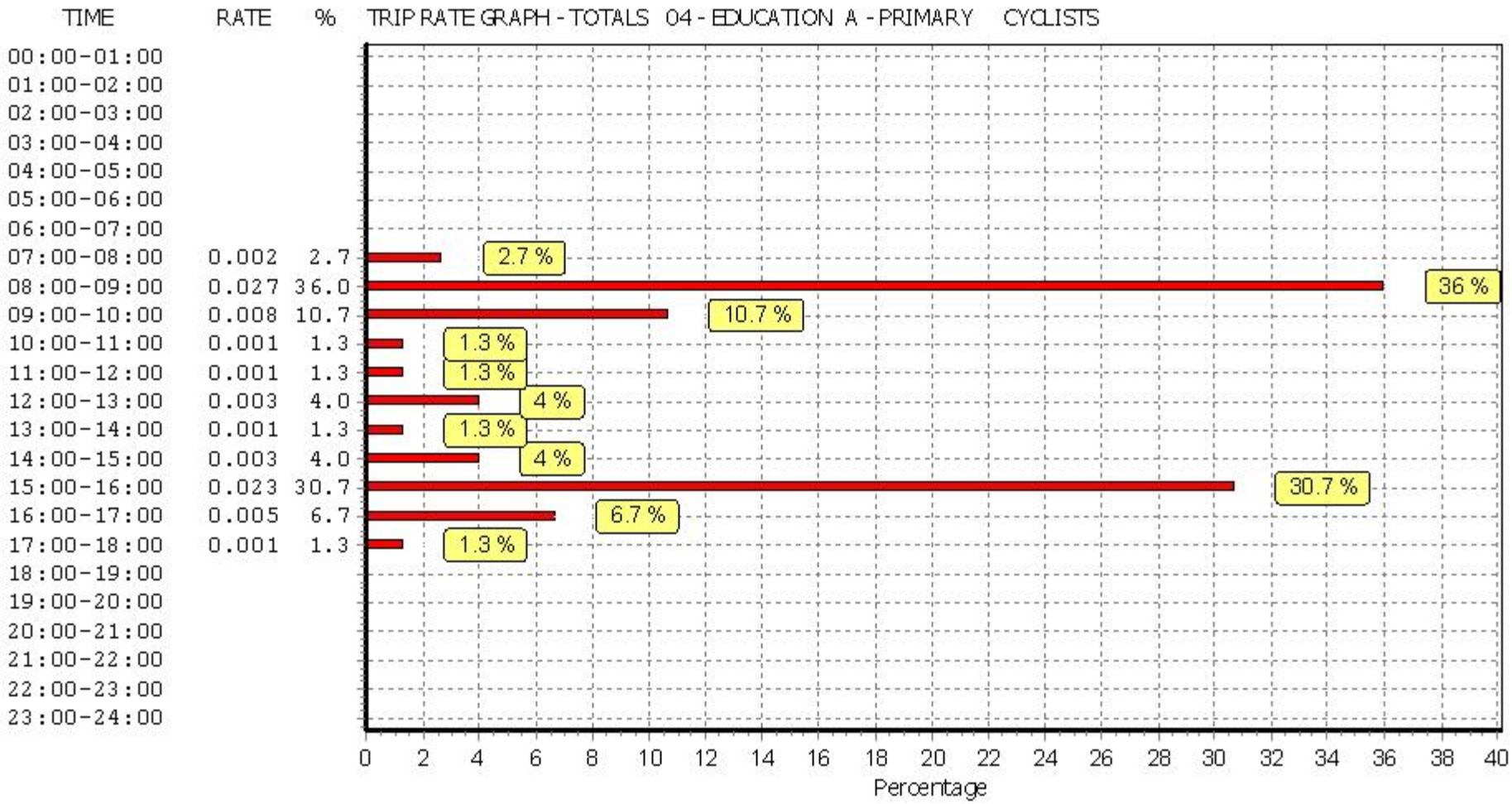


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