RPS

LAND AT STENCIL'S FARM ALDRIDGE ROAD WALSALL

TRANSPORT FEASIBILITY ASSESSMENT

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WALSALL

TRANSPORT FEASIBILITY ASSESSMENT

10 April 2017

Our Ref: EON/PW/adf/sjs/JNY9087-03

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1 INTRODUCTION

Introduction

1.1 RPS Planning and Development has been commissioned by Barratt West Midlands to prepare a Transport Feasibility Assessment for proposed residential development on land north of the A454 Aldridge Road to the northeast of Walsall.

1.2 The site lies approximately 3km to the east of Walsall town centre and 3km west of Aldridge. The development site lies to the north of the A454 Aldridge Road. The eastern boundary of the site is formed by the Rushall Canal (Daw End Branch), open fields and areas of woodland form the north and north-western boundaries, while to the west the boundary is formed by existing residential dwellings fronting onto Burton Farm Road and Mellish Drive. Barratt West Midlands are proposing a residential development on this site, with phased development over a number of years, with a mixture of sizes and tenure of dwellings.

1.3 A plan indicating the site's location in both a local and strategic context is included as **Figure 1**.

1.4 This report focuses on the feasibility of the proposed site and therefore the full extent of the study area has yet to be established with the local authority, which in this instance is Walsall Metropolitan Borough Council (WMBC) who acts as Planning and Highway Authority. A formal Transport Scoping Report should be submitted to WMBC in order to determine the full scope of a Transport Assessment and Residential Travel plan for the site.

Report Structure

1.5 This Transport Feasibility Assessment Report considers the transport issues in the local area of the site and identifies the likely impacts of the proposed development from all modes of travel considered.

1.6 The report is structured in the following manner:

Section 2 – A review of existing conditions at the site and surrounding transport networks. In particular, this focuses on the accessibility of the site by non-car means and the prevalence of public transport services;

Section 3 – Analysis of the development proposals in respect of the development itself in addition to the access arrangements being promoted;

Section 4 – Assessment of the number of trips that are likely to be generated by the proposed development with all modes of travel considered, including an initial appraisal of how the development trips are distributed through the local highway network;

Section 5 – Initial appraisal of the impact of the trips generated by the proposed development with respect to the operation of the local highway network; and

Section 6 – A summary of the findings of the Transport Assessment.

2 EXISTING TRANSPORT OPPORTUNITIES

Context

2.1 As previously discussed the proposed site is located north of the A454 Aldridge Road, approximately 3km east of Walsall town centre and approximately 3km east of Aldridge town centre.

Walking and Cycling

2.2 It is generally considered that up to 2km is a reasonable distance to walk to nearby facilities and amenities. This distance is illustrative and approximate, will vary by individual depending on their own personal mobility and fitness and will be influenced by their perception and prejudices towards such factors as local topography, their attitude towards particular travel modes and the cost and time of a journey.

2.3 Similarly, it is generally considered that around five kilometres is an acceptable cycling distance to work, local amenities and facilities.

2.4 The proposed site is located at the eastern edge of Walsall, on open countryside (Green Belt). Its current land use as open fields and semi-rural location means that at present there is limited infrastructure in place for pedestrians on the A454 Aldridge Road adjacent to the development site. This is illustrated in **Photograph 1**.

Photograph 1: View Eastbound Along the A454 Aldridge Road Adjacent to Site Frontage

Source: RPS (EON)

2.5 On the southern side of the A454 Aldridge Road there is a footway of 2.0m in width, extending east to Aldridge and west to Walsall. An existing footway runs from the extreme western corner of the site, where it abuts Aldridge Road, on the northern side of the carriageway. Westbound from this location there are footways adjacent to all local roads. The footways are all in good condition, generally flat with street lighting, thus providing safe pedestrian routes to all local facilities and services.

2.6 The proposed site is crossed by a single Public Rights of Way (PROW), which connects with the Rushall Canal towpath to the north of the site. Additional PROWS are also located to the west of the site and south of the A454 Aldridge Road, **Figure 2** indicates the locations. The access to the PROW from Aldridge Road is show in **Photograph 2**.

Photograph 2: Public Footpath Access from A454 Aldridge Road

Source: RPS (EON)

2.7 The PROW should be maintained in their current location where ever possible and integrated into the overall site masterplan. However, where this is not possible, the PROW should only be diverted by the minimum distance necessary. Any such diversion, including temporary diversions, of a PROW, however minor, will be subject to a Public Right of Way Diversion Order. The application for a Diversion Order is separate legal process from any planning application and ultimately can be refused by the local authority if objected too by members of the public or interested groups. Typically a Diversion Order can take 3 months to process, whilst objections can extend this process up to 12 months. If resolution cannot be found to the objection(s) then a Public Inquiry can ensue.

2.8 National Cycle Network Route 5 is located approximately 2km west of the proposed site, running north/south as it passes through Walsall. As the route passes through the town it consists of a mixture of lightly trafficked on-road sections and traffic free off-road paths. Northbound the route extends to Burntwood, Stafford, Kidsgrove and Chester. Southbound the route extends to Oxford and Reading.

2.9 Bounding the site to the east is the Rushall Canal (Daw End Branch) which forms part of the Birmingham and Black Country Cycle Route, providing access south to Birmingham, north to Cannock and west to Wolverhampton.

2.10 The route uses the towpath adjacent to the canal which is generally flat and in good condition. There are links with National Cycle Network Route 5, providing an extensive network of cycle routes around Walsall. Access to the route from Aldridge Road is indicated by signage as shown in **Photograph 3**.

Photograph 3: Signage on Aldridge Road Indicating Black Country Cycle Route (Daw End Branch)

Source: RPS (EON)

2.11 WMBC publish a regional cycle map highlighting National Cycle Routes and other cycle routes within the area. The map indicates that the A454 Aldridge Road is designated as a 'Proposed Cycle Route' thus indicating upgrades in the local cycling infrastructure. An interpretation of this map can be found in **Figure 3**.

2.12 Local journeys by foot and cycle will be encouraged through the development of a Travel Plan for the proposed site. Residents will be provided with maps detailing appropriate walking and cycling routes to highlight the potential to undertake journeys of 5km or less by foot or cycle.

Public Transport - Bus Services

2.13 The proposed development site is situated in proximity of regular public transport routes, with bus stops located on the A454 Aldridge Road. Eastbound and westbound stops are within circa 70m of the proposed site access. Three services, No.6, 7 and 7A are easily accessible from the site, providing a combined peak frequency of 7 buses per hour in each direction, facilitating travel to Walsall town centre, Aldridge, Castleford, Leighswood and Sutton Coldfield. **Figure 4** shows local bus routes in the vicinity of the proposed development site. **Table 2.1** provides a summary of these services.

2.14 Both bus stops include a flag, pole, timetable board and bus stop carriageway markings. Currently there are no shelters at either stop.

2.15 Additional bus services are available within 700m and 1.3km of the proposed site access, providing frequent further local and regional services. All services start/terminate or call at the St Paul's Bus Station in the centre of Walsall, providing further connectivity to local, regional and national services.

Table 2.1: Local Bus Services Operating in the Vicinity of the Development Site (March 2017)

No.	Stop	Route	Weekday						Weekend	
			Frequency				Time		Frequency	
			AM Peak	Off Peak	PM Peak	Eve	First Service	Last Service	Sat	Sun
6	A454 Aldridge Road (E/B & WB)	Walsall – Aldridge – Sutton Coldfield	20 to 25 mins	30 mins	30 to 35 mins	60 mins	05:20	22:30	15 to 30 mins	60 mins
7	A454 Aldridge Road (E/B & WB)	Walsall – Aldridge – Leighswood	30 to 35 mins	30 mins	30 mins	60 mins	07:05	23:10	30 to 35 mins	60 mins
7A	A454 Aldridge Road (E/B & WB)	Walsall – Aldridge – Castleford	30 mins	30 mins	30 mins	N/A	06:45	17:35	30 mins	N/A

Source: https://journeyplanner.networkwestmidlands.com/Timetables/cen_33006_L_H_y11/2/Outbound/0 (March 2017)

Public Transport - Rail Services

2.16 Walsall Rail Station, located at the Saddlers Centre, is circa 2.9km of the proposed development site, equating to a 36 minute walk or a 9 minute cycle. This is an acceptable cycling distance for multi-modal interchange, as stated in IHT 'Providing for Journeys on Foot'. Rail services from this station are operated by London Midland.

2.17 Walsall Station has car parking available adjacent to the station, operated by APCOA Parking, for 120 vehicles. Current charges are £1 for up to an hour, £3.50 for up to 4 hours and £4 for all day. Season tickets are available. Facilities at the station include a covered passenger waiting area, shops, telephones, toilets, storage for up to 10 cycles, an automated ticket machine and ticket kiosk, staffed between 07:00 and 19:00 Mondays to Fridays and to 16:00 at weekends and Bank holidays. A summary of service frequencies from Walsall railway station is provided in **Table 2.2.**

Table 2.2: Local Rail Services

Station	Route	Peak Frequency	First/Last Train Service
Walsall	Wolverhampton	2 per hour	06:01 / 19:31
	Birmingham New Street	2 per hour	06:01 / 19:55
	Rugeley Trent Valley	1 per hour	06:24 / 22:35

Source: London Midland Timetable for 11December 2016 to 20 May 2017

Existing Mode Share

2.18 The proposed development lies within the Local Authority District of Walsall. Census Data 2011 data subset E02002133 (Walsall 024), which covers the adjacent residential area to the proposed site has been used to establish the mode split of person trips - see **Figure 5** for plan of area used. **Table 2.3** shows how existing residents of this area currently travel to work.

Table 2.3: Journey to Work Mode Split (E02002133 (Walsall 024) Census 2011)

Mode	2011 Census Mode Share
Pedestrian	16.7%
Cyclist	1.6%
Public Transport	15.6%
Vehicular	60.7%
Passenger	5.3%
Other	0.1%
Total	**100%**

2.19 The Census data shows that 61% of working residents living in the adjacent residential area to the proposed site drive to work with 17% commuting on foot, 2% by cycling and 5% by public transport. The high levels of walking and public transport use reflect the availability of local public transport facilities and employment and retail opportunities in the area.

Local Highway Network

2.20 The proposed site is situated to the northeast of Walsall, adjacent to the A454 Aldridge Road. The A454 can be considered a local distributor road, proving a primary route to the nearby town of Aldridge. Along the site frontage the road is a dual lane boulevard, with a central reserve, street lighting, a posted speed limit of 40mph and can be considered semi-rural in character. To the west of the site the carriageway, Mellish Road, reduces to a single lane in each direction, becoming urbanised in character with residential frontages, private drive-ways and junctions with local unclassified access roads, as it approaches the centre of Walsall.

2.21 To the west of the site footways are present on both sides of Aldridge Road and considered to be in a good state of repair, well lit, general of flat topography, thus providing safe connectivity to Walsall town centre.

2.22 To the east of the site Aldridge Road again reduces to a single lane in each direction as it crosses the Rushall Canal. Semi-rural in character, the speed limit remains at 40mph, street lighting is present and for the majority of its length as it approaches Aldridge a footway is present on the southern side of the carriageway and intermittently present on the northern side.

2.23 To the west the A454 connects with the A461 Lichfield Road, considered to be a major arterial route connecting Walsall with the M6 Toll to the north. To the east the A454 passes through the town of Aldridge and then connects with the A452, which in turn runs north/south between the M6 and the M6 Toll.

Accessibility to Local Services

Access to Education Facilities

2.24 Butts Primary School, for children between the ages of 5 and 11 is located approximately 2km, or 22 minutes walking time, west of the proposed site and thus within the generally accepted walking distance discussed previously. The Aldridge Secondary School, for pupils between the age of 11 and 18, is located approximately 2.5km east of the site. An independent school for pupils between the ages of 5 and 16, Hydesville Tower School, is located 2km southwest of the site.

Access to Healthcare Facilities

2.25 Lichfield Street GP Surgery is located approximately 2km east of the proposed site. Similarly, a dental surgery is located Lichfield Street approximately 1.5km west of the proposed site.

2.26 Walsall Hospital is approximately 4km north of the proposed site and provides a 24 hour Accident and Emergency services in addition to a full range of health care services and facilities.

Access to Retail and Leisure Facilities

2.27 The Walsall Gala Baths are the nearest dedicated community sports and recreation centre to the site, located approximately 2.5km, southwest of the proposed site. The centre provides a range of leisure facilities including a 25m swimming pool, gym, kid's gym, fitness studios and sauna.

2.28 There are numerous food retail opportunities available within walking or cycling distance of the proposed site. A Morrison's superstore is located on Lower Rushall Street, approximately 2km southwest of the site, whilst a Co-operative Food is located on Heatherton Road, approximately 2.4km southwest of the site.

2.29 Extensive non-food retail opportunities exist in the centre of Walsall at 'The Old Square Shopping Centre' located approximately 2.4km southwest of the site. The centre offers a range of retail attractions including clothing, electronics, financial and home furnishing stores. The surrounding central area also offers extensive retail, business and dining opportunities.

2.30 Significant employment opportunities also exist within this central area, mainly in the retail and financial services sectors. The Anchor Brook Business Park and Redhouse Industrial Estate are both situated approximately 2.5km to the northeast of the site and offer employment in a range of sectors including distribution, engineering and electronics.

2.31 **Table 2.4** summarises these local facilities and land uses while also identifying the approximate distances and corresponding typical journey times measured from the centre of the proposed development. There will be areas of the proposed site where the travel times are slightly higher or lower than the averages presented.

2.32 It should be noted that examples of key services are provided only and is not an exhaustive list of all services in the area.

Table 2.4: Local Facilities with Journey Times by Foot and Cycle

Amenity	Location	Distance (m)	Journey Times (mins)		Meets IHT Maximum Walk Guidelines	Meets TN 2/08, Maximum Cycle Guideline (5km/8km)
			Walk	Cycle		
Education						
Primary:	Butts Primary School Teddesley Street	1800	23	7	✓	✓
Secondary:	Aldridge Secondary School Tynings Lane	2500	30	8		✓
College:	Walsall College (Wisemore Campus)	2200	27	7		✓
Health and Community						
Hospital (A&E):	Walsall Hospital	3900	48	13		✓
Doctors:	Litchfield Street Surgery	2000	27	10	✓	✓
Dentist:	WS4 Dental Care, 64 Litchfield Street	1500	18	5	✓	✓
Library:	Walsall Library and Museum	2200	27	7		✓
Place of Worship:	Saint Michael the Archangel	1500	19	6	✓	✓
Shopping / Retail / Leisure						
Post Office:	The Butts Post Office	1400	18	5	✓	✓
Convenience Store:	Star Groceries & Convenience Store, 97 Butts Road	1400	17	5	✓	✓

Amenity	Location	Distance (m)	Journey Times (mins)		Meets IHT Maximum Walk Guidelines	Meets TN 2/08, Maximum Cycle Guideline (5km/8km)
			Walk	Cycle		
Education						
Supermarket:	Morrisons Superstore	2000	25	7	✓	✓
Town Centre:	Walsall centre	2600	32	8		✓
Cinema:	The Light Cinema Experience	3300	38	10		✓
Leisure Centre:	Walsall Gala Bath, Tower Street	2300	28	7		✓
Existing Public Open Spaces						
Public Park:	Walsall Arboretum Visitors Centre	1400	16	4	✓	✓
Public Transport						
Bus Stop:	A454 Aldridge Road Eastbound: Westbound:	100: 110:	2	1	✓	✓
Railway Station:	Walsall Railway Station	2900	36	9		✓

2.33 **Table 2.4** indicates that the site is in a highly sustainable location with good walking and cycling routes to a variety of local facilities and services. An indicative location plan for local services and facilities is shown in **Figure 6**. In addition, the site is well served by public transport providing a sustainable means of travel over longer distances.

3 INITIAL DEVELOPMENT PROPOSALS AND ACCESS ARRANGEMENTS

Context

3.1 The development proposals have still to be finalised. However, preliminary indications are that the capacity limit for the site will be circa 570 dwellings of mixed sizes and tenure. The site will be developed in phases over a number of years, initially requiring a single point of vehicular access, with a separate shared footway/cycleway.

Vehicular Access

3.2 Typically a single access road will be sufficient for a development of up to circa 300 dwellings, beyond which a second access road would be required. The second access road location is discussed in more detail later in this report. The precise level at which the second access will be required should be discussed with the local planning and highway authority.

3.3 The existing speed limit posted on the A454 Aldridge Road, in the vicinity of the site, is 40mph. Aldridge Road takes the form of a dual lane, tree lined boulevard, with a footway present on the southern side of the carriageway only. A central reserve, approximately 1.8m in width, runs the length of Aldridge Road along the site frontage and beyond, with no breaks for vehicle turning. Street lighting is situated on the central reserve.

3.4 Towards the eastern end of the site frontage there is a roundabout junction between the A454 Aldridge Road and an unnamed access road to The Dilke Public House and Restaurant and the Calderfields Golf and Country Club. The unnamed access road is a no-through route beyond the country club.

3.5 Whilst there is a gated access, currently overgrown, into the site approximately 180m west of the roundabout and an informal farm vehicle access 35m east of the roundabout, utilising a break in the hedgerow but with no dropped kerbs, it is nonetheless considered that the most suitable site access road location is from the existing roundabout, northwards into the site.

3.6 The existing roundabout is circa 36.0m in diameter, with the A454 Aldridge Road forming the eastern and western arms and the unnamed access road forming the southern arm. An access road with a width of circa 6.8m and footways of 2.0m on one or both sides, subject to detailed discussions with the local highway authority, could be formed directly opposite the unnamed access road. The width of the access road takes into account the potential for diverting existing bus services along the A454 Aldridge Road through the site.

3.7 The two lane approach on Aldridge Road from both sides of the roundabout provides scope for road markings that direct eastbound nearside lane and westbound offside lane traffic into the site. This is subject to detailed junction capacity analysis and discussions with the local highway authority.

3.8 As discussed the posted speed limit is 40mph. However, the vertical and horizontal alignment of Aldridge Road would suggest that vehicle flows may be above this limit. A speed survey, in conjunction with traffic and vehicle queue surveys, should be undertaken in order to determine the 85th percentile speeds of vehicle and thus visibility requirements on the approach to the roundabout. Visibility requirements will conform to standards set out in The Design Manual for Roads and Bridges, Technical Document 9 paragraph 6.1.1, Desirable Minimum Stopping Sight Distance (SSD) for Approach Road Design Speed.

3.9 An initial review indicates that the required SSD can be achieved for the posted limit and for speeds moderately above the posted limit. The SSD visibility splay will pass over land within the control of the land owner and land set aside as Public Highway Land. These areas will necessitate that all vegetation and other street furniture is kept below 600mm in height. Public Highway Land records have been sourced from WMBC and are shown in **Appendix A**.

3.10 As discussed the scale of the development could reach approximately 570 dwellings. It is considered that when the scale of the development exceeds circa 300 dwellings a second vehicular access will be required. The location for the second access point has not been researched in detail, however it is considered that the most likely location would be east of the existing A454 Aldridge Road / Unnamed access road roundabout, but sufficiently west of the Rushall Canal bridge to avoid visibility restrictions as the carriageway rises to cross the canal and also bends as it approaches the A454 Aldridge Road / Longwood Lane / Airfield roundabout.

3.11 The two vehicular accesses, and potential footway/cycleway link discussed later in this report, are illustrated in RPS Drawing Nos. JNY9087-01 and JNY9087-02 which can be found in **Appendix B**.

Travel by Foot and Cycle

3.12 It is proposed that 2.0m wide footways be provided adjacent to either side of the proposed access road, north from the roundabout into the site and to tie in with footways proposed within the site. On the eastern side of the proposed access road, it is proposed that the footway be continued adjacent to the roundabout and then onto the northern side of the eastbound carriageway and extend as far as the existing eastbound bus stop.

3.13 An informal crossing point should also be provided in the vicinity of the bus stop, across the central reserve and from the southern side of the carriageway connecting with the existing footway on the southern side of the carriageway. This will provide a safe pedestrian route to the Dilke Public House and Restaurant and the westbound bus stop.

3.14 The footway on the western side of the proposed access should similarly be continued adjacent to the roundabout and then onto the northern side of the eastbound carriageway. There would appear to be sufficient width to continue the footway westwards until it connects with the existing footway which currently terminates outside of No.19 Aldridge Road. Alternatively, if this proposal does not meet with approval from the planning and highway authority then a footway should be provided within the boundary of the site and again connect with the existing footway. This will provide a safe pedestrian route westbound towards Walsall town centre and the vast majority of facilities residents will require.

3.15 An informal crossing could also be provided at a point along the frontage of the site, then across the central reserve in order to connect with the existing footway on the southern side of the carriageway. This will provide a safe means for pedestrians to cross the A454 Aldridge Road.

3.16 It is anticipated that the development proposals will open up the site to the local area by providing pedestrian and cycle links through to the A454 Aldridge Road, where proposed and existing pedestrian links together with existing public transport infrastructure will provide safe and convenient routes and services to local facilities.

3.17 Alternatively a shared footway/cycleway could be provided from the south western corner of the site, through a consented development site of 12 residential dwellings and in turn along the development access road onto the A454 Aldridge Road, or secondly from the previously discussed gated access, approximately 180m west of the A454 Aldridge Road / Unnamed access road roundabout. It is anticipated that the access would be circa 3.8m in width, with fixed bollards located at suitable locations to prevent general vehicular access into the site. Appropriate road markings and signage would be present to indicate its use as a shared footway/cycleway.

Refuse Collection / Emergency Service Vehicle Access

3.18 The preliminary access junction has been designed to facilitate the manoeuvrability and navigation of refuse vehicles and emergency service vehicles into the site. Whilst the internal layout of the site has yet to be determined it should be designed such that all servicing vehicles will be able to enter, route through, and then exit the site in forward gear in a safe and satisfactory manner.

Car Parking

3.19 When determining the level and type of parking throughout the residential development, consideration should be given to the housing types proposed and the location of the development site in context with its surroundings. A design led approach should be adopted which seeks to provide parking that is well integrated and compliments, rather than dominates, the surrounding street scene.

3.20 The objective is to provide an adequate level of parking and, importantly, to ensure that the places that are designed for parking are used for parking, and that places where parking may cause a problem are not used for that purpose. This approach will help prevent the problems that have occurred at recently implemented residential developments such as cars parked indiscriminately which obstructs footways and restricts street access.

3.21 Whilst the mixture of dwelling sizes has yet to be finalised, WMBC has issued residential development car parking standards (Policy T13 Parking Provision for Cars, Cycles and Taxis, Section B, page 159 of the Walsall Unitary Development Plan) which the site will adhere too. These are as follows:

- 1,2 and 3 bedroom houses: 2 car parking spaces per unit;
- 4 bedroom houses and above: 3 car parking spaces per unit;
- Flats with allocated parking: 2 car parking spaces per unit; and

- Flats with unallocated parking: 1.5 car parking spaces per unit.

4 TRIP GENERATION AND DISTRIBUTION

4.1 This section of the appraisal outlines the forecast trip generation of the proposed development in respect of vehicular trips as well as those by other modes of travel. The appraisal focuses on the weekday morning and evening peak hours, representing the busiest periods along the local highway network as well as the peak traffic generating periods of the proposals.

Traffic Flow Forecasts for Proposed Residential Development

4.2 Development trip generation for the site has been estimated using the TRICS database – Version 2017 v7.3.4. In order to provide a robust analysis, vehicle trip generation has been calculated from the private dwelling trip rate category. The TRICS analysis excludes the areas of Scotland, Ireland (republic and Northern), Wales and Greater London as these areas are not considered representative of the Walsall region. The resulting output of trip rates from the TRICS database is included within **Appendix C**.

4.3 The vehicle trip rates from the TRICS output have been applied to a development of approximately 570 dwellings in order to ascertain the potential trip generation resulting from the site. The resulting trip rates and vehicular generation are shown within **Table 4.1.**

Table 4.1: Proposed Development Residential Trip Generations

Vehicles	Trip Rates Per Dwelling			Trip Generation (Vehicles)		
	In	Out	Two-Way	In	Out	Two-Way
570 Dwellings						
AM (08:00-09:00)	0.138	0.370	0.508	79	211	290
PM (17:00-18:00)	0.312	0.177	0.489	178	101	279
Daily (07:00-19:00)	2.164	2.271	4.435	1234	1295	2528

Source: TRICS 2017 (v7.3.4)

4.4 **Table 4.1** shows that the proposed development is likely to generate circa **280** two-way vehicle trips in the morning peak and **269** two-way vehicle trips in the evening peak. It should be noted that the above trip rates are for private dwellings only. The site will have a proportion of affordable dwellings which are anticipated to have lower trips rates than private dwellings. Therefore the above trips rates are considered a robust worst case.

Vehicular and Non-Vehicular Trip Generation

4.5 The proposed development lies within the Census data subset E02002133 (Walsall 024), which covers the adjacent residential area to the proposed site. Census Data 2011 has been used to establish the mode split of person trips in the local area. **Table 4.2** shows the modal split and potential number of trips generated.

Table 4.2: Proposed Multi Modal Trip Generation for 570 Residential Units

Mode	2011 Census Mode Share	AM Peak Hour (08:00-09:00)			PM Peak Hour (17:00-18:00)			Daily (07:00-19:00)		
		In	Out	Total	In	Out	Total	In	Out	Total
Pedestrian	16.7%	23	58	81	49	28	77	339	356	695
Cyclist	1.6%	2	5	7	5	3	7	32	34	66
Public Transport	15.6%	21	54	75	46	26	72	317	333	650
Vehicular	60.7%	79	211	290	178	100	278	1233	1294	2527
Passenger	5.3%	7	19	26	16	8	24	108	113	221
Other	0.1%	0	0	0	0	0	0	2	2	4
Total	**100%**	**132**	**347**	**477**	**293**	**166**	**458**	**2031**	**2132**	**4163**

Source: 2011 Census Method of Travel to Work Data

4.6 It is evident from **Table 4.2** that, aside from vehicular traffic, public transport, cycling and pedestrian movements will make up the largest proportion of trips with 1362 predicted two-way daily movements. The remaining trips would comprise of vehicular passenger journeys.

4.7 Public transport users will make use of existing bus services that route along A454 Aldridge Road, where it has been established that bus stops are located in proximity to the proposed development access, which ensures a very good level of public transport accessibility. Additional bus routes are within walking distance of the site providing further connectivity and frequency to local regional and national services.

4.8 Based on the above it is considered that the existing non-car networks in the vicinity of the proposed development, coupled with measures to further encourage sustainable forms of travel that will be promoted through a Travel Plan, will ensure that the non-car trips generated by the proposed development will be accommodated in a satisfactory manner.

Development Trip Distribution

4.9 The vehicular trips generated by the proposed residential development have been distributed onto the local highway network using the directional distribution obtained from the 2011 Census data subset E02002133 (Walsall 024), which covers the adjacent residential area to the proposed site. This is considered to represent a good proxy of the distribution of the residential vehicular trips generated by the proposed development.

4.10 Analysis of data subset E02002133 (Walsall 024) has determined the following destinations for work by residents of the proposed development site. The destinations, ranked in percentage order are shown in **Table 4.3**.

Table 4.3: Travel to Work Destination Percentage Distribution

Destination	Percentage Distribution
Walsall	53.9%
Birmingham	17.2%
Sandwell	8.1%
Wolverhampton	5.0%
Cannock Chase	2.1%
Dudley	1.7%
Lichfield	1.6%
South Staffordshire	1.6%
Solihull	1.1%
Telford and Wrekin	0.7%
North Warwickshire	0.5%
Stafford	0.4%
Warwick	0.4%
East Staffordshire	0.3%
Tamworth	0.3%
Other	5.1%
Total	**100%**

Source: 2011 Census Method of Travel to Work Data

4.11 Subsequently the distribution from **Table 4.3** is anticipated to use the following routing when arriving and departing from the site. **Table 4.4** shows the proportional distribution of residential trips by destination. It should be noted that the percentage distribution shown below has been calculated as 100% at each junction.

Table 4.4: Proportional Distribution of Residential Trips

Route	Proportion of Trips (Morning Peak)		Proportion of Trips (Evening Peak)	
	Arrivals	Departures	Arrivals	Departures
A454 Aldridge Road / Proposed Site Access				
A454 Aldridge Road West	68.9%	68.9%	68.9%	68.9%
A454 Aldridge Road East	31.1%	31.1%	31.1%	31.1%
Total	100%		100%	

Route	Proportion of Trips (Morning Peak)		Proportion of Trips (Evening Peak)	
	Arrivals	Departures	Arrivals	Departures
A454 Aldridge Road / Lichfield Street / Lichfield Road / Buchanan Avenue Roundabout				
Lichfield Road (North)	3.8%	3.8%	3.8%	3.8%
Lichfield Road (South)	96.2%	96.2%	96.2%	96.2%
Total	100.0%	100.0%	100.0%	100.0%
A454 Aldridge Road / Walsall Road / Longwood Lane Roundabout				
Walsall Road (North)	93.2%	93.2%	93.2%	93.2%
Longwood Lane (South)	6.8%	6.8%	6.8%	6.8%
Total	100%	100%	100%	100%

Source: Traffic Count Data September 2016

4.12 The above distribution is based on a single point of access from the existing A454 Aldridge Road/Unnamed access road roundabout. Whilst the ultimate destination will not alter as a result of two accesses, the proportion of development exiting either access has yet to be determined. The final distribution between the two accesses will depend on the layout of the development and will be undertaken as the site masterplan evolves.

4.13 **Table 4.5** indicates the resultant assignment of these trips along the local highway network during the morning and evening peak hours.

Table 4.5: Network Vehicle Flows for 570 Dwellings

Route	Proportion of Trips (Morning Peak)		Proportion of Trips (Evening Peak)	
	Arrivals	Departures	Arrivals	Departures
A454 Aldridge Road / Proposed Site Access				
A454 Aldridge Road West	88	239	202	114
A454 Aldridge Road East	44	108	91	52
Total	132	347	293	166
A454 Aldridge Road / Lichfield Street / Lichfield Road / Buchanan Avenue Roundabout				
Lichfield Road (North)	3	9	7	5
Lichfield Road (South)	85	230	195	109
Total	88	239	202	114
A454 Aldridge Road / Walsall Road / Longwood Lane Roundabout				
Walsall Road (North)	41	101	85	49
Longwood Lane (South)	3	7	6	3

Route	Proportion of Trips (Morning Peak)		Proportion of Trips (Evening Peak)	
	Arrivals	Departures	Arrivals	Departures
A454 Aldridge Road / Proposed Site Access				
Total	44	108	91	52

4.14 Background traffic flows at the above junctions and across the network during the AM and PM peak hours has yet to be determined and therefore it is difficult to predict the precise impact from a development of 570 dwellings.

4.15 However, it is considered that the impact from a development of circa 570 dwellings at the A454 Aldridge Road / Lichfield Street roundabout is likely to be moderate, whilst the impact at the A454 Aldridge Road / Walsall Road / Longwood Lane roundabout is likely to be low to moderate. It should be noted that these considered impacts are subject to detailed understanding of existing traffic flows and queues at these and potentially other junctions on the local highway network and are subject to change.

4.16 Having reviewed other consented developments in the local area, there are currently no proposed junction improvements at any of the junctions discussed.

4.17 The impact on the existing A454 Aldridge Road / Unnamed access road / Proposed New Site Access roundabout is considered to be moderate. The design of the second site access, east of the A454 Aldridge Road / New Site Access roundabout is such that the impact will be kept to a minimum.

4.18 Detailed mitigation measures at any junctions have yet to be considered.

5 SUMMARY AND PRELIMINARY CONCLUSION

5.1 RPS Planning and Development has been commissioned by Barratt West Midlands to prepare a Transport Feasibility Assessment for proposed development site on land north of the A454 Aldridge Road to the northeast of Walsall.

5.2 The site lies approximately 3km to the east of Walsall town centre and 3km west of Aldridge. The development site lies to the north of the A454 Aldridge Road.

Travel by Foot and Cycle

5.3 It is anticipated that the development proposals will open up the site to the local area by providing pedestrian and cycle links through to the A454 Aldridge Road and Rushall Canal, where proposed and existing pedestrian links, together with existing public transport infrastructure will provide safe and convenient routes and services to local facilities.

Travel by Public Transport

5.4 Public transport users will make use of existing bus services that route along A454 Aldridge Road, where it has been established that bus stops are located in proximity to the proposed development access, which ensures a very good level of public transport accessibility. Additional bus routes are within walking distance of the site providing further connectivity and frequency to local regional and national services.

Travel by Car

5.5 The site will be developed in phases over a number of years, initially requiring a single point of vehicular access. As discussed previously, it is considered that a second point of access will be required when the scale of the development exceeds circa 300 dwellings.

5.6 It considered that the most suitable site access road location is from the existing A454 Aldridge Road / Unnamed access road roundabout, northwards into the site. The most appropriate location for the second access point would be east of the existing A454 Aldridge Road / Unnamed access road roundabout, but sufficiently west of the Rushall Canal Bridge to avoid visibility restrictions as the carriageway rises to cross the canal and also bends as it approaches the A454 Aldridge Road / Longwood Lane / Airfield roundabout. The location of the second access is shown on drawings found in **Appendix B**.

5.7 Whilst the mixture of dwelling sizes has yet to be finalised, WMBC has issued residential development car parking standards (Policy T13 Parking Provision for Cars, Cycles and Taxis, Section B, page 159 of the Walsall Unitary Development Plan) which the site will adhere to.

Highway Impact

5.8 Background traffic flows at local junctions and across the network during the AM and PM peak hours has yet to be determined and therefore it is difficult to predict the precise impact from a development of 570 dwellings.

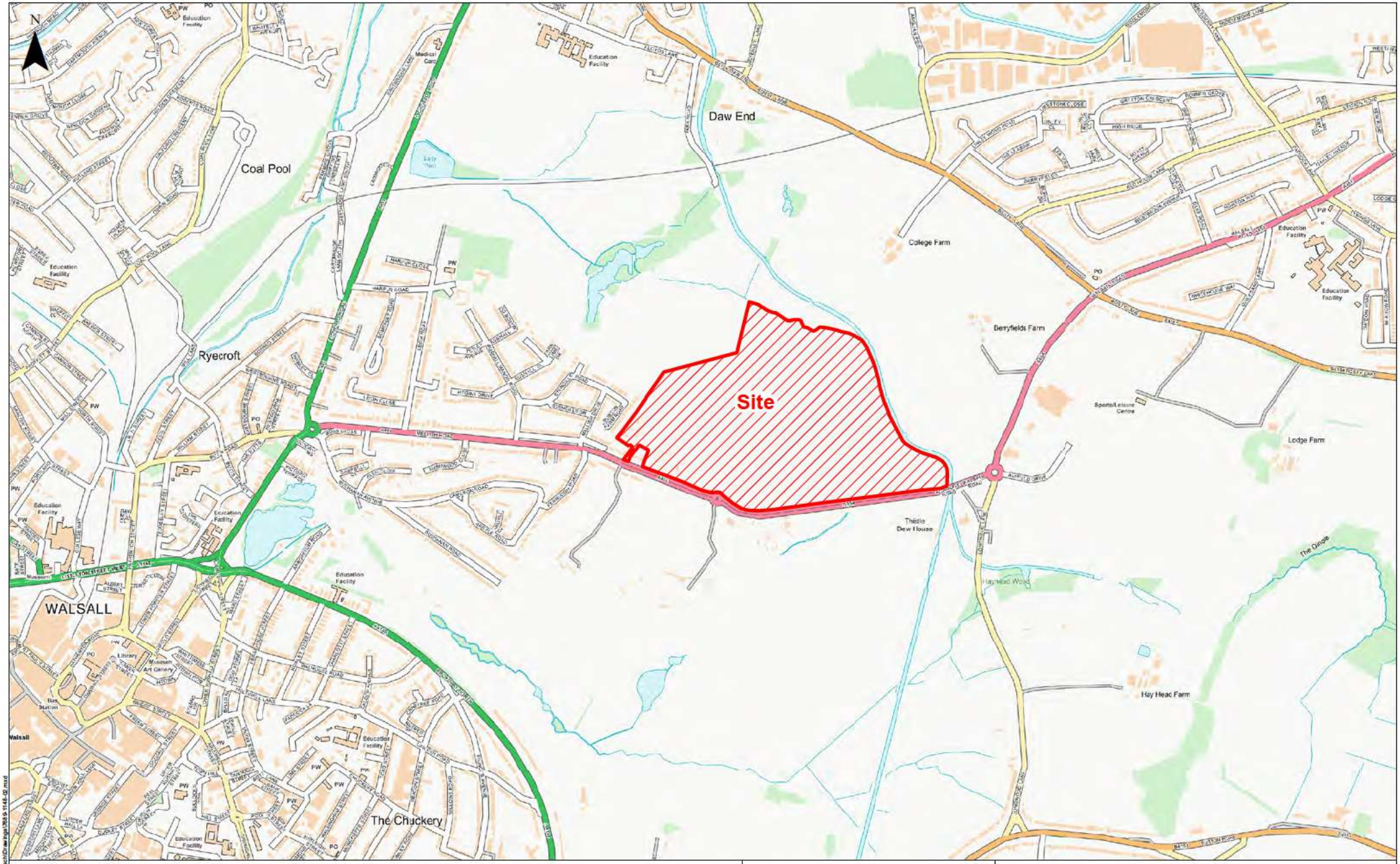
5.9 However, it is considered that the impact at the A454 Aldridge Road / Lichfield Street roundabout is likely to be moderate, whilst the impact at the A454 Aldridge Road / Walsall Road / Longwood Lane roundabout is likely to be low to moderate.

5.10 The impact on the existing A454 Aldridge Road / Unnamed access road / Proposed New Site Access roundabout is considered to be moderate. The design of the second site access, east of the A454 Aldridge Road / New Site Access roundabout is such that the impact will be kept to a minimum.

Preliminary Conclusion

5.11 It is therefore concluded at this preliminary stage, that the proposed development accords with National Planning Policy Framework, which is in favour of sustainable development and advises that 'development should only be prevented or refused on transport grounds where the residual cumulative impacts of the development are severe'. In light of the preliminary evidence presented in this report, it is considered that the site is highly sustainable accessible by travel modes other than the private car, and that the development's transport impacts, within the limit currently show and subject to revision, cannot be regarded as severe. Therefore, the local Highway Authority should be able to recommend approval of the planning application when submitted.

FIGURES



RPS

Project:
LAND AT STENCIL'S FARM, ALDR DGE ROAD, WALSALL

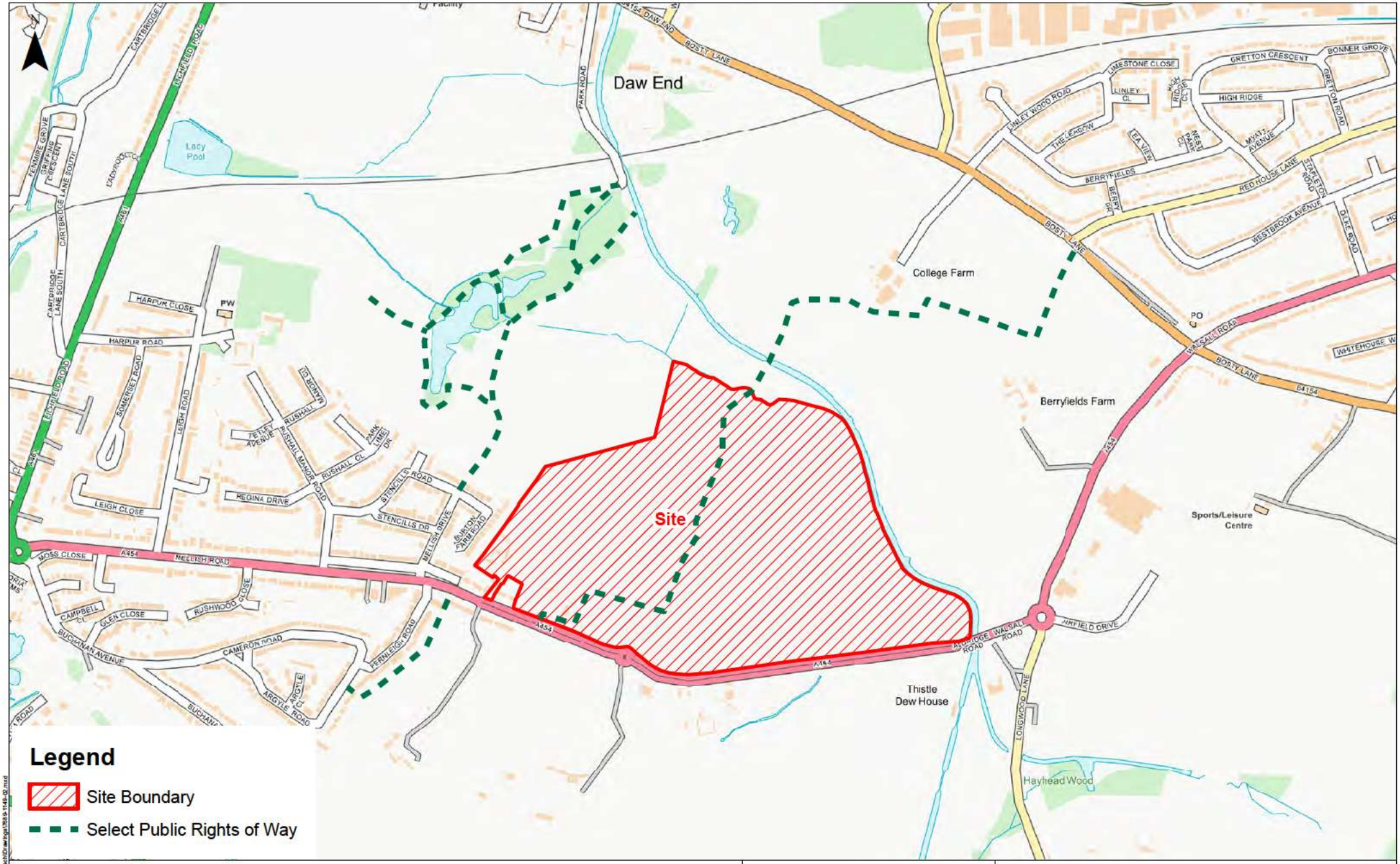
Title:
SITE LOCATION PLAN

Date: Mar 2017	Scale: 1:15,000	Rev: 1
Drwg. No: JNY9087-01	Drawn: BM	Checked: PW

Figure No:
1

Transport

Path: O:\7680 Newbury Tech Support\Tech\Drawings\7680-1148-02.mxd



RPS

Project: LAND AT STENCIL'S FARM, ALDR DGE ROAD, WALSALL

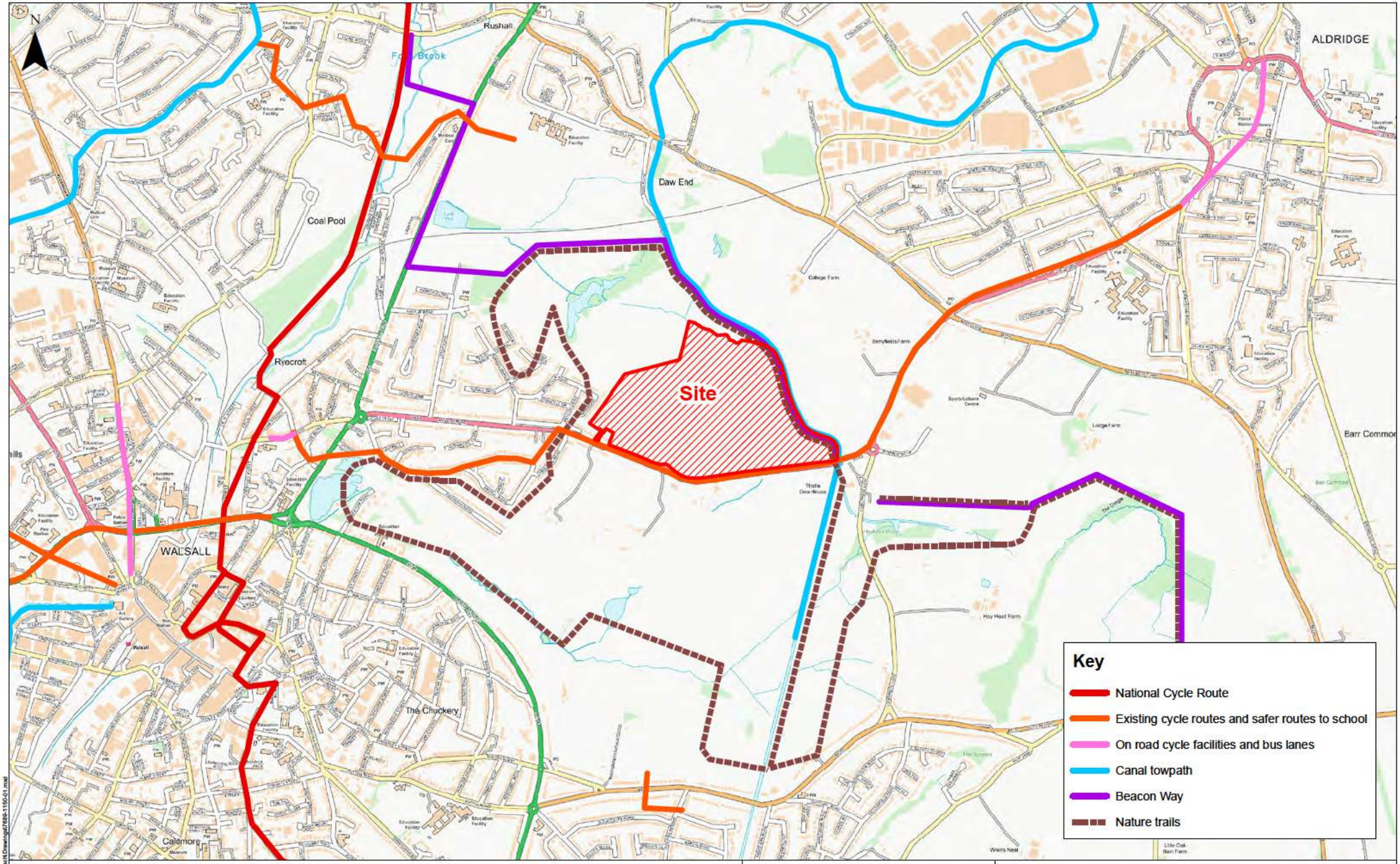
Title: PUBLIC RIGHTS OF WAY

Date: Mar 2017 | Scale: 1:10,000 | Rev: 1

Drwg. No: JNY9087-02 | Drawn: BM | Checked: PW

Figure No: 2

Transport



RPS

Date: Mar 2017	Scale: 1:15,000	Rev: 1
Drwg. No: JNY9087-01	Drawn: CR	Checked: PW

Project:
LAND AT STENCIL'S FARM, ALDR DGE ROAD, WALSALL

Title:
WALK NG AND CYCL NG MAP

Figure No:
3

Transport

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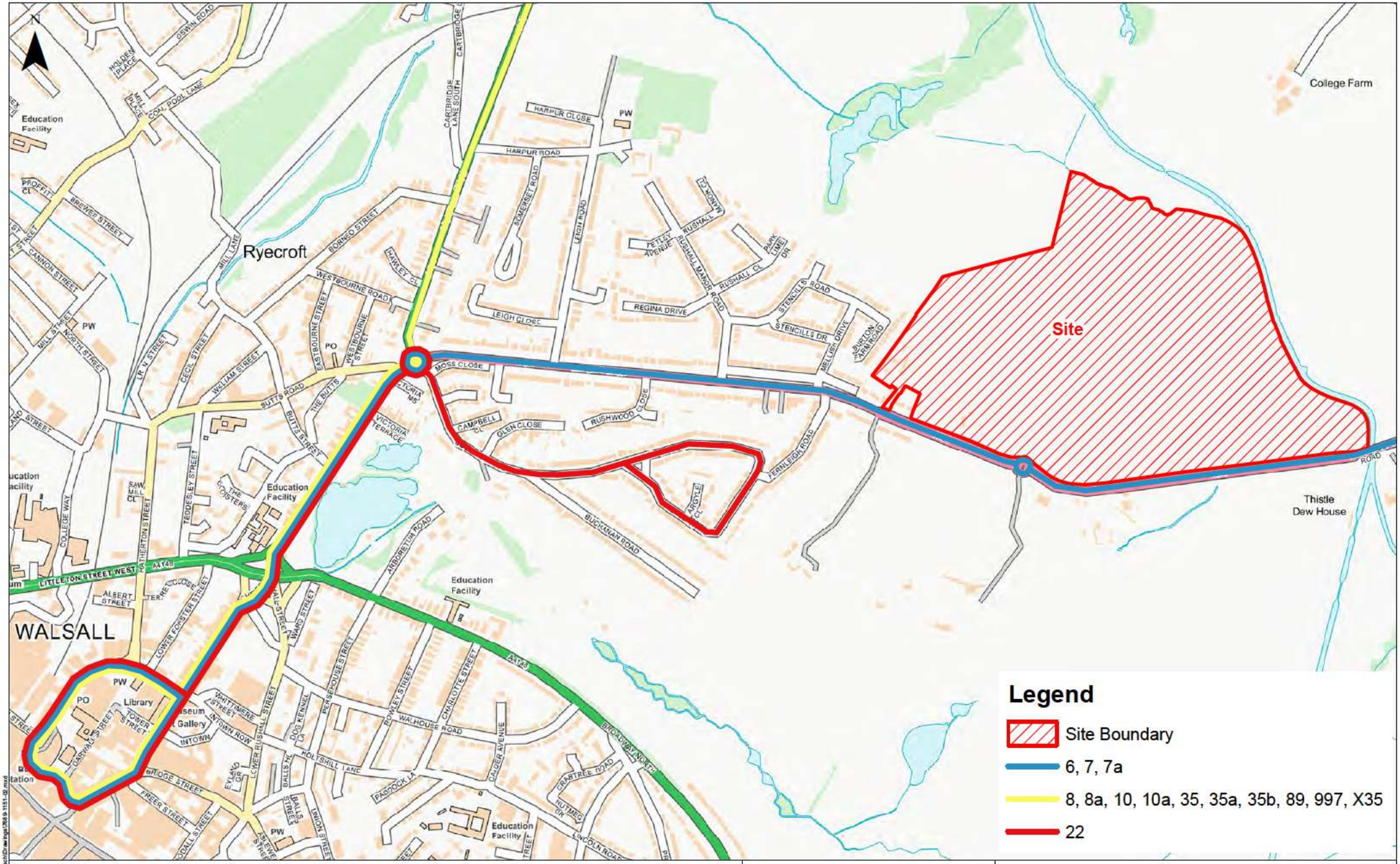

RPS

Date: Mar 2017 Scale: 1:10,000 Rev: 1

Drwg. No: JNY9087-04 Drawn: BM Checked: PW

Project:
LAND AT STENCIL'S FARM, ALDR DGE ROAD, WALSALL

Title:
LOCAL BUS ROUTES

Figure No:
4

Transport

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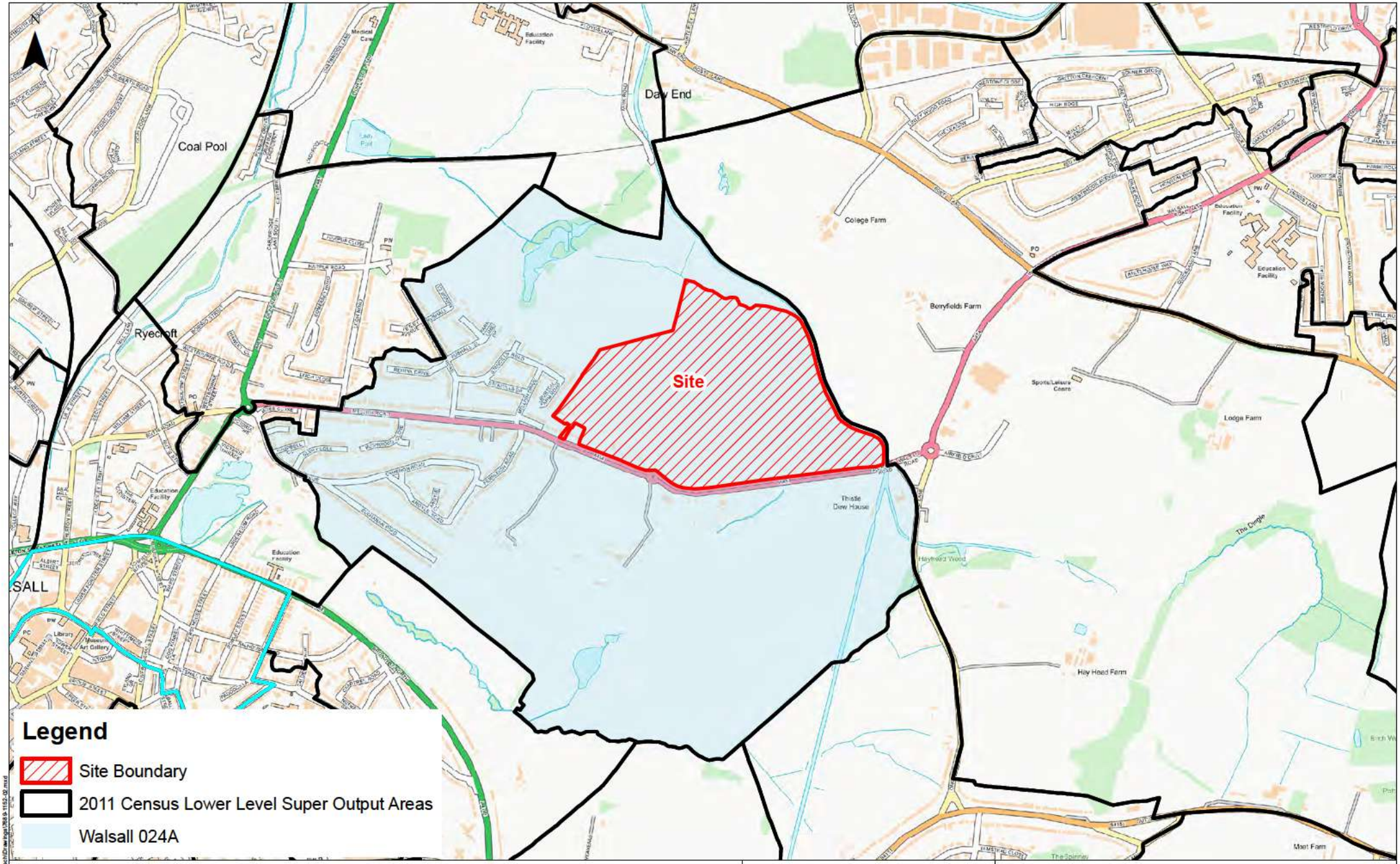


Site lies within E02002133 (Walsall 024)

RPS

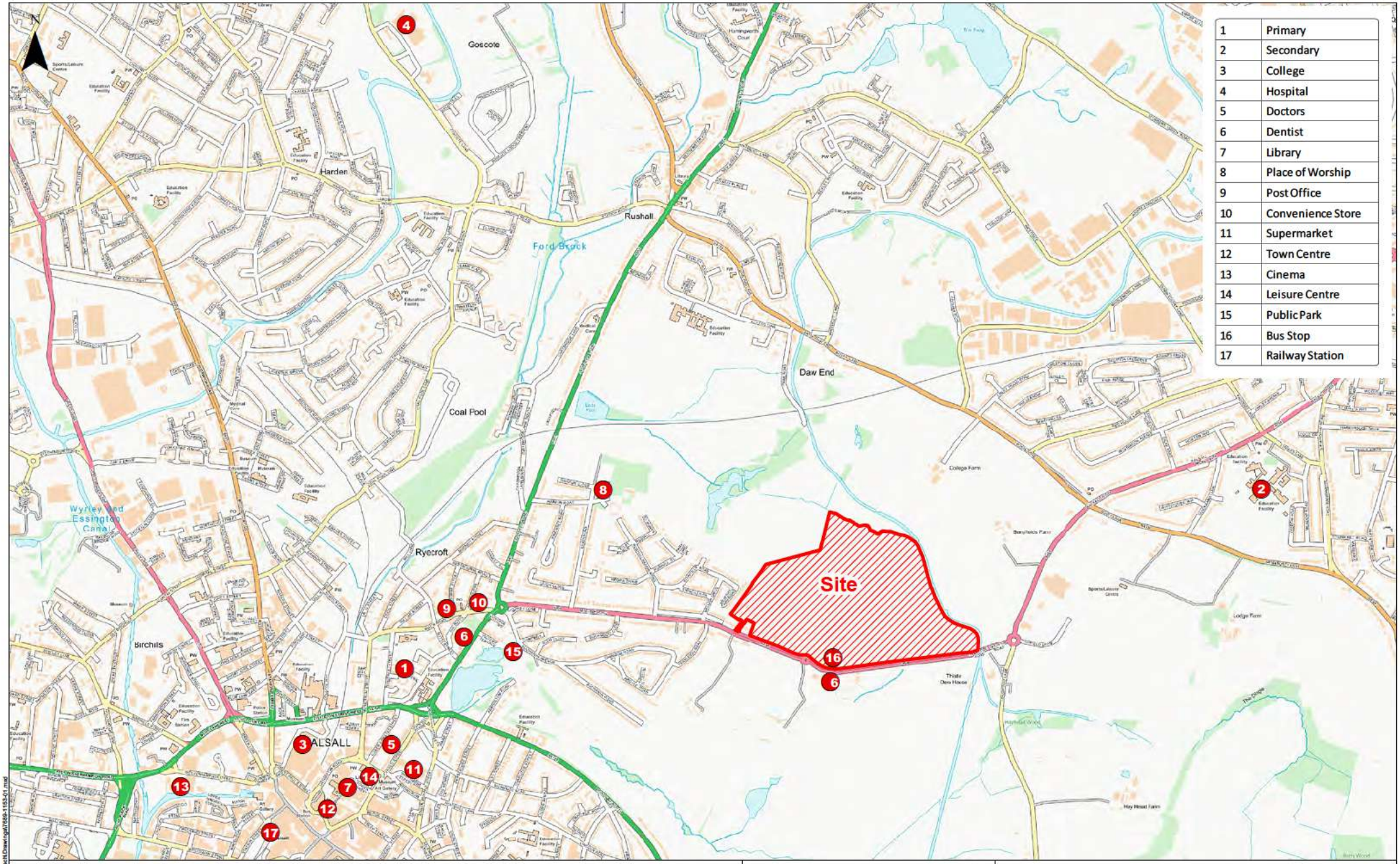
Date: Mar 2017	Scale: 1:15,000	Rev: 1
Drwg. No: JNY9087-05	Drawn: BM	Checked: PW

Project:
LAND AT STENCIL'S FARM, ALDR DGE ROAD, WALSALL

Title:
2011 CENSUS LOWER LEVEL SUPER OUTPUT AREAS

Figure No:
5

Transport



RPS

Date: Mar 2017 Scale: 1:15,000 Rev: 1

Drwg. No: JNY9087-01 Drawn: CR Checked: PW

Project:
LAND AT STENCIL'S FARM, ALDR DGE ROAD, WALSALL

Title:
LOCAL FAC LITIES MAP

Figure No:
6

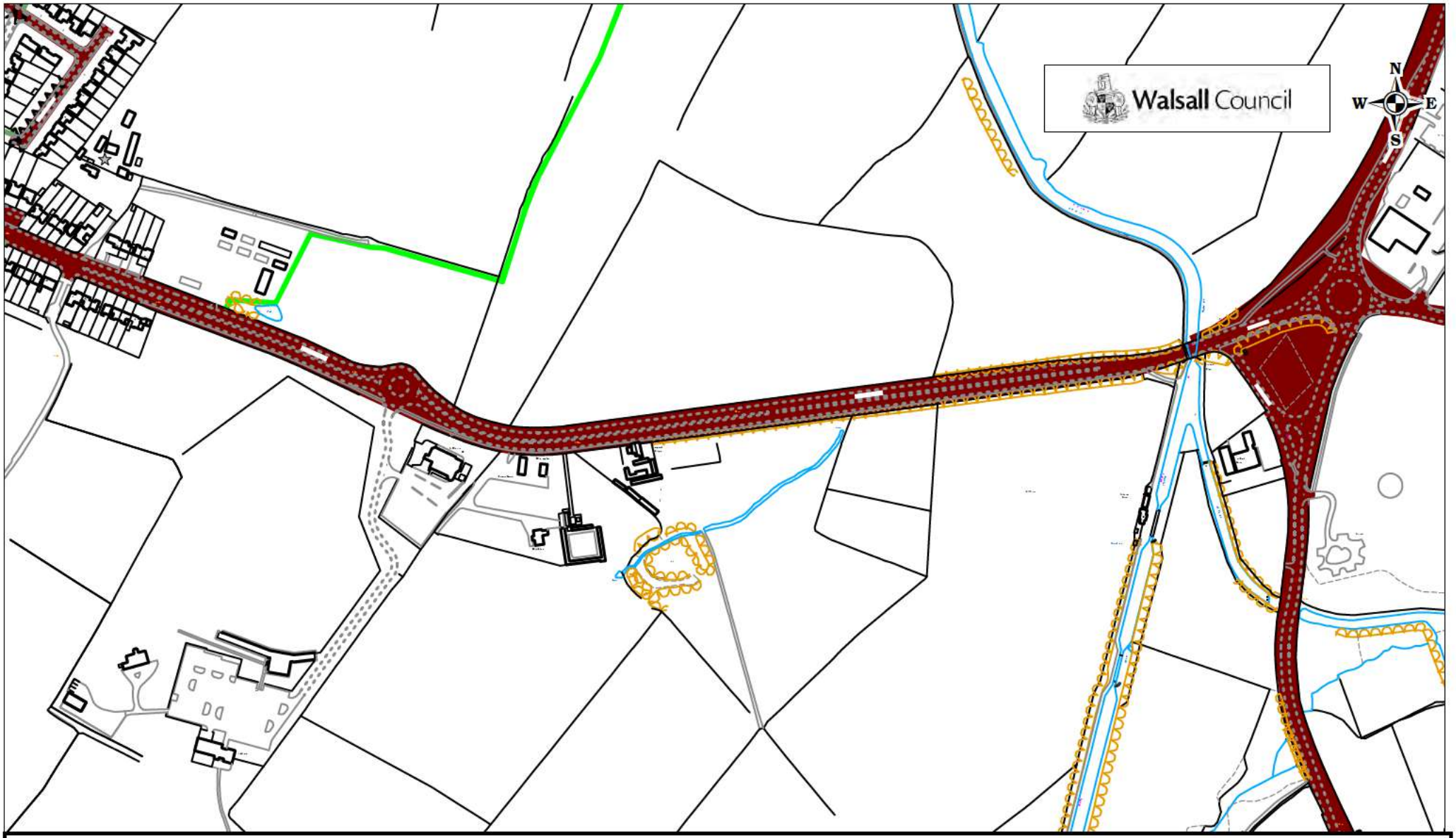
Transport

Path: O:\7689 Newbury Tech Support\Tech\Drawings\7689-1153-01.mxd

APPENDICES

APPENDIX A – PUBLIC HIGHWAY LAND RECORDS

Extent of Public Highway Land – Sourced from WMBC



Title: Aldridge Road, Walsall

KEY

Extent of Publicly Maintainable Highway

Definitive Public Rights of Way

Limit of Information Supplied

Scale: Not to Scale for Diagrammatical Purposes Only

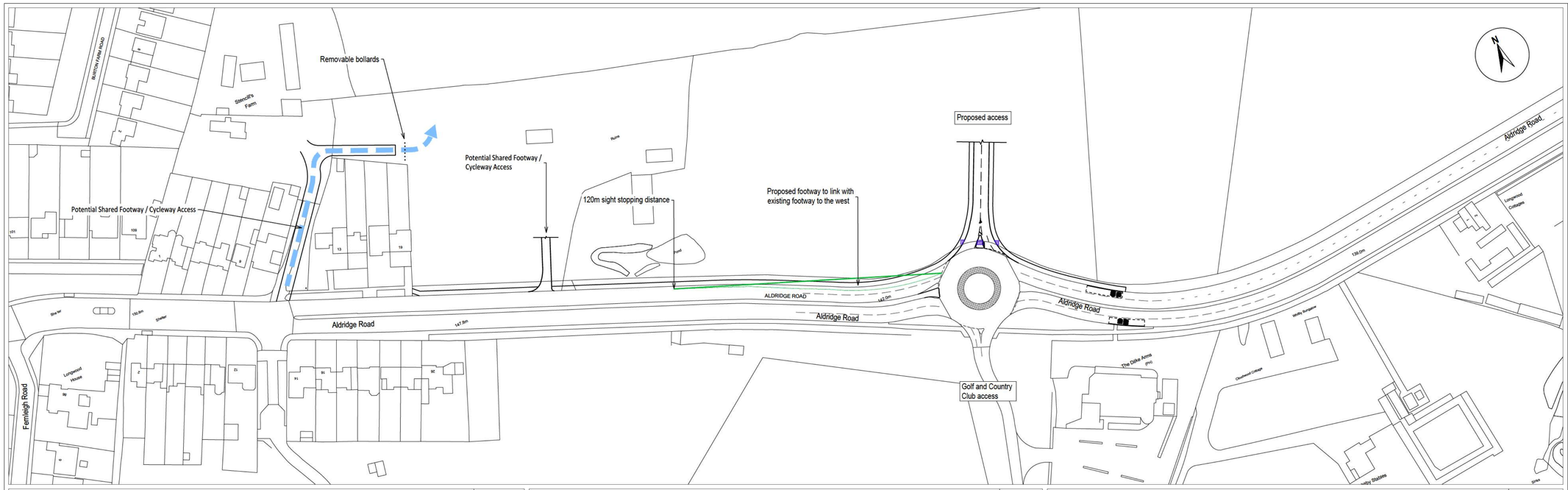
Date: 06/04/2017

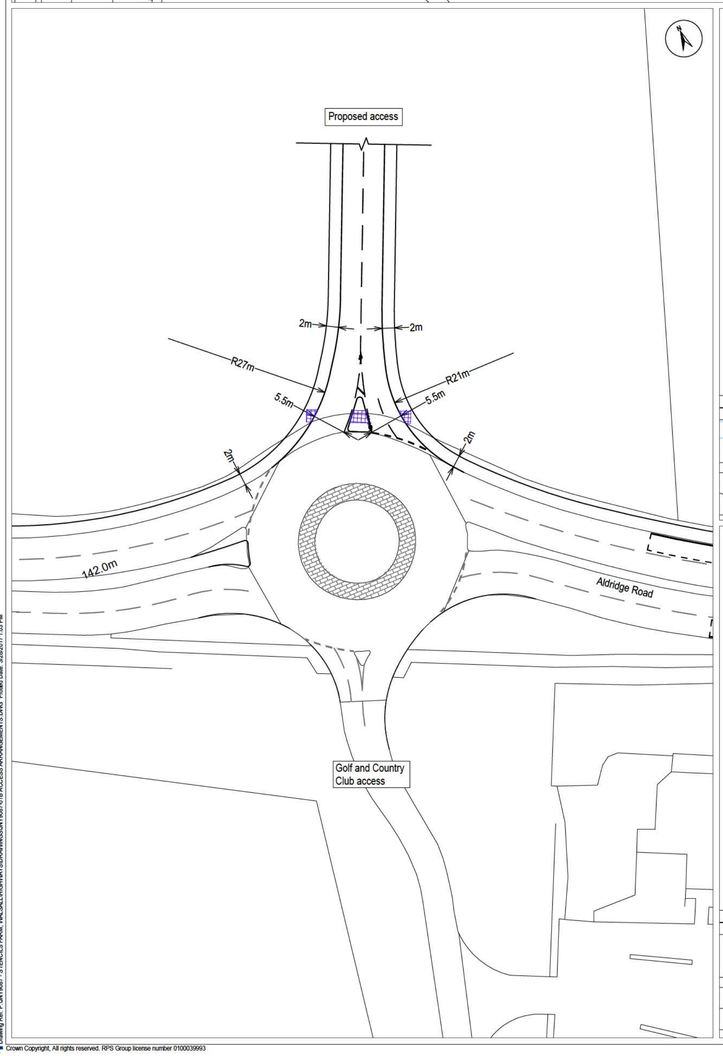
Drawn by: HK

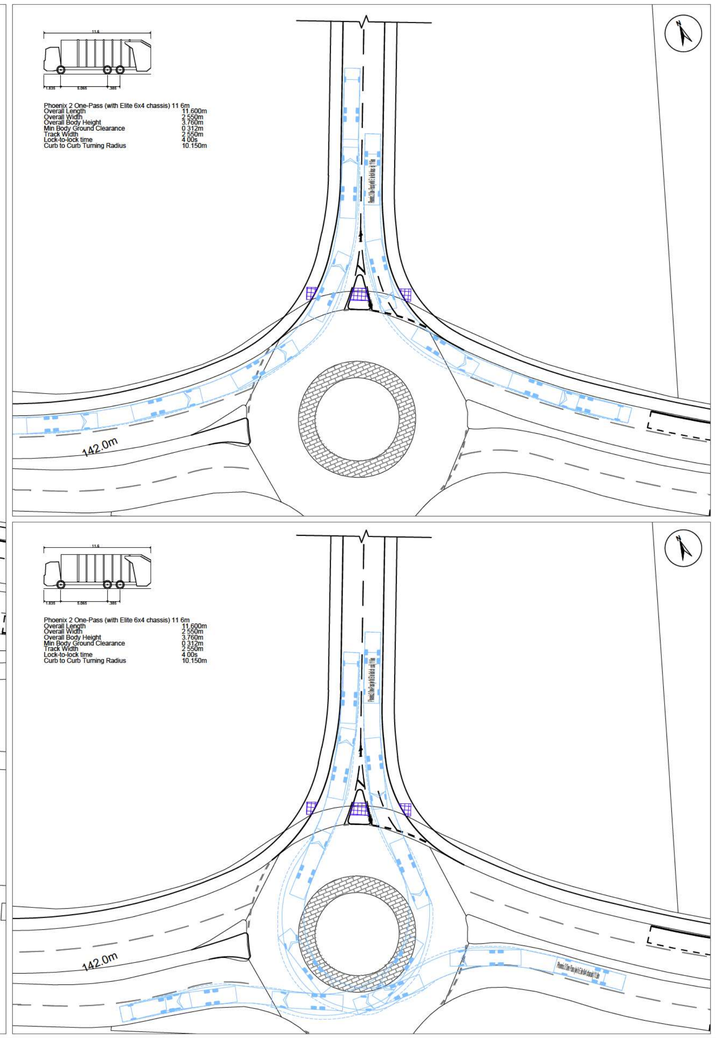
Engineering and Transportation Services
Civic Centre
Darwall Street
Walsall,
WS1 1DG.

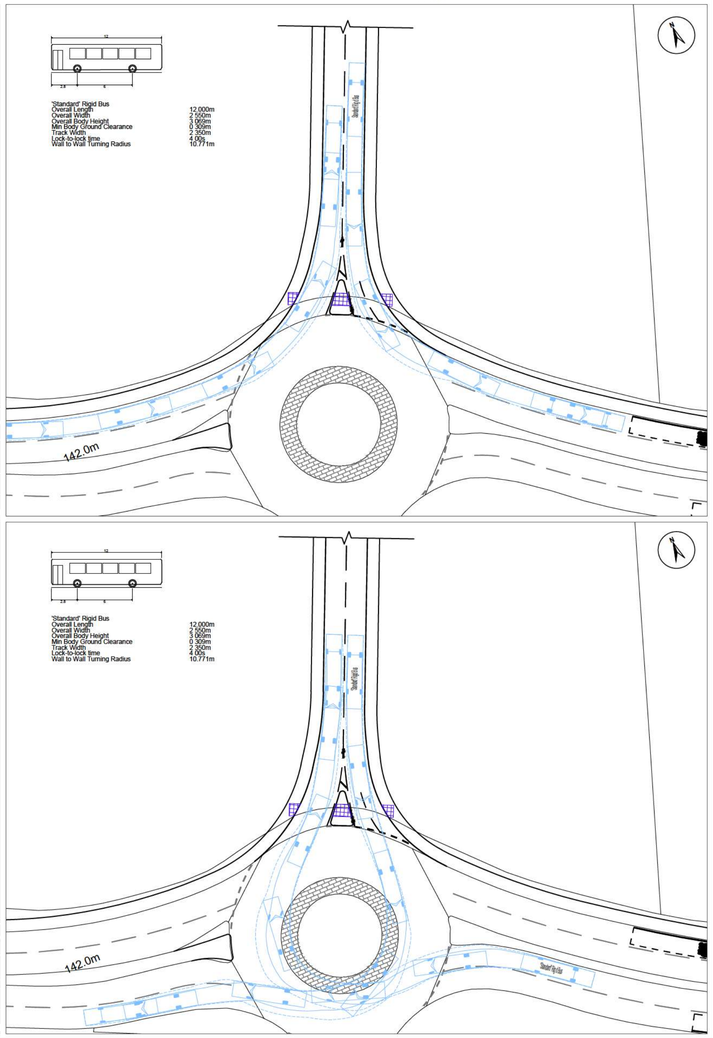
APPENDIX B – DRAWINGS JNY9087-01 AND JNY9087-02

Preliminary Site Access and Potential Shared Footway/Cycleway Arrangements









NOTES

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2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used. DO NOT SCALE.

Key:

Site Boundary

Tactile Paving

Rev	Description	Date	Initial	Checked
B	Notes amended	28.3.17	AJ	PW
A	SSD visibility added	27.3.17	AJ	PW

RPS

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London, EC2Y 5DN

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Client Midlands and North Planning

Project Land at Stencils Farm, Walsall

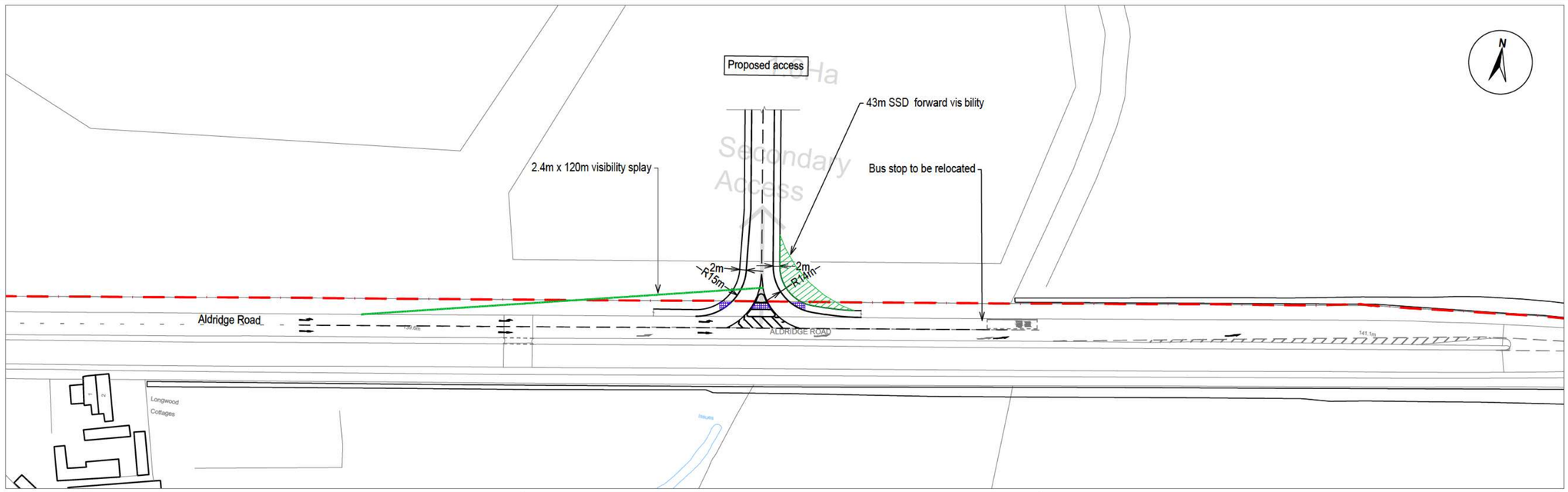
Title Preliminary Site Access Arrangements Central and Emergency Accesses

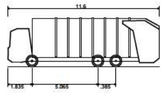
Status	Drawn By	Checked by
Preliminary	AJ	
Project Number	Scale @ A1	Date Created
JNY9087	1:1000 / 1:500	22.03.17

Drawing Number JNY9087-01

Rev B

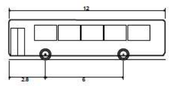
rpsgroup.com





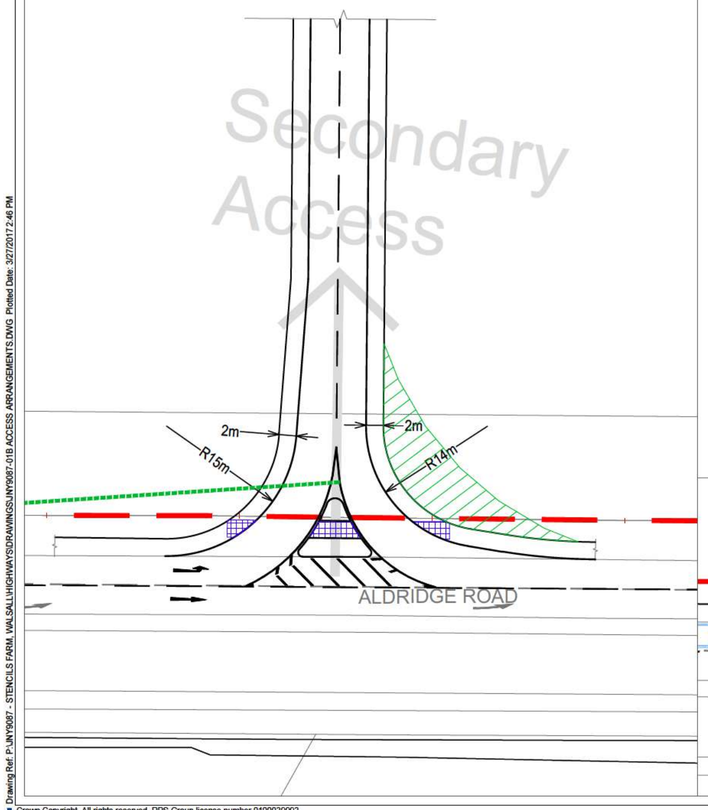
Phoenix 2 One-Pass (with Elite 6x4 chassis) 11.6m

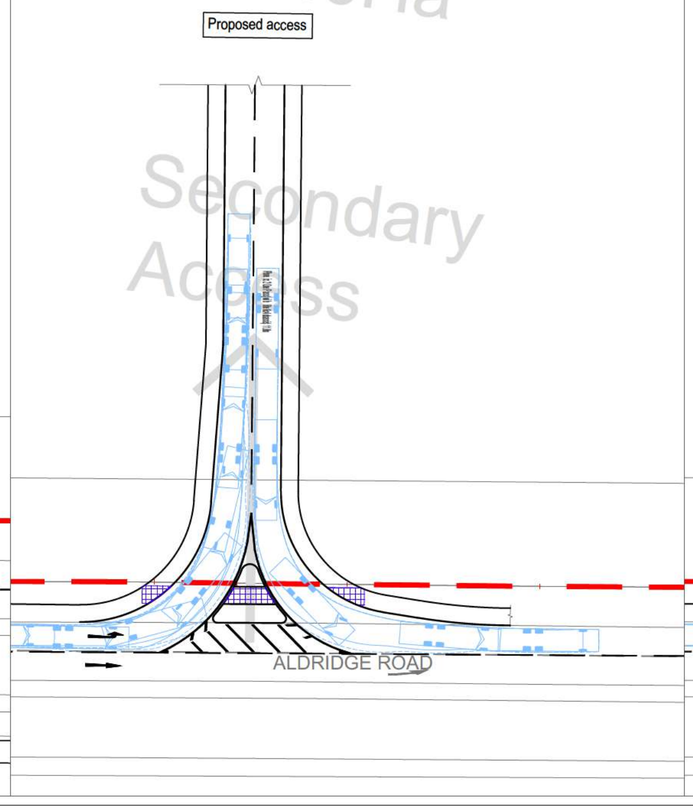
Overall Length	11.600m
Overall Width	2.550m
Overall Body Height	3.760m
Min Body Ground Clearance	0.312m
Track Width	2.550m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10.150m

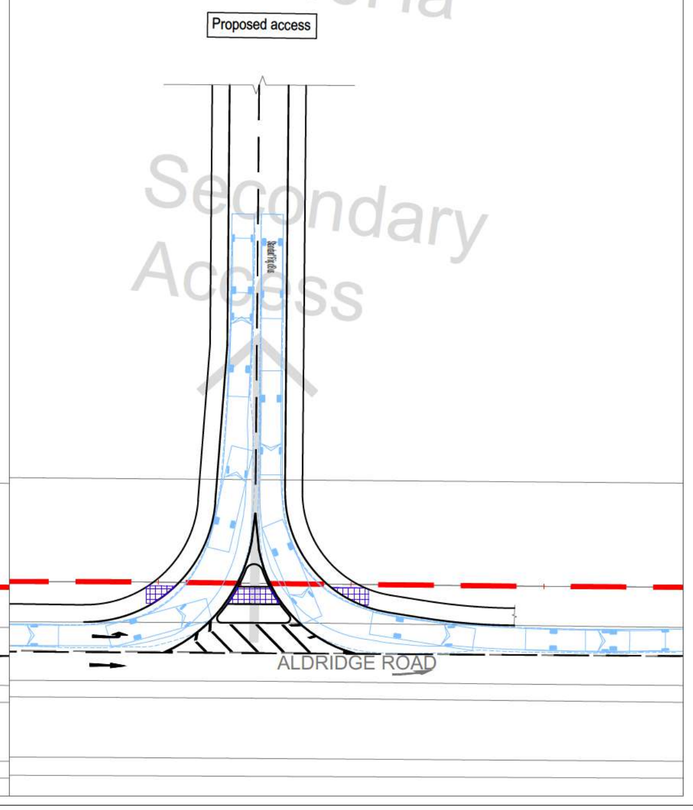


'Standard' Rigid Bus

Overall Length	12.000m
Overall Width	2.550m
Overall Body Height	3.059m
Min Body Ground Clearance	0.309m
Track Width	2.350m
Lock-to-lock time	4.00s
Wall to Wall Turning Radius	10.771m







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Key:

Site Boundary

Tactile Paving

Rev	Description	Date	Initial	Checked
B	Secondary access realigned with landscape architect layout	27.3.17	AJ	
A	Visibility splays added	27.3.17	AJ	PW

RPS

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London, EC2Y 5DN
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Client: Midlands and North Planning

Project: Land at Stencils Farm, Wasall

Title: Preliminary Site Access Arrangements Eastern Access

Status	Drawn By	Checked by
Preliminary	AJ	PW
Project Number	Scale @ A2	Date Created
JNY9087	1:1000 / 1:500	23.03.17

Drawing Number: JNY9087-02

Rev: B

rpsgroup.com

APPENDIX C – TRICS DATASHEETS - PRIVATE DWELLINGS

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	6-491 DWELLS	
Actual Trip Rate Calculation Parameter Range	6-432 DWELLS	
Date Range	Minimum: 01/01/08	Maximum: 12/11/15
Days of the week selected	Monday	10
	Tuesday	10
	Wednesday	8
	Thursday	9
	Friday	9
Main Location Types selected	Edge of Town Centre	5
	Suburban Area (PPS6 Out of Centre)	21
	Edge of Town	20
Population <1 Mile ranges selected	1,001 to 5,000	7
	5,001 to 10,000	11
	10,001 to 15,000	11
	15,001 to 20,000	6
	20,001 to 25,000	5
	25,001 to 50,000	6
Population <5 Mile ranges selected	5,001 to 25,000	6
	25,001 to 50,000	5
	50,001 to 75,000	4
	75,001 to 100,000	11
	100,001 to 125,000	4
	125,001 to 250,000	8
	250,001 to 500,000	7
	500,001 or More	1
Car Ownership <5 Mile ranges selected	0.5 or Less	1
	0.6 to 1.0	15
	1.1 to 1.5	29
	1.6 to 2.0	1
PTAL Rating	No PTAL Present	46

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	EX	ESSEX	1 days
	HC	HAMPSHIRE	1 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	2 days
03	SOUTH WEST		
	DC	DORSET	1 days
	DV	DEVON	3 days
	SM	SOMERSET	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	3 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	2 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	4 days
	ST	STAFFORDSHIRE	2 days
	WK	WARWICKSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	2 days
	NY	NORTH YORKSHIRE	6 days
	SY	SOUTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	4 days
	GM	GREATER MANCHESTER	1 days
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	CB	CUMBRIA	2 days
	TW	TYNE & WEAR	1 days

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

Secondary Filtering selection:

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

Parameter:	Number of dwellings
Actual Range:	6 to 432 (units:)
Range Selected by User:	6 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/08 to 12/11/15

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

Selected survey days:

Monday	10 days
Tuesday	10 days
Wednesday	8 days
Thursday	9 days
Friday	9 days

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

Selected survey types:

Manual count	46 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	5
Suburban Area (PPS6 Out of Centre)	21
Edge of Town	20

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	39
No Sub Category	7

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:

C1	1 days
C3	44 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	7 days
5,001 to 10,000	11 days
10,001 to 15,000	11 days
15,001 to 20,000	6 days
20,001 to 25,000	5 days
25,001 to 50,000	6 days

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

Population within 5 miles:

5,001 to 25,000	6 days
25,001 to 50,000	5 days
50,001 to 75,000	4 days
75,001 to 100,000	11 days
100,001 to 125,000	4 days
125,001 to 250,000	8 days
250,001 to 500,000	7 days
500,001 or More	1 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	15 days
1.1 to 1.5	29 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	4 days
No	42 days

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

PTAL Rating:

No PTAL Present	46 days

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

LIST OF SITES relevant to selection parameters

Site(1):	CA-03-A-04	Site area:	0.48 hect
Development Name:	DETACHED	Number of dwellings:	9
Location:	PETERBOROUGH	Housing density:	21
Postcode:	PE3 6LQ	Total Bedrooms:	35
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/10/11
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	22
Site(2):	CB-03-A-03	Site area:	1.80 hect
Development Name:	SEMI DETACHED	Number of dwellings:	40
Location:	WORKINGTON	Housing density:	25
Postcode:	CA14 3HR	Total Bedrooms:	120
Main Location Type:	Edge of Town	Survey Date:	20/11/08
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	124
Site(3):	CB-03-A-04	Site area:	2.90 hect
Development Name:	SEMI DETACHED	Number of dwellings:	82
Location:	WORKINGTON	Housing density:	36
Postcode:	CA14 5LH	Total Bedrooms:	246
Main Location Type:	Edge of Town	Survey Date:	24/04/09
Sub-Location Type:	No Sub Category	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	143
Site(4):	CH-03-A-05	Site area:	0.84 hect
Development Name:	DETACHED	Number of dwellings:	17
Location:	CREWE	Housing density:	23
Postcode:	CW1 5FR	Total Bedrooms:	67
Main Location Type:	Edge of Town	Survey Date:	14/10/08
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	63
Site(5):	CH-03-A-06	Site area:	5.32 hect
Development Name:	SEMI-DET./BUNGALOWS	Number of dwellings:	129
Location:	CREWE	Housing density:	30
Postcode:	CW1 6DX	Total Bedrooms:	318
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	14/10/08
Sub-Location Type:	No Sub Category	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	334
Site(6):	CH-03-A-08	Site area:	0.48 hect
Development Name:	DETACHED	Number of dwellings:	11
Location:	CHESTER	Housing density:	37
Postcode:	CH3 5JZ	Total Bedrooms:	44
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	22/05/12
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	52
Site(7):	CH-03-A-09	Site area:	0.73 hect
Development Name:	TERRACED HOUSES	Number of dwellings:	24
Location:	MACCLESFIELD	Housing density:	39
Postcode:	SK10 2NS	Total Bedrooms:	72
Main Location Type:	Edge of Town	Survey Date:	24/11/14
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	32
Site(8):	DC-03-A-08	Site area:	1.85 hect
Development Name:	BUNGALOWS	Number of dwellings:	28
Location:	BOURNEMOUTH	Housing density:	17
Postcode:	BH8 0AL	Total Bedrooms:	64
Main Location Type:	Edge of Town	Survey Date:	24/03/14
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	131

LIST OF SITES relevant to selection parameters (Cont.)

Site(9):	DV-03-A-01	Site area:	1.25 hect
Development Name:	TERRACED HOUSES	Number of dwellings:	37
Location:	TORQUAY	Housing density:	53
Postcode:	TQ1 3HR	Total Bedrooms:	111
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	30/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	103

Site(10):	DV-03-A-02	Site area:	4.04 hect
Development Name:	HOUSES & BUNGALOWS	Number of dwellings:	116
Location:	HONITON	Housing density:	44
Postcode:	EX14 1JB	Total Bedrooms:	306
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	25/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	261

Site(11):	DV-03-A-03	Site area:	2.02 hect
Development Name:	TERRACED & SEMI DETACHED	Number of dwellings:	70
Location:	HONITON	Housing density:	50
Postcode:	EX14 2DF	Total Bedrooms:	208
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	28/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	116

Site(12):	ES-03-A-02	Site area:	0.50 hect
Development Name:	PRIVATE HOUSING	Number of dwellings:	37
Location:	PEACEHAVEN	Housing density:	74
Postcode:	BN10 8SA	Total Bedrooms:	103
Main Location Type:	Edge of Town	Survey Date:	18/11/11
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	59

Site(13):	EX-03-A-01	Site area:	6.84 hect
Development Name:	SEMI-DET.	Number of dwellings:	237
Location:	STANFORD-LE-HOPE	Housing density:	35
Postcode:	SS17 8JU	Total Bedrooms:	717
Main Location Type:	Edge of Town	Survey Date:	13/05/08
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	599

Site(14):	GM-03-A-10	Site area:	1.43 hect
Development Name:	DETACHED/SEMI	Number of dwellings:	29
Location:	MANCHESTER	Housing density:	23
Postcode:	M25 9PL	Total Bedrooms:	85
Main Location Type:	Edge of Town	Survey Date:	12/10/11
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	81

Site(15):	HC-03-A-17	Site area:	1.40 hect
Development Name:	HOUSES & FLATS	Number of dwellings:	36
Location:	LIPHOOK	Housing density:	
Postcode:	GU30 7TG	Total Bedrooms:	130
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	12/11/15
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	136

Site(16):	LC-03-A-30	Site area:	0.80 hect
Development Name:	SEMI-DETACHED	Number of dwellings:	24
Location:	BLACKPOOL	Housing density:	30
Postcode:	FY4 2DF	Total Bedrooms:	72
Main Location Type:	Edge of Town Centre	Survey Date:	14/06/13
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	40

LIST OF SITES relevant to selection parameters (Cont.)

Site(17):	LN-03-A-03	Site area:	0.77 hect
Development Name:	SEMI DETACHED	Number of dwellings:	22
Location:	LINCOLN	Housing density:	29
Postcode:	LN6 7PL	Total Bedrooms:	58
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/09/12
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	24
Site(18):	LN-03-A-04	Site area:	1.70 hect
Development Name:	DETACHED & SEMI-DETACHED	Number of dwellings:	30
Location:	LINCOLN	Housing density:	23
Postcode:	LN2 4PJ	Total Bedrooms:	100
Main Location Type:	Edge of Town Centre	Survey Date:	29/06/15
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	66
Site(19):	MS-03-A-03	Site area:	0.50 hect
Development Name:	DETACHED	Number of dwellings:	15
Location:	LIVERPOOL	Housing density:	38
Postcode:	L17 5BT	Total Bedrooms:	60
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	21/06/13
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	45
Site(20):	NE-03-A-02	Site area:	12.00 hect
Development Name:	SEMI DETACHED & DETACHED	Number of dwellings:	432
Location:	SCUNTHORPE	Housing density:	133
Postcode:	DN15 8GS	Total Bedrooms:	1174
Main Location Type:	Edge of Town	Survey Date:	12/05/14
Sub-Location Type:	No Sub Category	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	432
Site(21):	NE-03-A-03	Site area:	8.00 hect
Development Name:	PRIVATE HOUSES	Number of dwellings:	180
Location:	SCUNTHORPE	Housing density:	
Postcode:	DN15 6BW	Total Bedrooms:	432
Main Location Type:	Edge of Town Centre	Survey Date:	20/05/14
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	482
Site(22):	NF-03-A-01	Site area:	1.49 hect
Development Name:	SEMI DET. & BUNGALOWS	Number of dwellings:	27
Location:	CAISTER-ON-SEA	Housing density:	19
Postcode:	NR30 5BX	Total Bedrooms:	66
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	16/10/12
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	64
Site(23):	NF-03-A-02	Site area:	2.20 hect
Development Name:	HOUSES & FLATS	Number of dwellings:	98
Location:	NORWICH	Housing density:	52
Postcode:	NR5 8QS	Total Bedrooms:	279
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	22/10/12
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	220
Site(24):	NF-03-A-03	Site area:	0.63 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	10
Location:	THETFORD	Housing density:	20
Postcode:	IP24 1EY	Total Bedrooms:	40
Main Location Type:	Edge of Town	Survey Date:	16/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	37

LIST OF SITES relevant to selection parameters (Cont.)

Site(25):	NY-03-A-03	Site area:	0.35 hect
Development Name:	PRIVATE HOUSING	Number of dwellings:	14
Location:	BOROUGHBRIDGE	Housing density:	61
Postcode:	YO51 9NU	Total Bedrooms:	34
Main Location Type:	Edge of Town Centre	Survey Date:	15/09/08
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	44

Site(26):	NY-03-A-06	Site area:	5.23 hect
Development Name:	BUNGALOWS & SEMI DET.	Number of dwellings:	115
Location:	BOROUGHBRIDGE	Housing density:	28
Postcode:	YO51 9NF	Total Bedrooms:	220
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	14/10/11
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	402

Site(27):	NY-03-A-08	Site area:	0.15 hect
Development Name:	TERRACED HOUSES	Number of dwellings:	21
Location:	YORK	Housing density:	175
Postcode:	YO10 3EJ	Total Bedrooms:	54
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	16/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	24

Site(28):	NY-03-A-09	Site area:	3.30 hect
Development Name:	MIXED HOUSING	Number of dwellings:	52
Location:	NORTHALLERTON	Housing density:	18
Postcode:	DL6 1BQ	Total Bedrooms:	152
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	16/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	135

Site(29):	NY-03-A-10	Site area:	2.21 hect
Development Name:	HOUSES AND FLATS	Number of dwellings:	71
Location:	RIPON	Housing density:	48
Postcode:	HG4 1UH	Total Bedrooms:	138
Main Location Type:	Edge of Town	Survey Date:	17/09/13
Sub-Location Type:	No Sub Category	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	59

Site(30):	NY-03-A-11	Site area:	1.79 hect
Development Name:	PRIVATE HOUSING	Number of dwellings:	23
Location:	BOROUGHBRIDGE	Housing density:	15
Postcode:	YO51 9LQ	Total Bedrooms:	101
Main Location Type:	Edge of Town	Survey Date:	18/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	144

Site(31):	SC-03-A-04	Site area:	3.20 hect
Development Name:	DETACHED & TERRACED	Number of dwellings:	71
Location:	BYFLEET	Housing density:	25
Postcode:	KT14 7BY	Total Bedrooms:	202
Main Location Type:	Edge of Town	Survey Date:	23/01/14
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	177

Site(32):	SF-03-A-04	Site area:	0.59 hect
Development Name:	DETACHED & BUNGALOWS	Number of dwellings:	7
Location:	LOWESTOFT	Housing density:	15
Postcode:	NR32 2PQ	Total Bedrooms:	7
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	23/10/12
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	31

LIST OF SITES relevant to selection parameters (Cont.)

Site(33):	SF-03-A-05	Site area:	1.15 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	18
Location:	BURY ST EDMUNDS	Housing density:	19
Postcode:	IP33 2SN	Total Bedrooms:	78
Main Location Type:	Edge of Town	Survey Date:	09/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	75

Site(34):	SH-03-A-03	Site area:	0.51 hect
Development Name:	DETATCHED	Number of dwellings:	10
Location:	SHREWSBURY	Housing density:	25
Postcode:	SY3 5PD	Total Bedrooms:	33
Main Location Type:	Edge of Town	Survey Date:	26/06/09
Sub-Location Type:	No Sub Category	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	30

Site(35):	SH-03-A-04	Site area:	5.30 hect
Development Name:	TERRACED	Number of dwellings:	108
Location:	SHREWSBURY	Housing density:	25
Postcode:	SY1 2HL	Total Bedrooms:	329
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	11/06/09
Sub-Location Type:	No Sub Category	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	201

Site(36):	SH-03-A-05	Site area:	1.32 hect
Development Name:	SEMI-DETACHED/TERRACED	Number of dwellings:	54
Location:	TELFORD	Housing density:	56
Postcode:	TF7 4JE	Total Bedrooms:	162
Main Location Type:	Edge of Town	Survey Date:	24/10/13
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	63

Site(37):	SH-03-A-06	Site area:	0.80 hect
Development Name:	BUNGALOWS	Number of dwellings:	16
Location:	SHREWSBURY	Housing density:	24
Postcode:	SY1 2RB	Total Bedrooms:	34
Main Location Type:	Edge of Town	Survey Date:	22/05/14
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	32

Site(38):	SM-03-A-01	Site area:	1.40 hect
Development Name:	DETACHED & SEMI	Number of dwellings:	33
Location:	BRIDGWATER	Housing density:	28
Postcode:	TA6 7PL	Total Bedrooms:	107
Main Location Type:	Edge of Town	Survey Date:	24/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	131

Site(39):	ST-03-A-05	Site area:	0.52 hect
Development Name:	TERRACED & DETACHED	Number of dwellings:	14
Location:	STOKE-ON-TRENT	Housing density:	48
Postcode:	SP1 5GD	Total Bedrooms:	33
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	26/11/08
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	40

Site(40):	ST-03-A-06	Site area:	0.37 hect
Development Name:	SEMI-DET. & TERRACED	Number of dwellings:	17
Location:	WOLVERHAMPTON	Housing density:	65
Postcode:	WV2 4NH	Total Bedrooms:	51
Main Location Type:	Edge of Town Centre	Survey Date:	09/05/14
Sub-Location Type:	No Sub Category	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	19

LIST OF SITES relevant to selection parameters (Cont.)

Site(41):	SY-03-A-01	Site area:	1.73 hect
Development Name:	SEMI DETACHED HOUSES	Number of dwellings:	54
Location:	DONCASTER	Housing density:	34
Postcode:	DN5 9TD	Total Bedrooms:	162
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	61

Site(42):	TW-03-A-02	Site area:	0.55 hect
Development Name:	SEMI-DETACHED	Number of dwellings:	16
Location:	GATESHEAD	Housing density:	34
Postcode:	NE8 4SQ	Total Bedrooms:	52
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	07/10/13
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	38

Site(43):	WK-03-A-01	Site area:	0.10 hect
Development Name:	TERRACED/SEMI/DET.	Number of dwellings:	6
Location:	LEAMINGTON SPA	Housing density:	
Postcode:	CV32 5XJ	Total Bedrooms:	24
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	21/10/11
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	12

Site(44):	WK-03-A-02	Site area:	0.47 hect
Development Name:	BUNGALOWS	Number of dwellings:	17
Location:	COVENTRY	Housing density:	50
Postcode:	CV2 2NT	Total Bedrooms:	29
Main Location Type:	Edge of Town	Survey Date:	17/10/13
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	35

Site(45):	WS-03-A-04	Site area:	5.45 hect
Development Name:	MIXED HOUSES	Number of dwellings:	151
Location:	HORSHAM	Housing density:	46
Postcode:	RH12 1EP	Total Bedrooms:	465
Main Location Type:	Edge of Town	Survey Date:	11/12/14
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	345

Site(46):	WS-03-A-05	Site area:	1.61 hect
Development Name:	TERRACED & FLATS	Number of dwellings:	48
Location:	SHOREHAM BY SEA	Housing density:	50
Postcode:	BN43 6TQ	Total Bedrooms:	129
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/04/12
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	132

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL 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	46	58	0.070	46	58	0.260	46	58	0.330
08:00 - 09:00	46	58	0.138	46	58	0.370	46	58	0.508
09:00 - 10:00	46	58	0.143	46	58	0.162	46	58	0.305
10:00 - 11:00	46	58	0.133	46	58	0.155	46	58	0.288
11:00 - 12:00	46	58	0.145	46	58	0.146	46	58	0.291
12:00 - 13:00	46	58	0.160	46	58	0.155	46	58	0.315
13:00 - 14:00	46	58	0.157	46	58	0.151	46	58	0.308
14:00 - 15:00	46	58	0.154	46	58	0.171	46	58	0.325
15:00 - 16:00	46	58	0.265	46	58	0.195	46	58	0.460
16:00 - 17:00	46	58	0.274	46	58	0.170	46	58	0.444
17:00 - 18:00	46	58	0.312	46	58	0.177	46	58	0.489
18:00 - 19:00	46	58	0.213	46	58	0.159	46	58	0.372
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.164			2.271			4.435

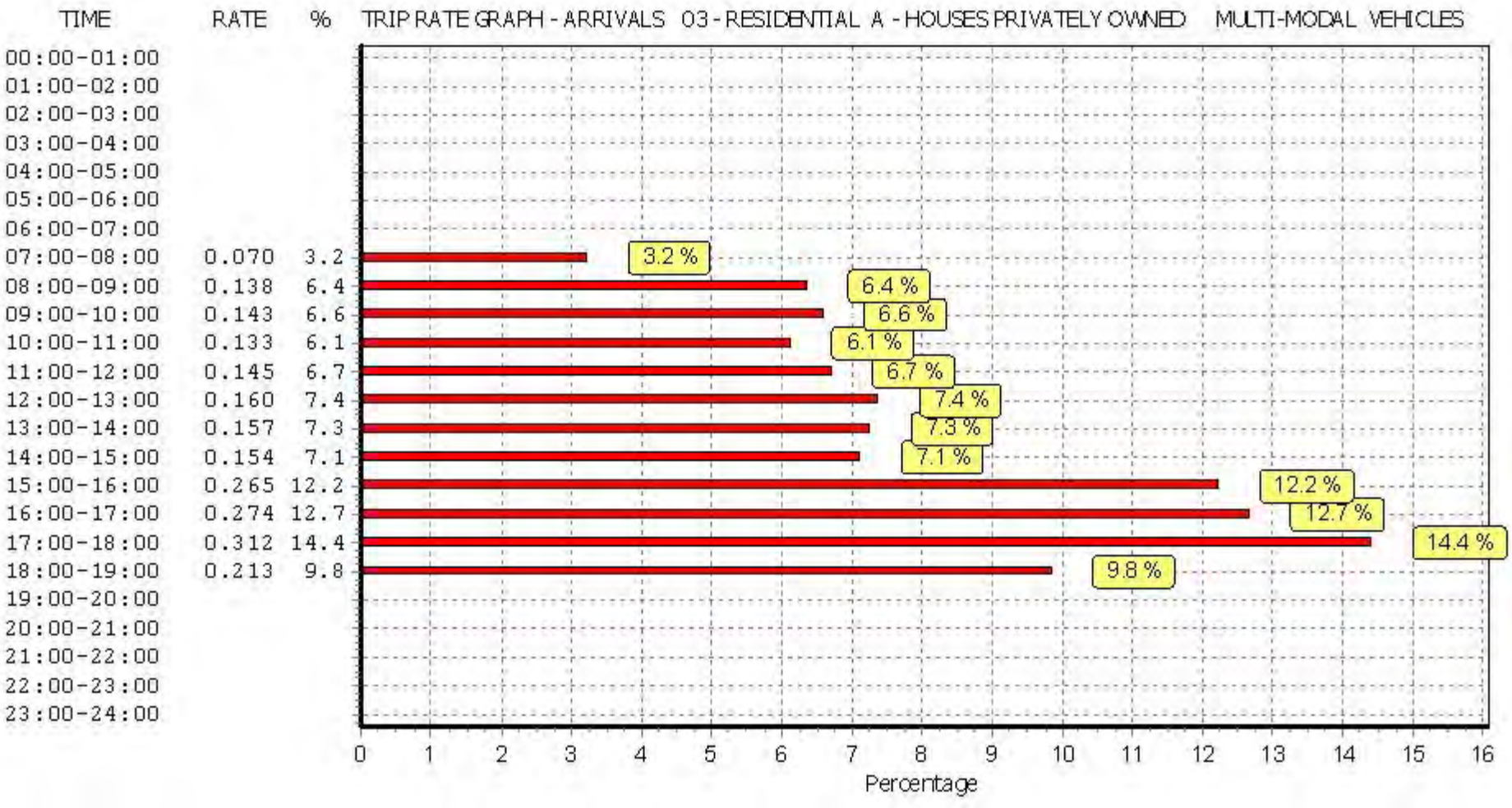
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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

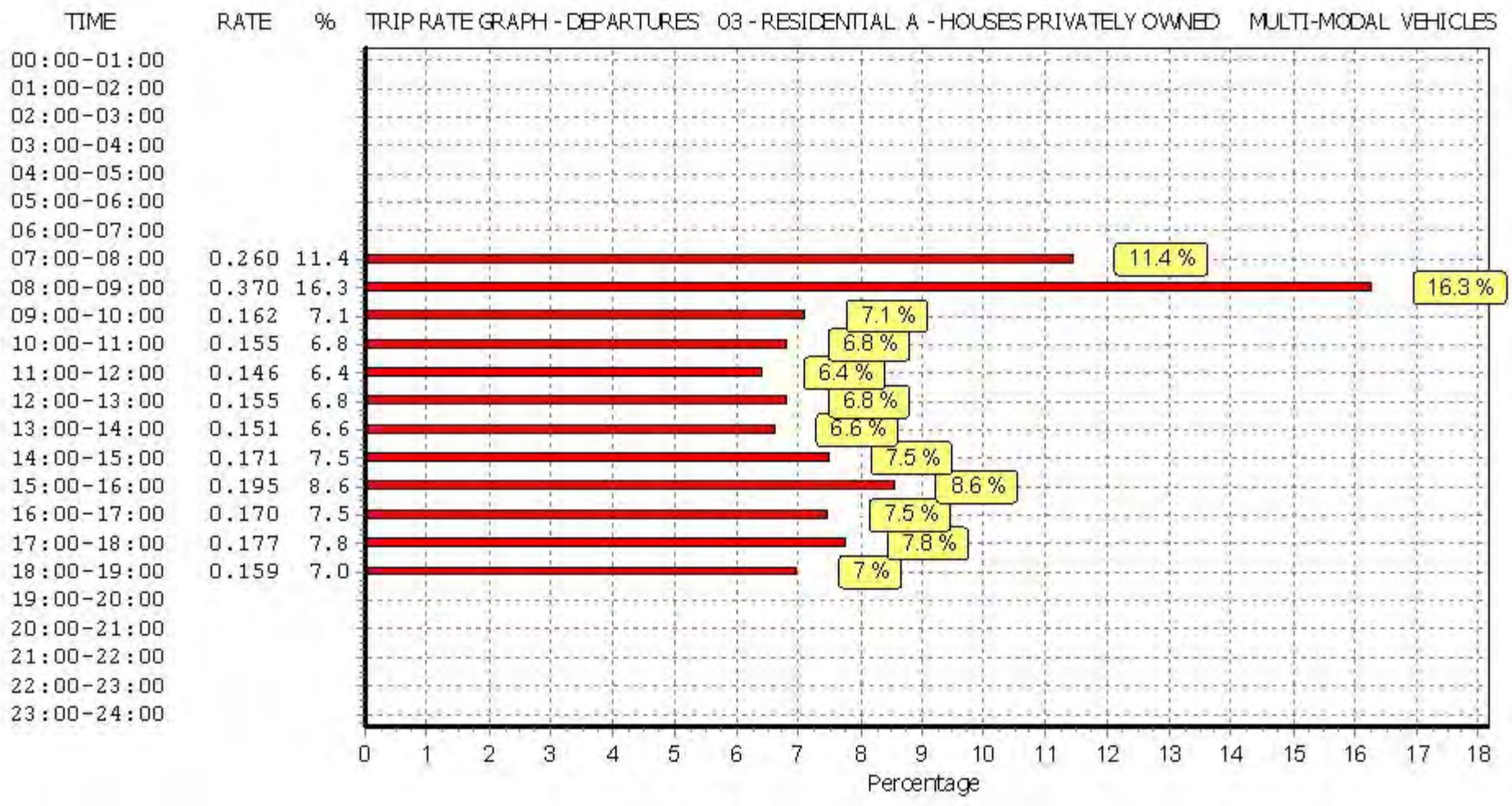
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

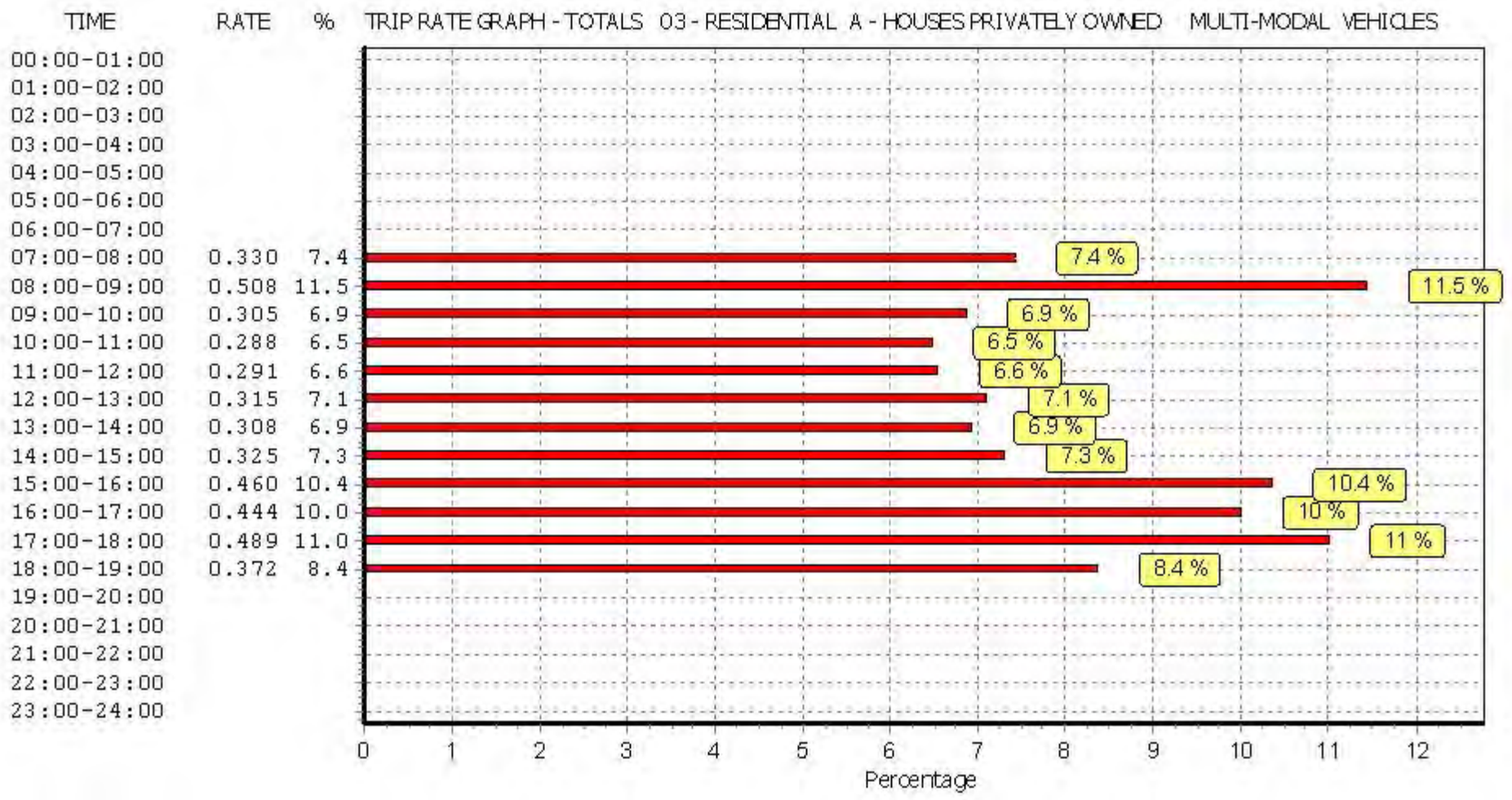
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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/A - HOUSES 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	46	58	0.004	46	58	0.003	46	58	0.007
08:00 - 09:00	46	58	0.005	46	58	0.004	46	58	0.009
09:00 - 10:00	46	58	0.003	46	58	0.003	46	58	0.006
10:00 - 11:00	46	58	0.003	46	58	0.003	46	58	0.006
11:00 - 12:00	46	58	0.002	46	58	0.002	46	58	0.004
12:00 - 13:00	46	58	0.001	46	58	0.001	46	58	0.002
13:00 - 14:00	46	58	0.001	46	58	0.001	46	58	0.002
14:00 - 15:00	46	58	0.003	46	58	0.003	46	58	0.006
15:00 - 16:00	46	58	0.006	46	58	0.006	46	58	0.012
16:00 - 17:00	46	58	0.004	46	58	0.004	46	58	0.008
17:00 - 18:00	46	58	0.003	46	58	0.002	46	58	0.005
18:00 - 19:00	46	58	0.002	46	58	0.002	46	58	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.037			0.034			0.071

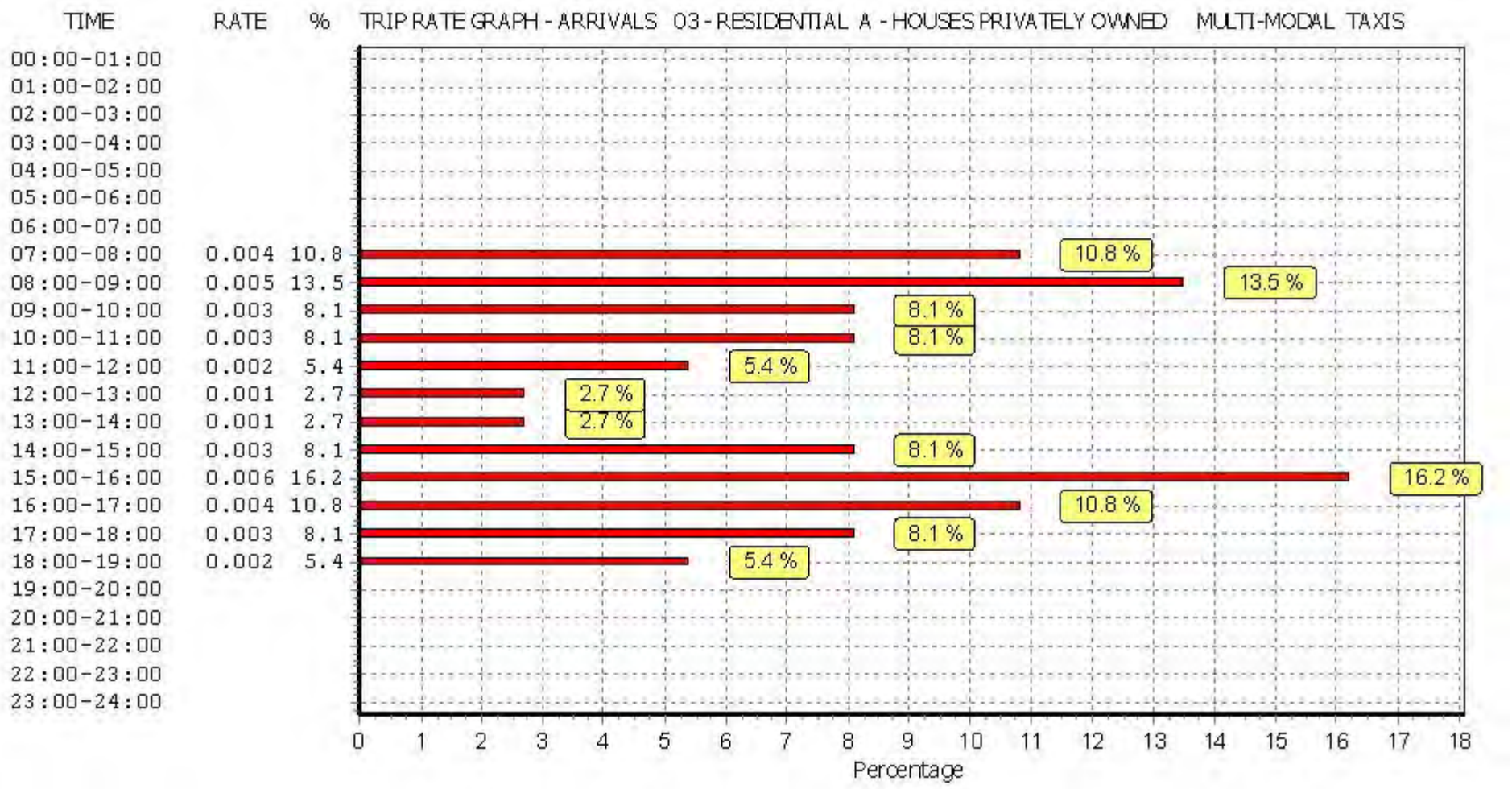
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

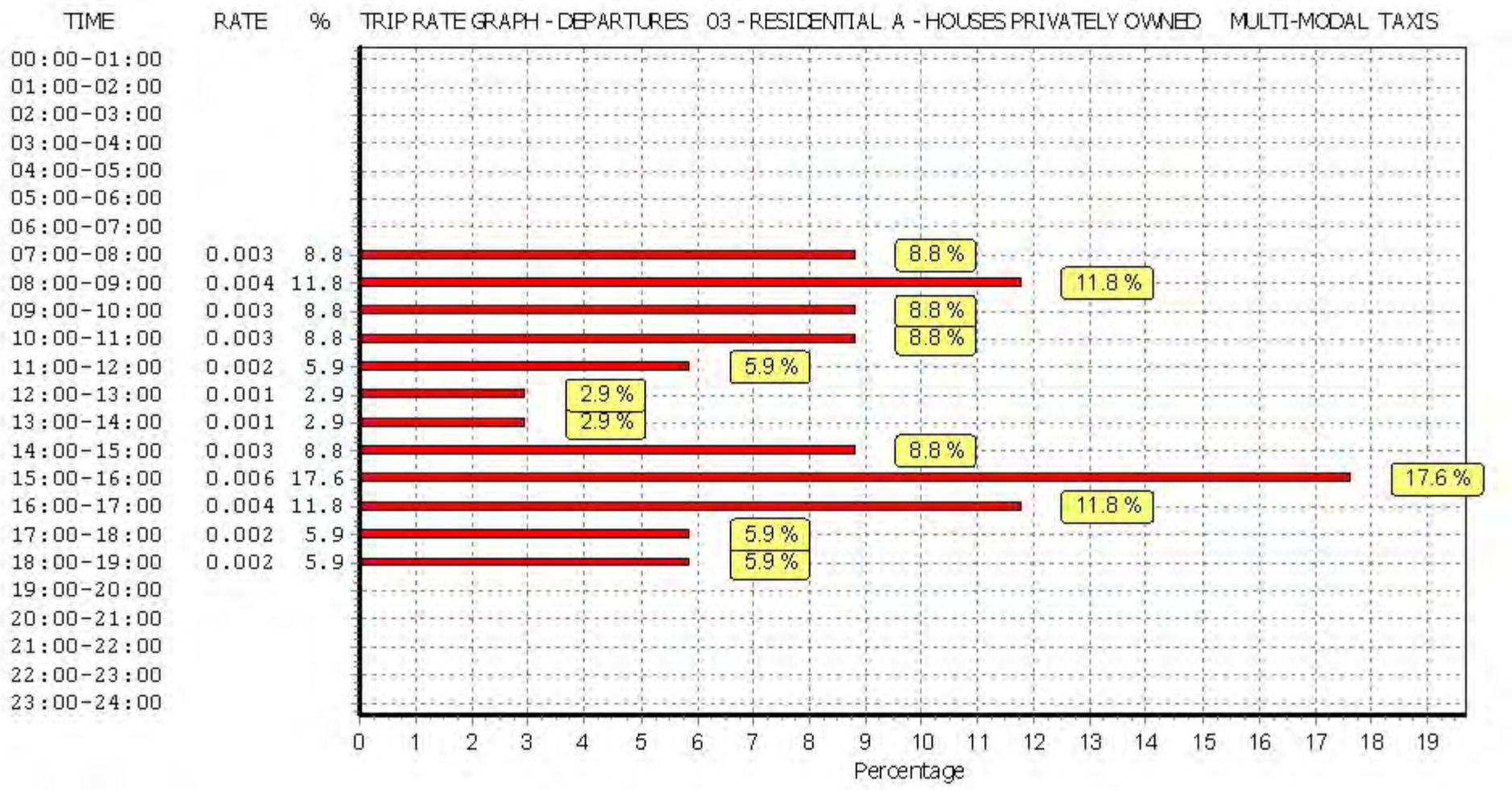
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

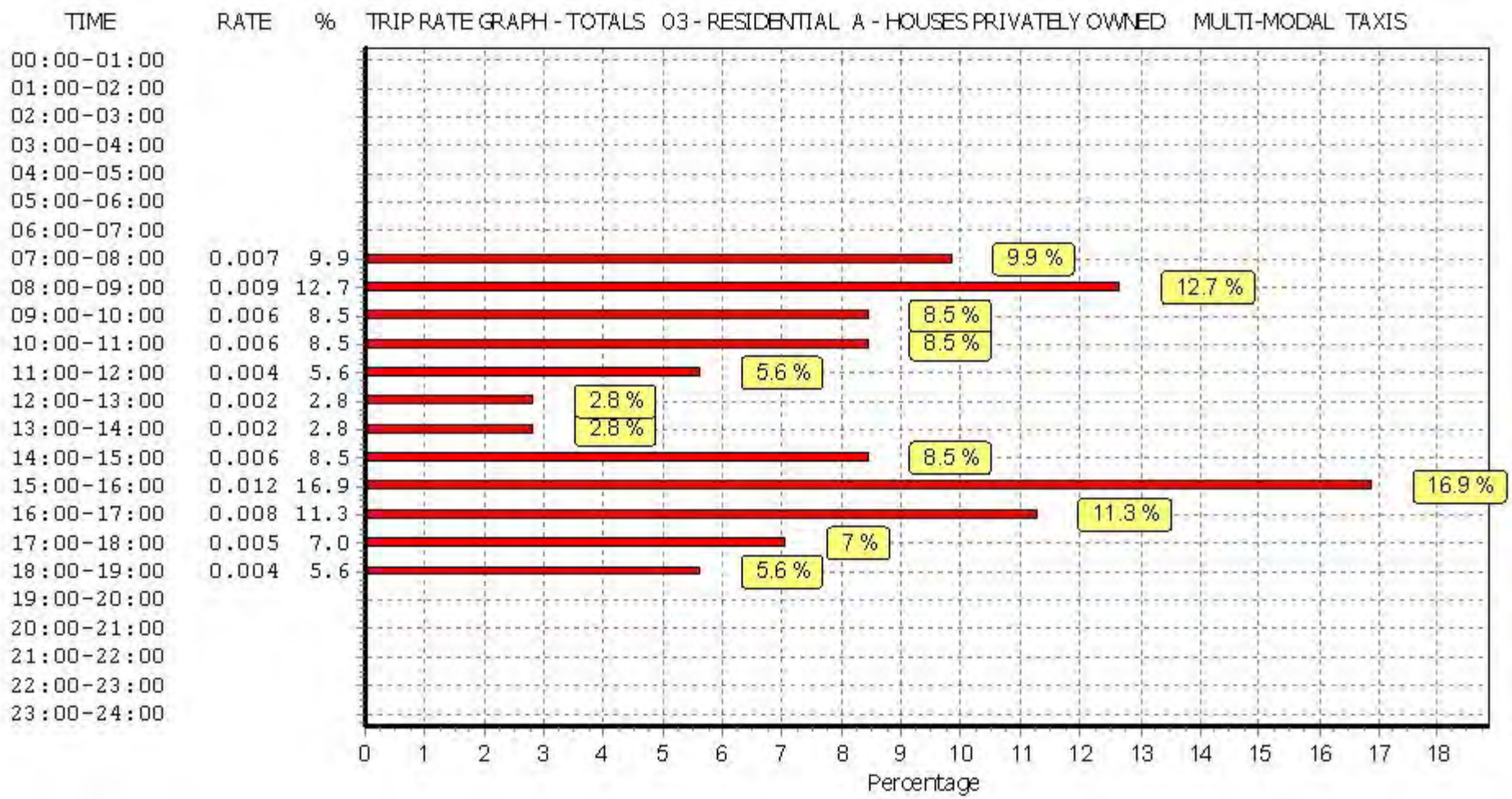
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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/A - HOUSES 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	46	58	0.001	46	58	0.001	46	58	0.002
08:00 - 09:00	46	58	0.003	46	58	0.003	46	58	0.006
09:00 - 10:00	46	58	0.003	46	58	0.001	46	58	0.004
10:00 - 11:00	46	58	0.003	46	58	0.003	46	58	0.006
11:00 - 12:00	46	58	0.003	46	58	0.003	46	58	0.006
12:00 - 13:00	46	58	0.003	46	58	0.003	46	58	0.006
13:00 - 14:00	46	58	0.003	46	58	0.003	46	58	0.006
14:00 - 15:00	46	58	0.001	46	58	0.003	46	58	0.004
15:00 - 16:00	46	58	0.001	46	58	0.001	46	58	0.002
16:00 - 17:00	46	58	0.002	46	58	0.001	46	58	0.003
17:00 - 18:00	46	58	0.001	46	58	0.001	46	58	0.002
18:00 - 19:00	46	58	0.000	46	58	0.000	46	58	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.023			0.047

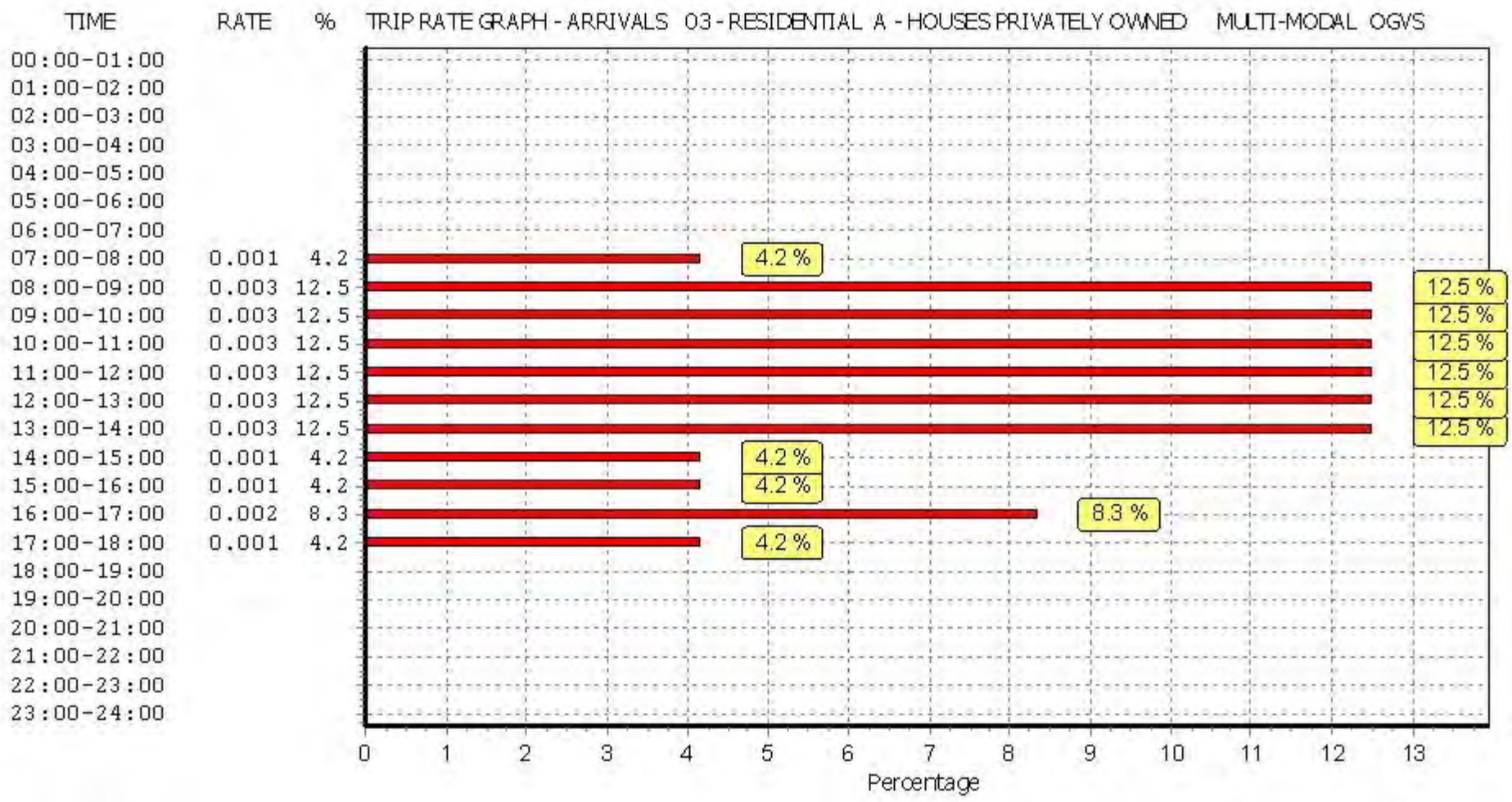
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

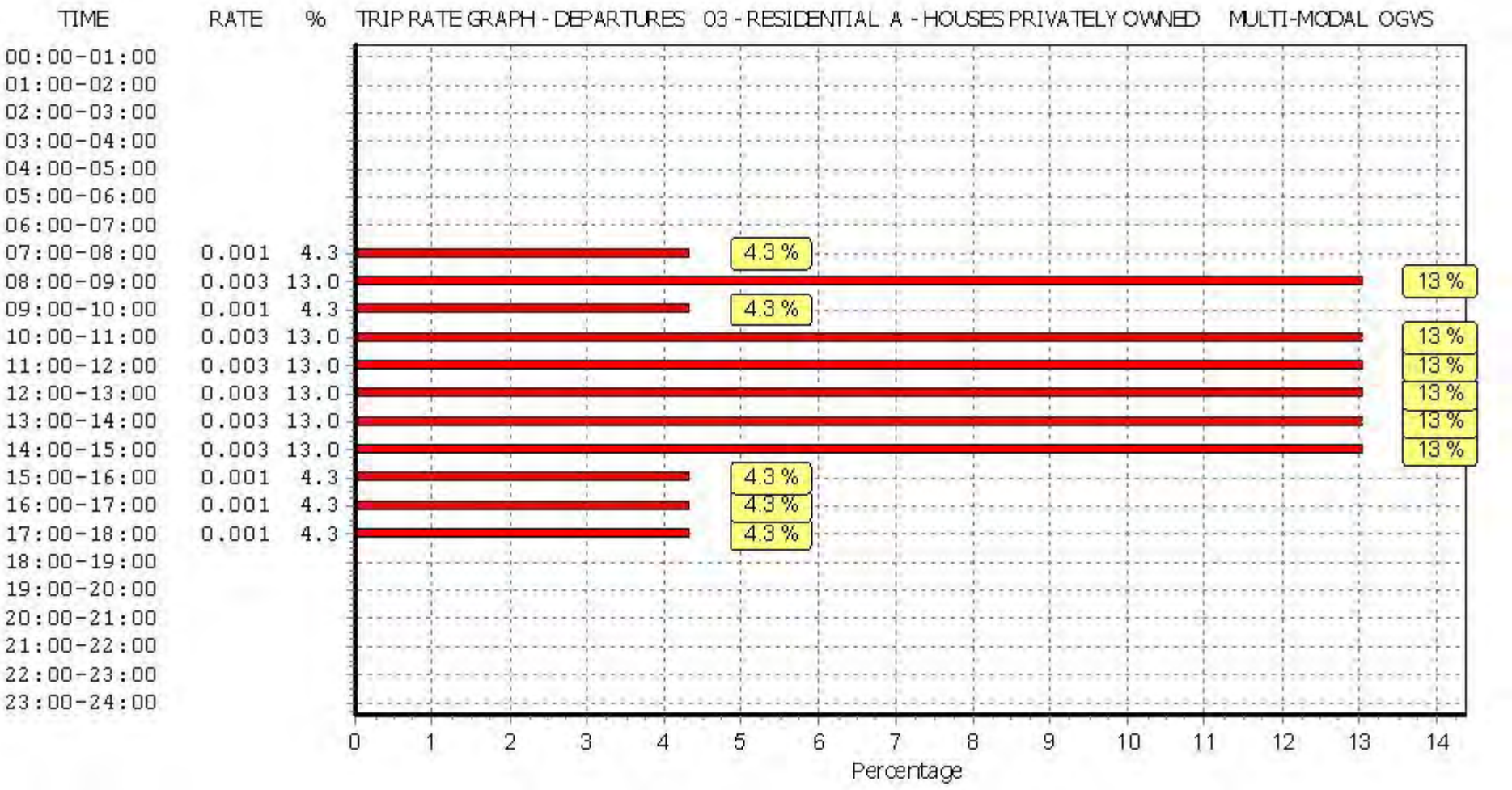
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

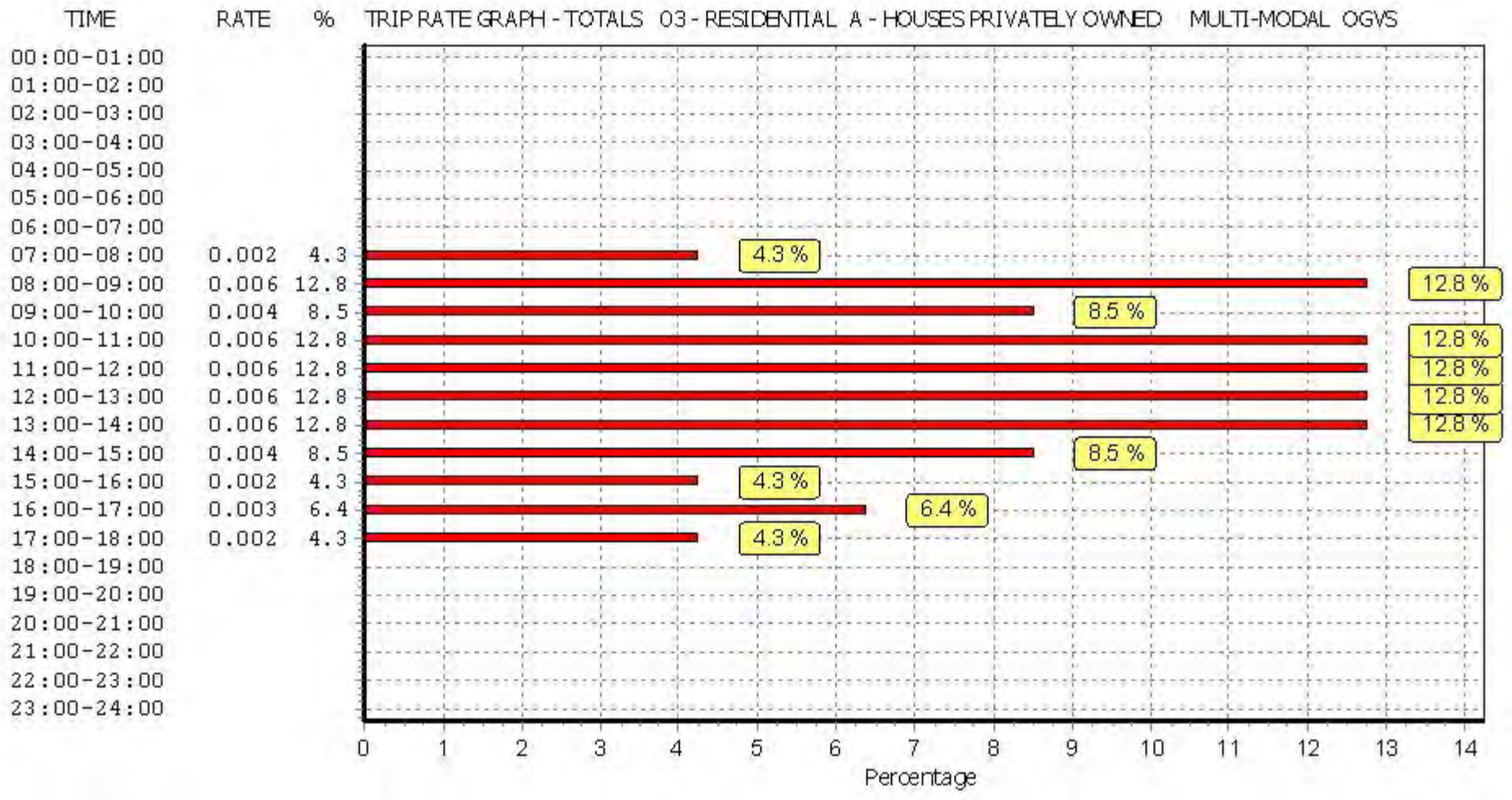
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	46	58	0.000	46	58	0.000	46	58	0.000
08:00 - 09:00	46	58	0.000	46	58	0.000	46	58	0.000
09:00 - 10:00	46	58	0.000	46	58	0.000	46	58	0.000
10:00 - 11:00	46	58	0.000	46	58	0.000	46	58	0.000
11:00 - 12:00	46	58	0.001	46	58	0.001	46	58	0.002
12:00 - 13:00	46	58	0.000	46	58	0.000	46	58	0.000
13:00 - 14:00	46	58	0.000	46	58	0.000	46	58	0.000
14:00 - 15:00	46	58	0.000	46	58	0.000	46	58	0.000
15:00 - 16:00	46	58	0.000	46	58	0.000	46	58	0.000
16:00 - 17:00	46	58	0.000	46	58	0.000	46	58	0.000
17:00 - 18:00	46	58	0.000	46	58	0.000	46	58	0.000
18:00 - 19:00	46	58	0.000	46	58	0.000	46	58	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.001			0.002

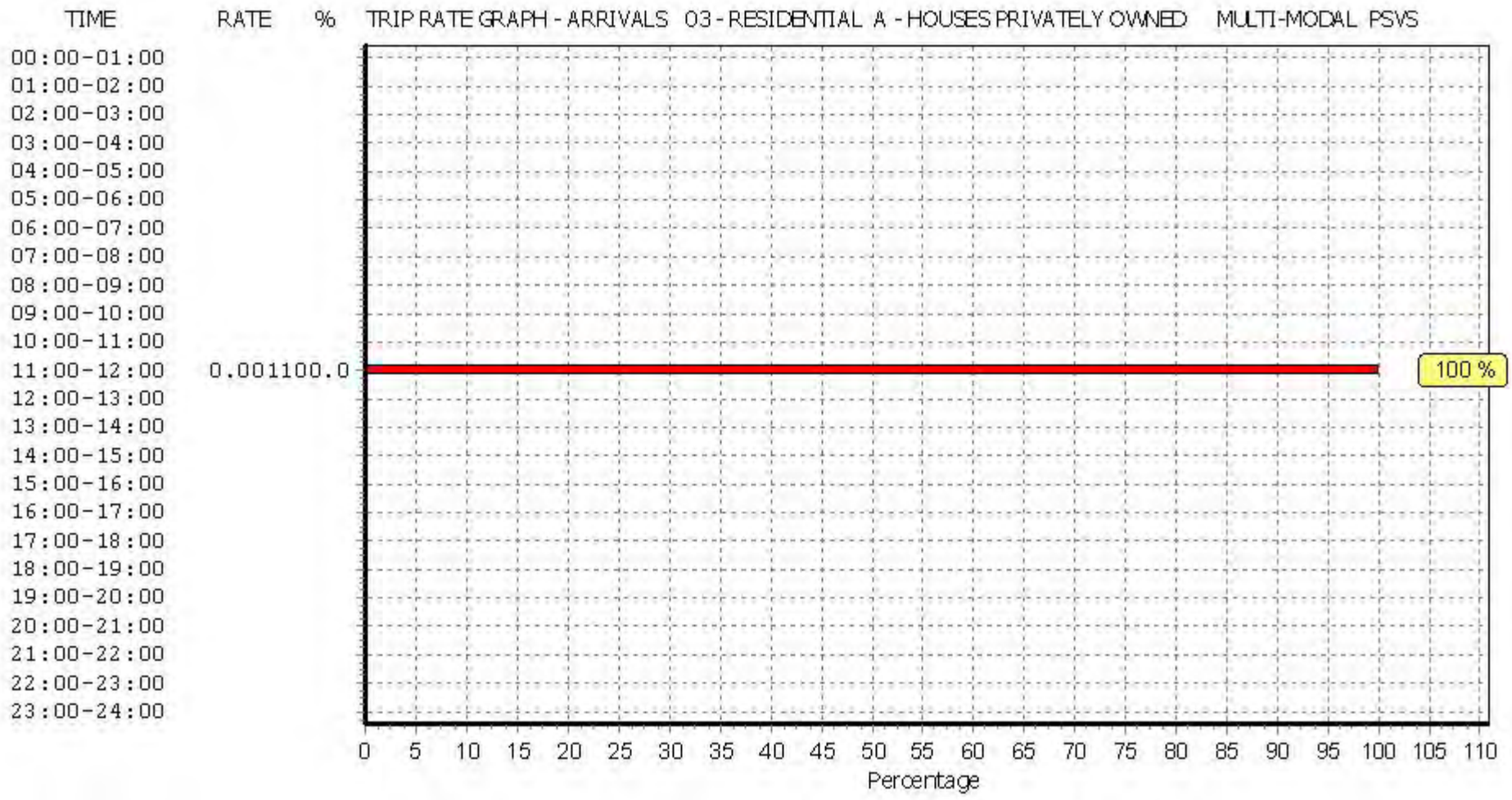
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

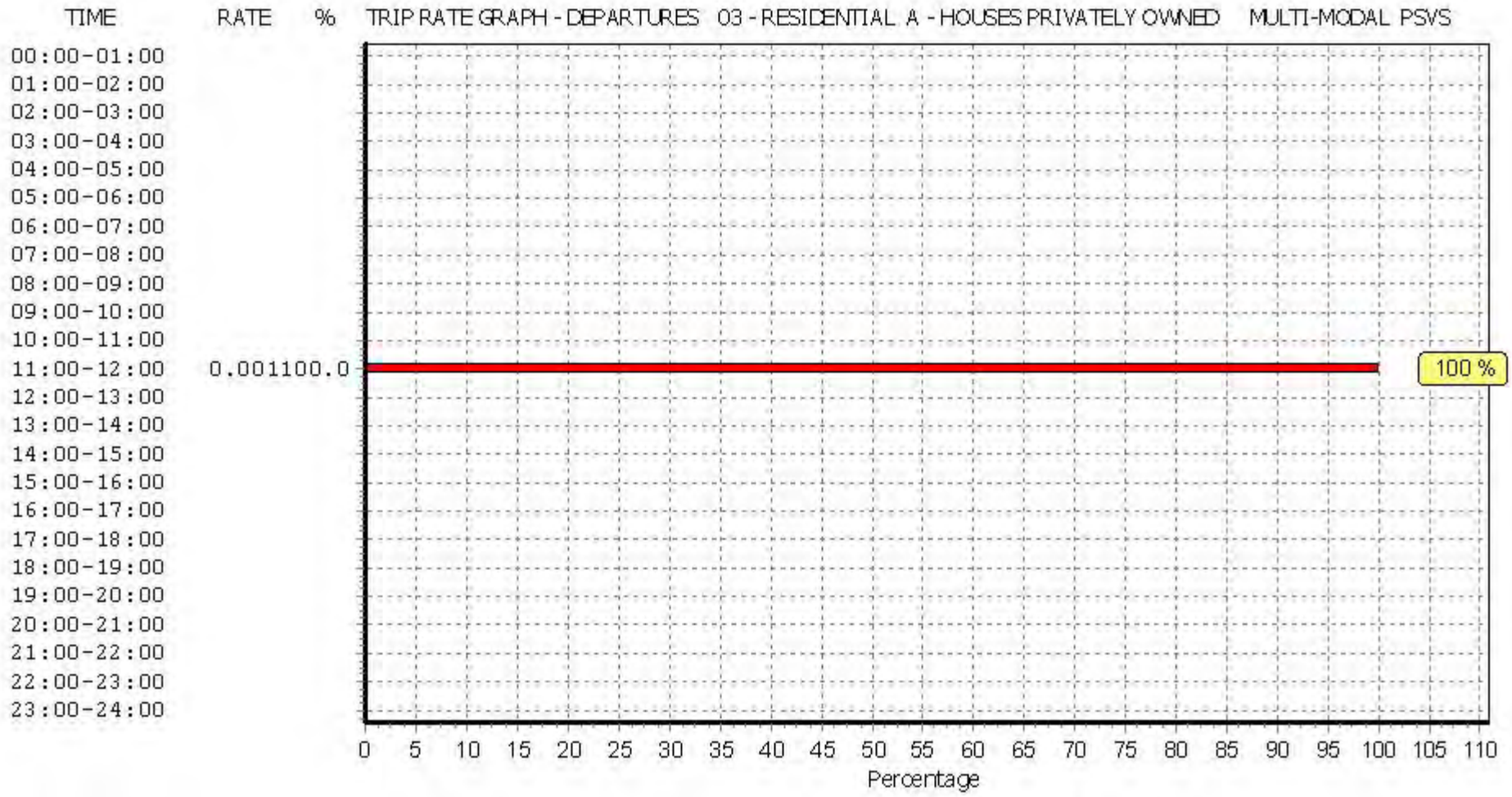
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
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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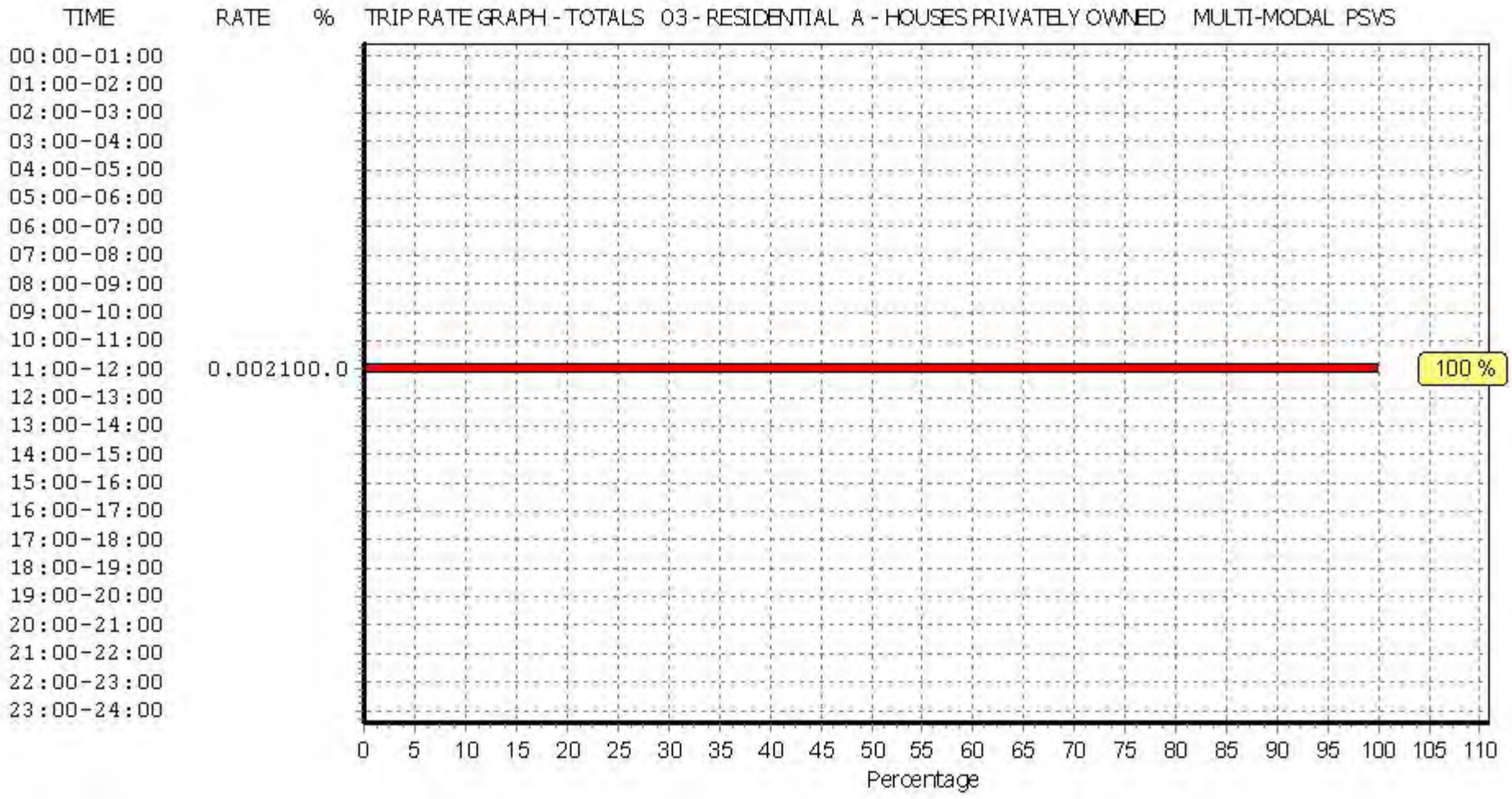

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	46	58	0.005	46	58	0.018	46	58	0.023
08:00 - 09:00	46	58	0.002	46	58	0.018	46	58	0.020
09:00 - 10:00	46	58	0.002	46	58	0.005	46	58	0.007
10:00 - 11:00	46	58	0.003	46	58	0.009	46	58	0.012
11:00 - 12:00	46	58	0.004	46	58	0.003	46	58	0.007
12:00 - 13:00	46	58	0.007	46	58	0.004	46	58	0.011
13:00 - 14:00	46	58	0.006	46	58	0.003	46	58	0.009
14:00 - 15:00	46	58	0.005	46	58	0.006	46	58	0.011
15:00 - 16:00	46	58	0.016	46	58	0.005	46	58	0.021
16:00 - 17:00	46	58	0.014	46	58	0.004	46	58	0.018
17:00 - 18:00	46	58	0.018	46	58	0.009	46	58	0.027
18:00 - 19:00	46	58	0.009	46	58	0.006	46	58	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.091			0.090			0.181

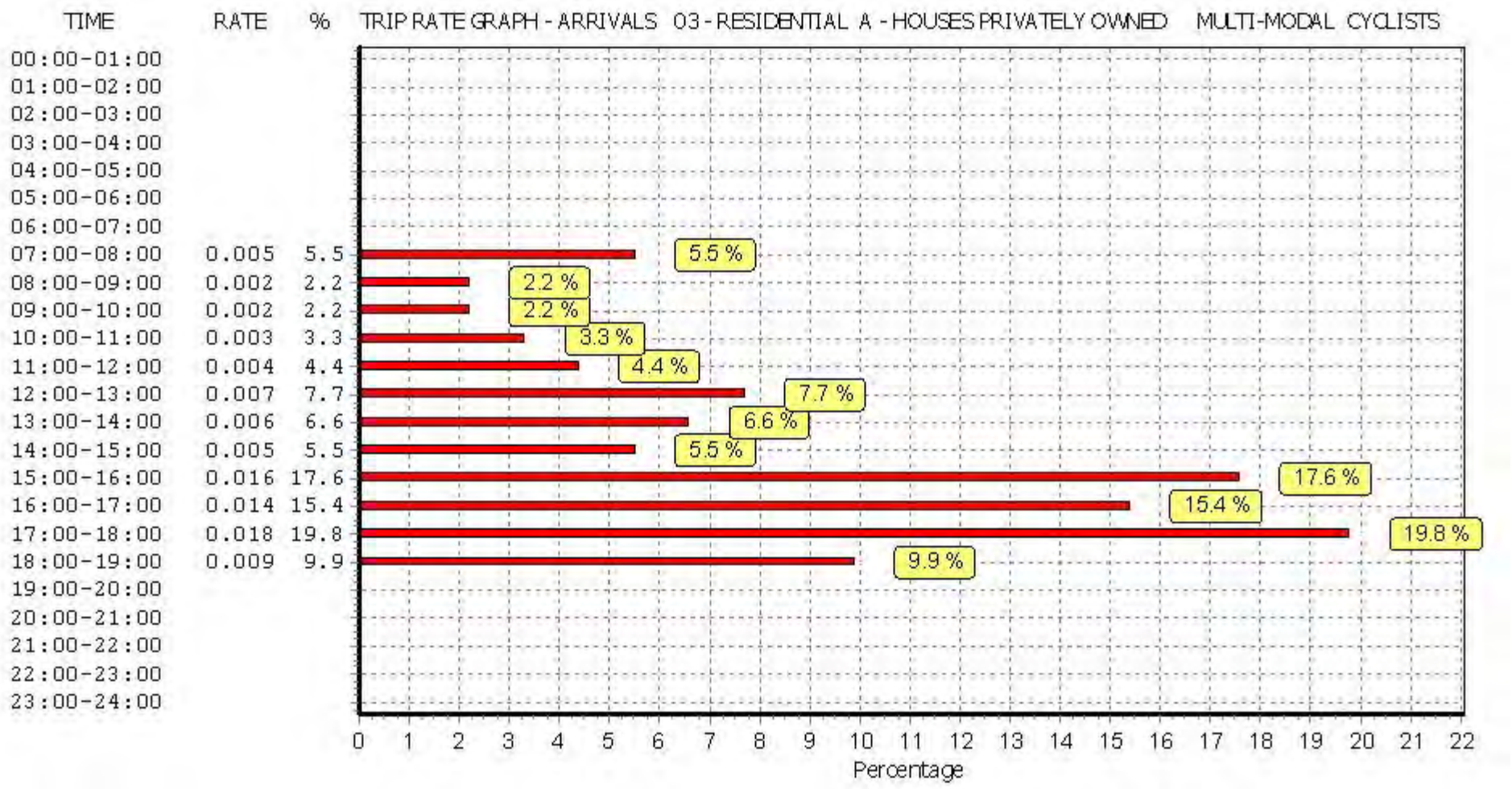
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

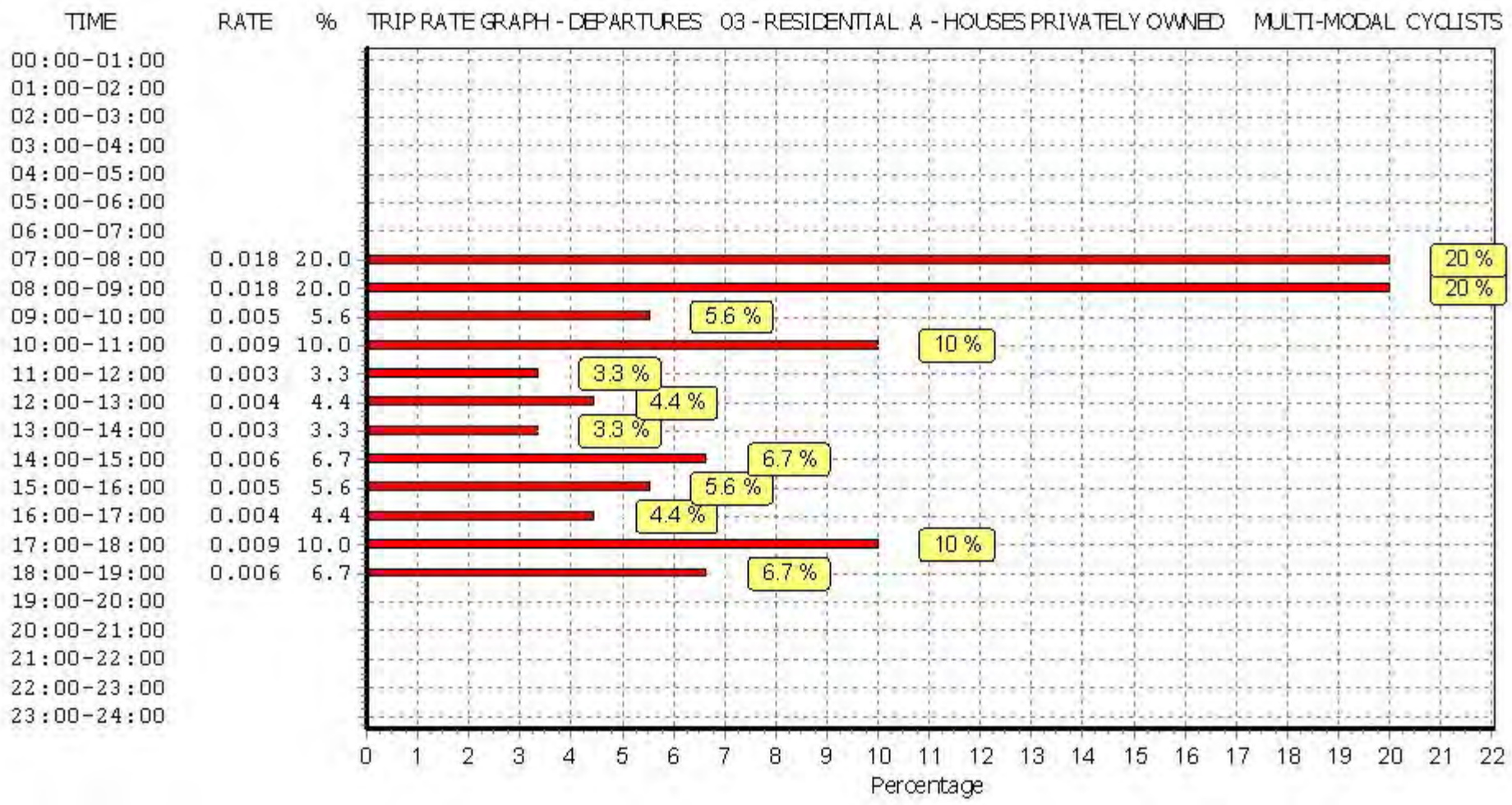
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
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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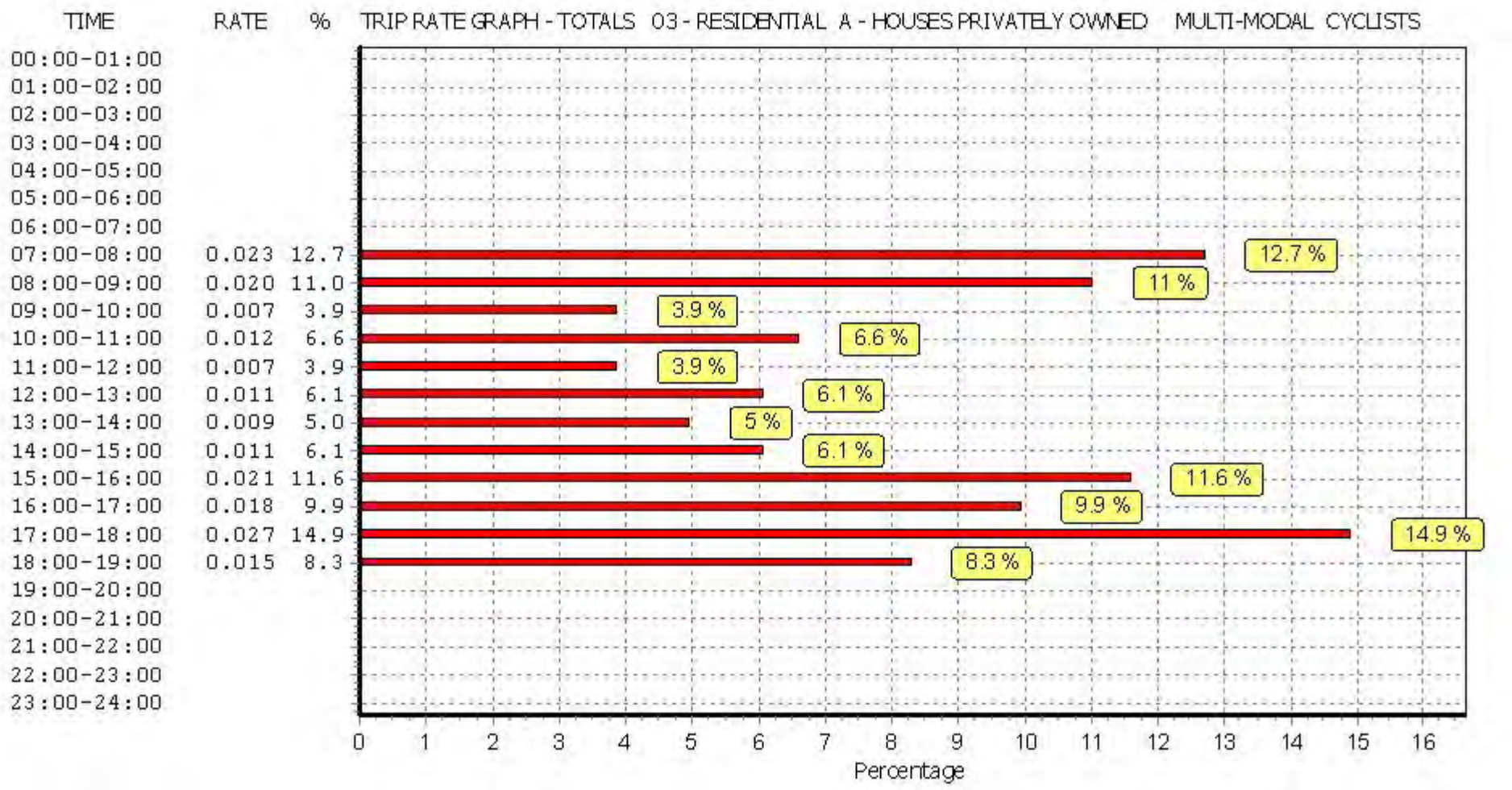

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	46	58	0.078	46	58	0.320	46	58	0.398
08:00 - 09:00	46	58	0.175	46	58	0.542	46	58	0.717
09:00 - 10:00	46	58	0.168	46	58	0.209	46	58	0.377
10:00 - 11:00	46	58	0.163	46	58	0.197	46	58	0.360
11:00 - 12:00	46	58	0.183	46	58	0.191	46	58	0.374
12:00 - 13:00	46	58	0.203	46	58	0.195	46	58	0.398
13:00 - 14:00	46	58	0.196	46	58	0.193	46	58	0.389
14:00 - 15:00	46	58	0.197	46	58	0.217	46	58	0.414
15:00 - 16:00	46	58	0.410	46	58	0.260	46	58	0.670
16:00 - 17:00	46	58	0.391	46	58	0.232	46	58	0.623
17:00 - 18:00	46	58	0.406	46	58	0.225	46	58	0.631
18:00 - 19:00	46	58	0.270	46	58	0.219	46	58	0.489
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.840			3.000			5.840

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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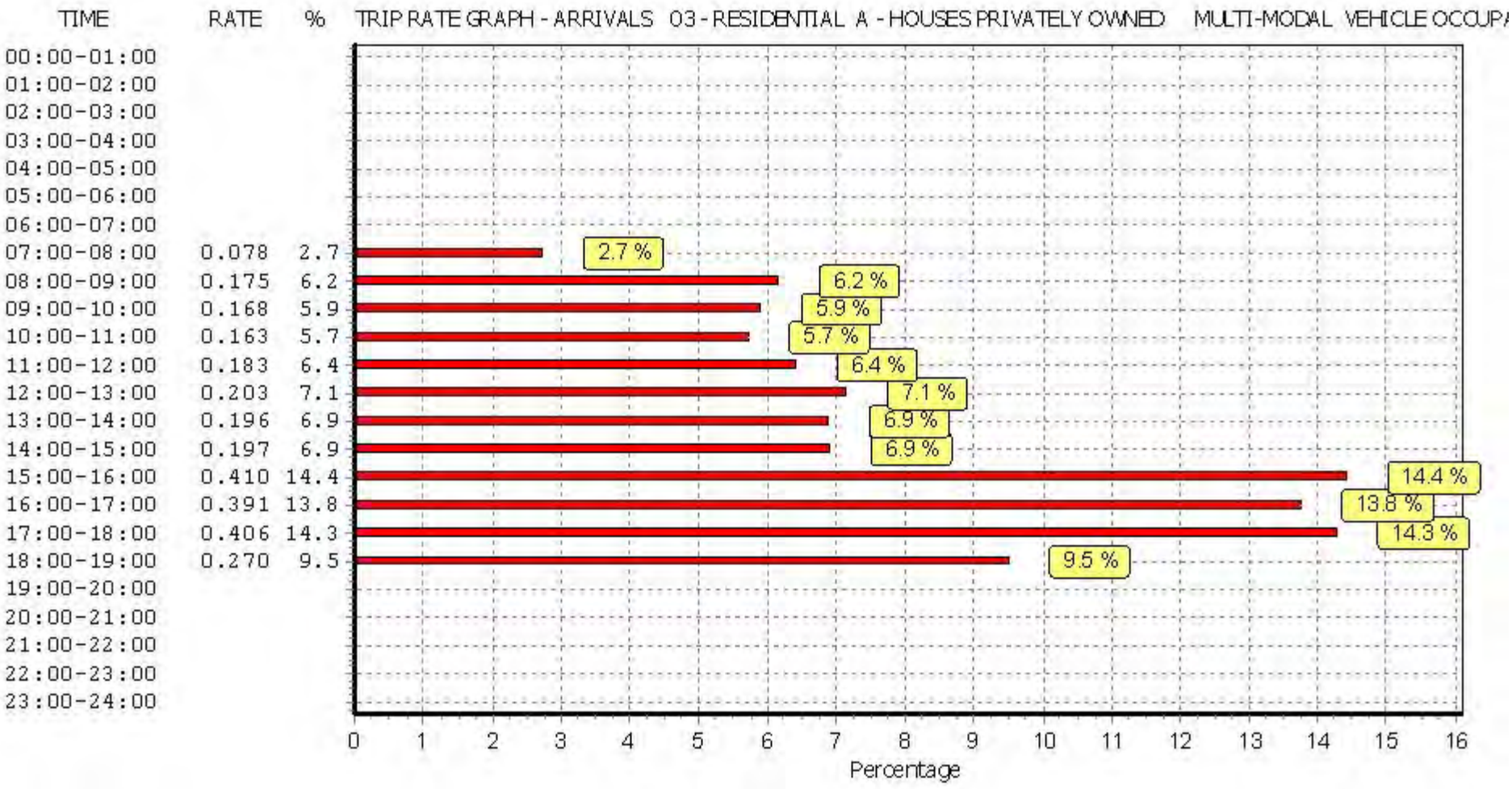
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
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.



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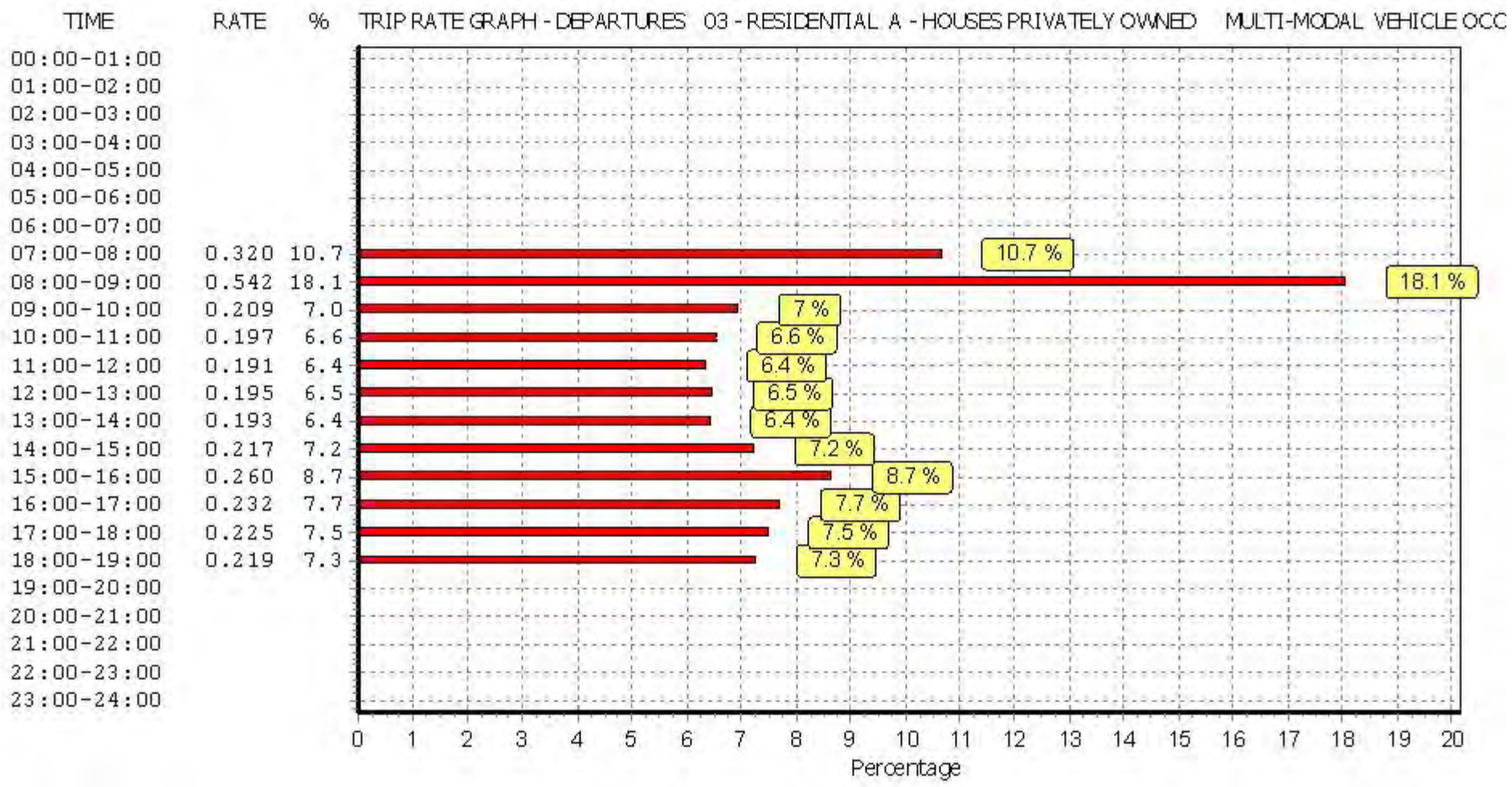


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES 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	46	58	0.022	46	58	0.070	46	58	0.092
08:00 - 09:00	46	58	0.041	46	58	0.170	46	58	0.211
09:00 - 10:00	46	58	0.046	46	58	0.065	46	58	0.111
10:00 - 11:00	46	58	0.046	46	58	0.058	46	58	0.104
11:00 - 12:00	46	58	0.042	46	58	0.042	46	58	0.084
12:00 - 13:00	46	58	0.043	46	58	0.036	46	58	0.079
13:00 - 14:00	46	58	0.039	46	58	0.049	46	58	0.088
14:00 - 15:00	46	58	0.050	46	58	0.059	46	58	0.109
15:00 - 16:00	46	58	0.145	46	58	0.075	46	58	0.220
16:00 - 17:00	46	58	0.099	46	58	0.048	46	58	0.147
17:00 - 18:00	46	58	0.091	46	58	0.043	46	58	0.134
18:00 - 19:00	46	58	0.059	46	58	0.043	46	58	0.102
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.723			0.758			1.481

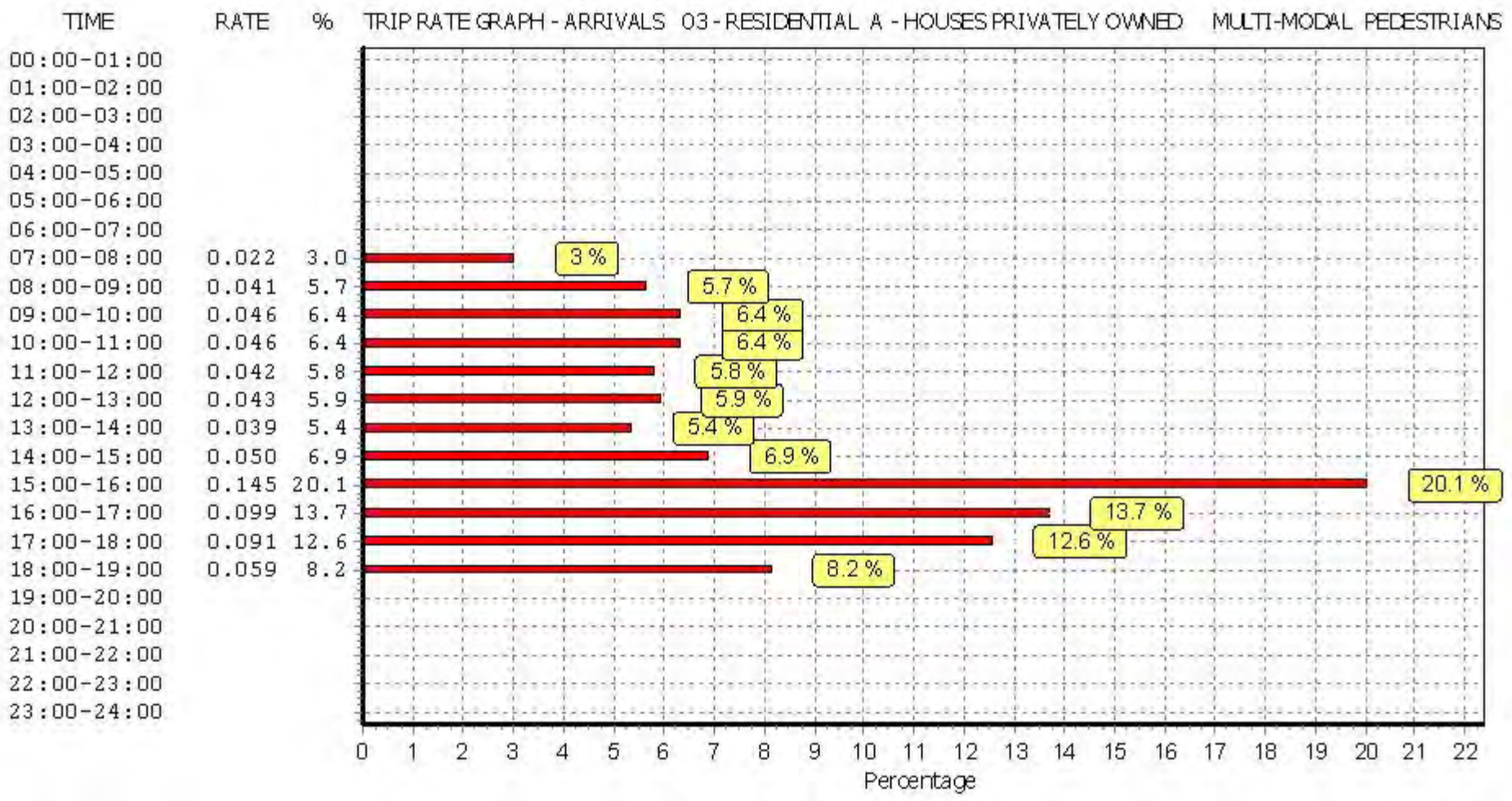
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

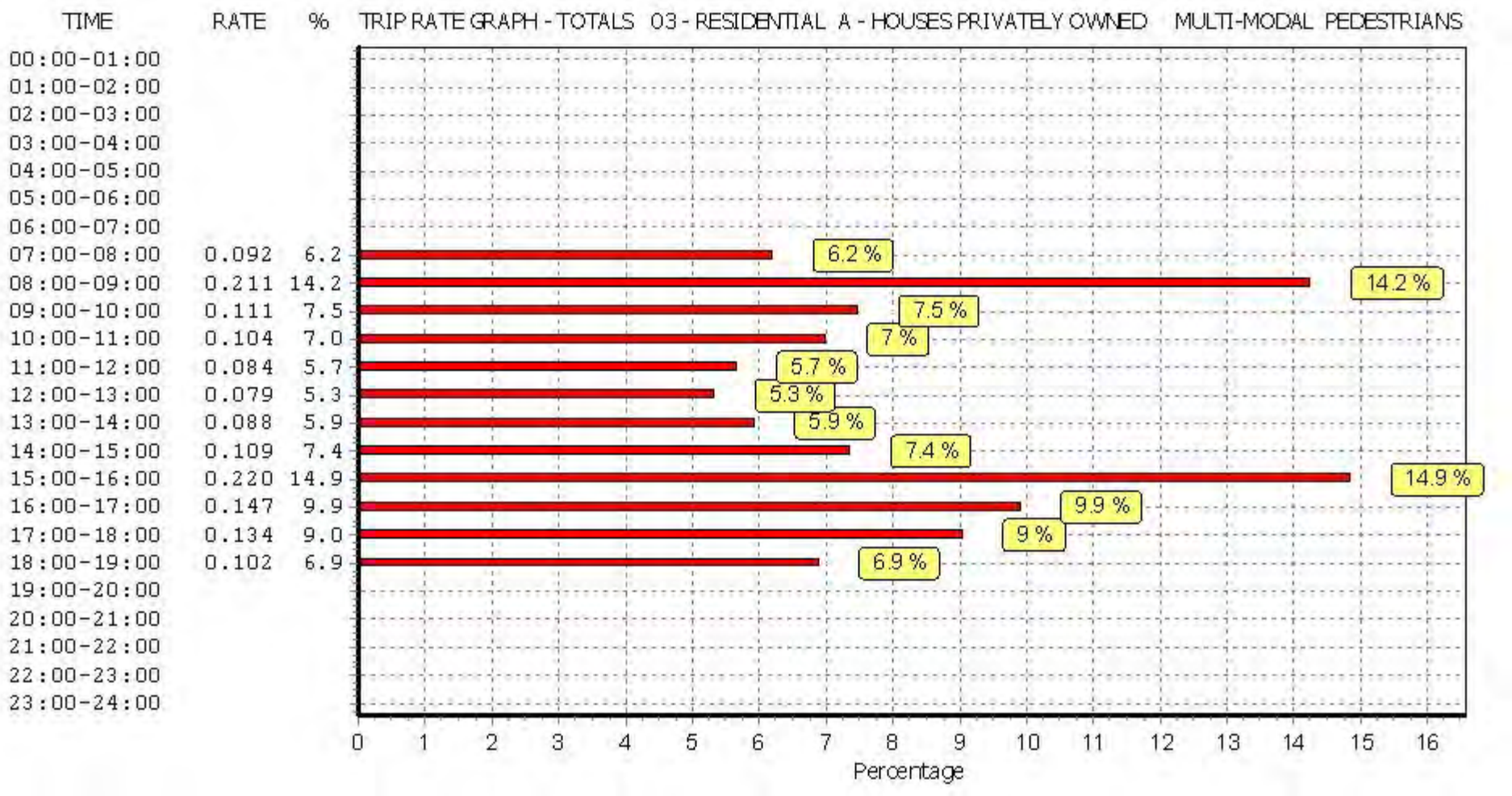
Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

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.

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/A - HOUSES 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	46	58	0.000	46	58	0.006	46	58	0.006
08:00 - 09:00	46	58	0.001	46	58	0.005	46	58	0.006
09:00 - 10:00	46	58	0.001	46	58	0.004	46	58	0.005
10:00 - 11:00	46	58	0.002	46	58	0.004	46	58	0.006
11:00 - 12:00	46	58	0.003	46	58	0.004	46	58	0.007
12:00 - 13:00	46	58	0.006	46	58	0.004	46	58	0.010
13:00 - 14:00	46	58	0.004	46	58	0.001	46	58	0.005
14:00 - 15:00	46	58	0.002	46	58	0.003	46	58	0.005
15:00 - 16:00	46	58	0.003	46	58	0.002	46	58	0.005
16:00 - 17:00	46	58	0.005	46	58	0.002	46	58	0.007
17:00 - 18:00	46	58	0.007	46	58	0.001	46	58	0.008
18:00 - 19:00	46	58	0.007	46	58	0.000	46	58	0.007
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.041			0.036			0.077

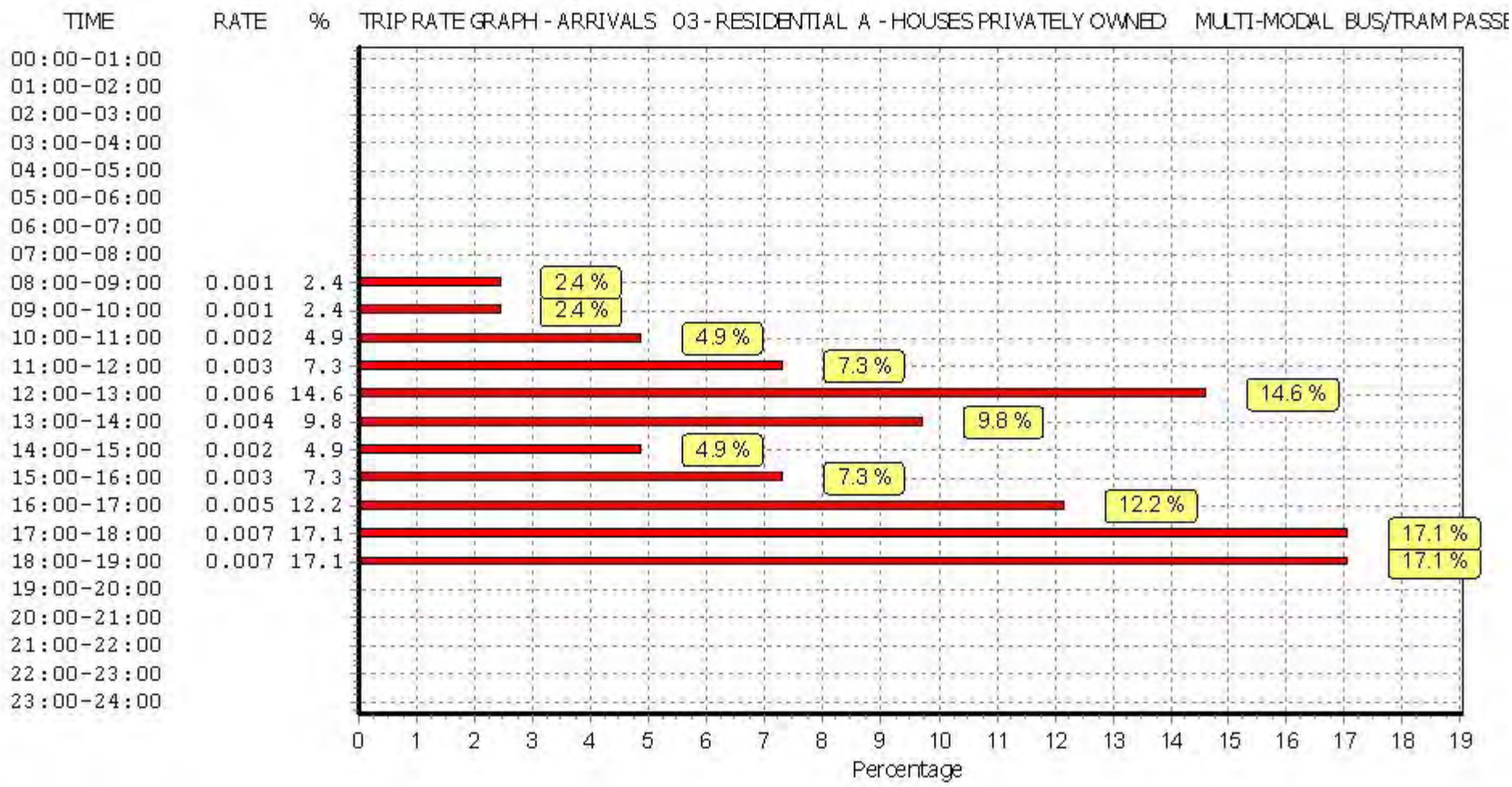
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

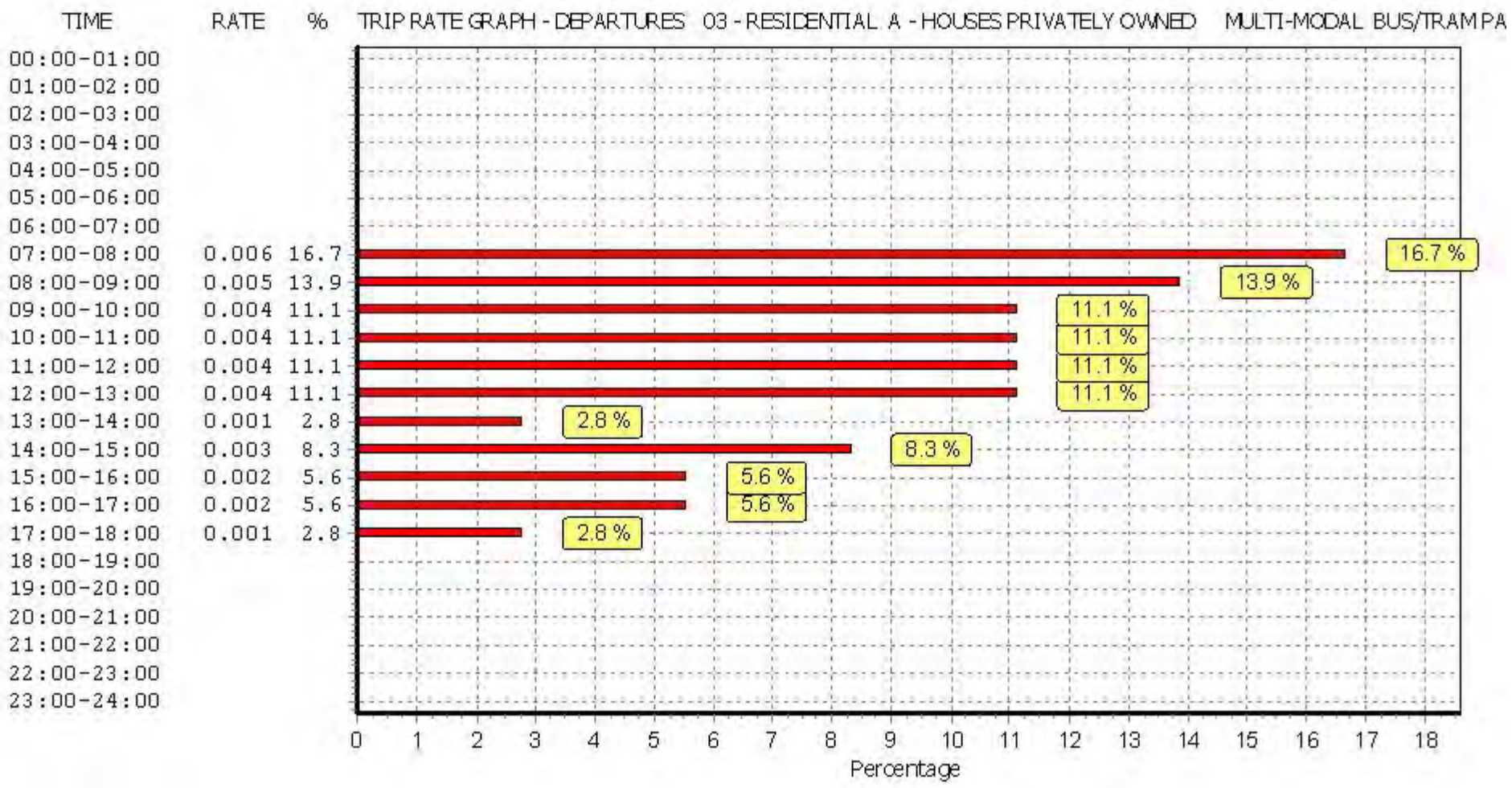
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

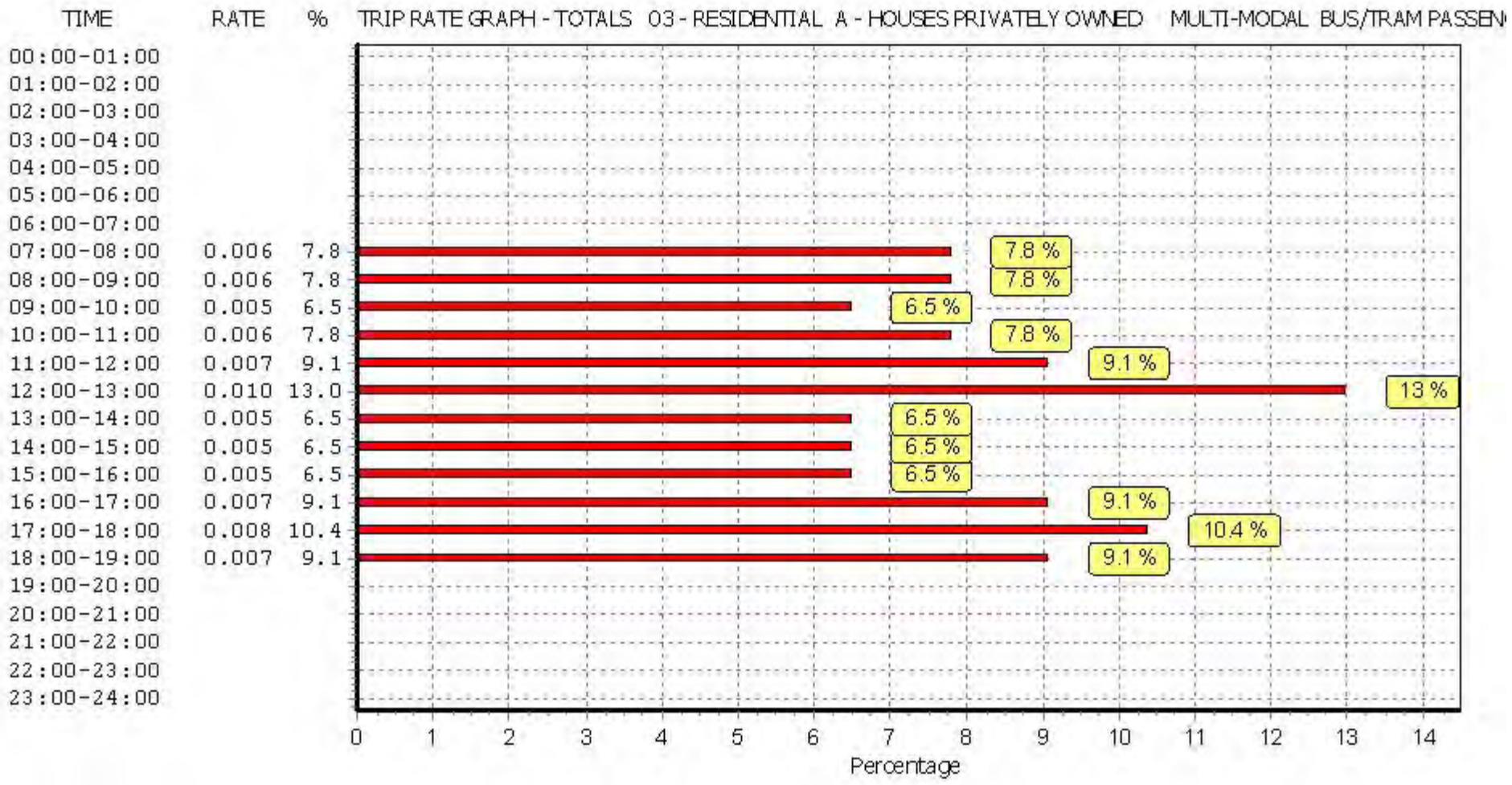
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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/A - HOUSES 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	46	58	0.000	46	58	0.005	46	58	0.005
08:00 - 09:00	46	58	0.000	46	58	0.002	46	58	0.002
09:00 - 10:00	46	58	0.000	46	58	0.001	46	58	0.001
10:00 - 11:00	46	58	0.000	46	58	0.000	46	58	0.000
11:00 - 12:00	46	58	0.000	46	58	0.000	46	58	0.000
12:00 - 13:00	46	58	0.000	46	58	0.001	46	58	0.001
13:00 - 14:00	46	58	0.000	46	58	0.000	46	58	0.000
14:00 - 15:00	46	58	0.000	46	58	0.000	46	58	0.000
15:00 - 16:00	46	58	0.000	46	58	0.001	46	58	0.001
16:00 - 17:00	46	58	0.000	46	58	0.000	46	58	0.000
17:00 - 18:00	46	58	0.003	46	58	0.001	46	58	0.004
18:00 - 19:00	46	58	0.003	46	58	0.000	46	58	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.011			0.017

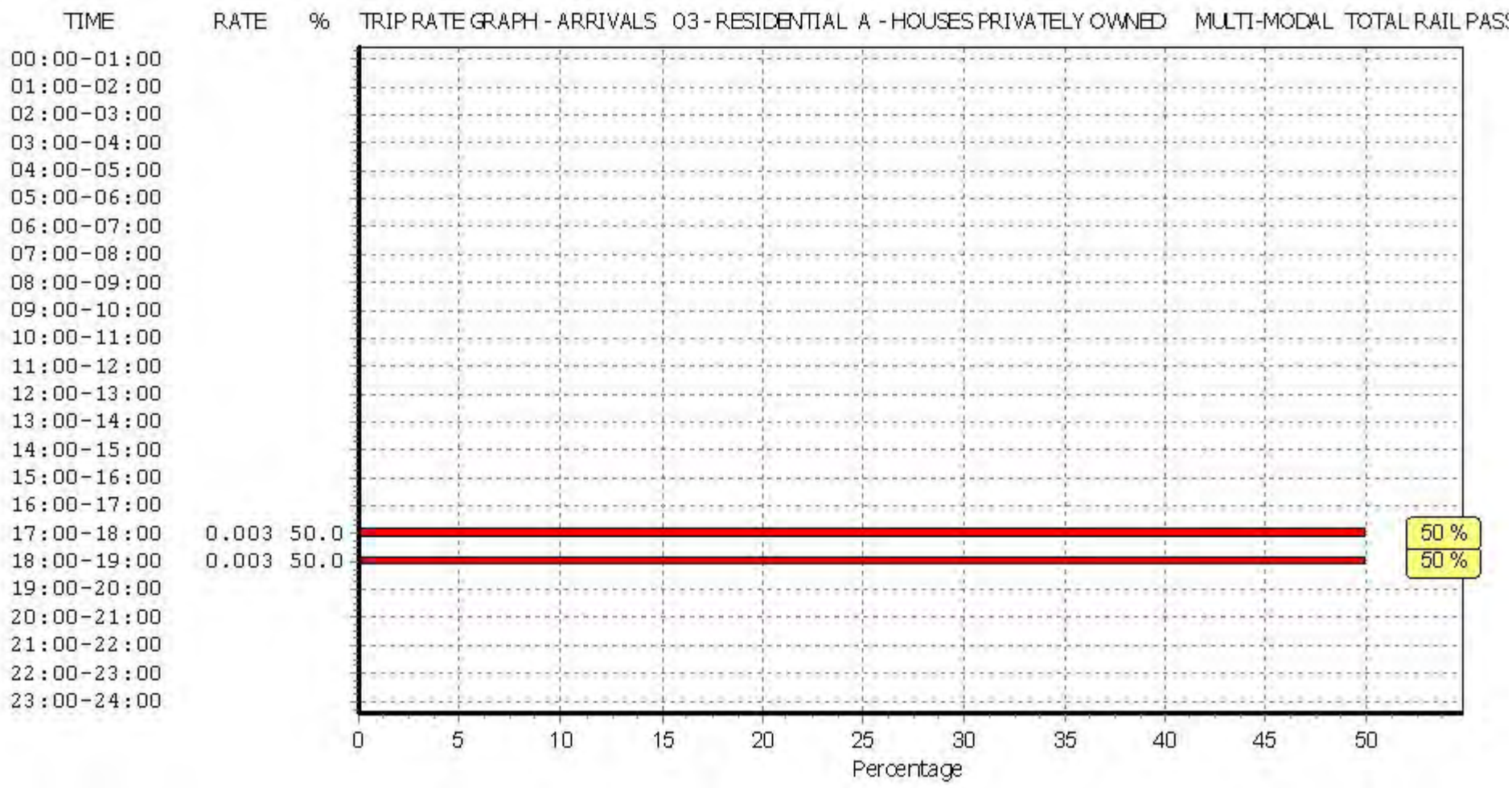
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

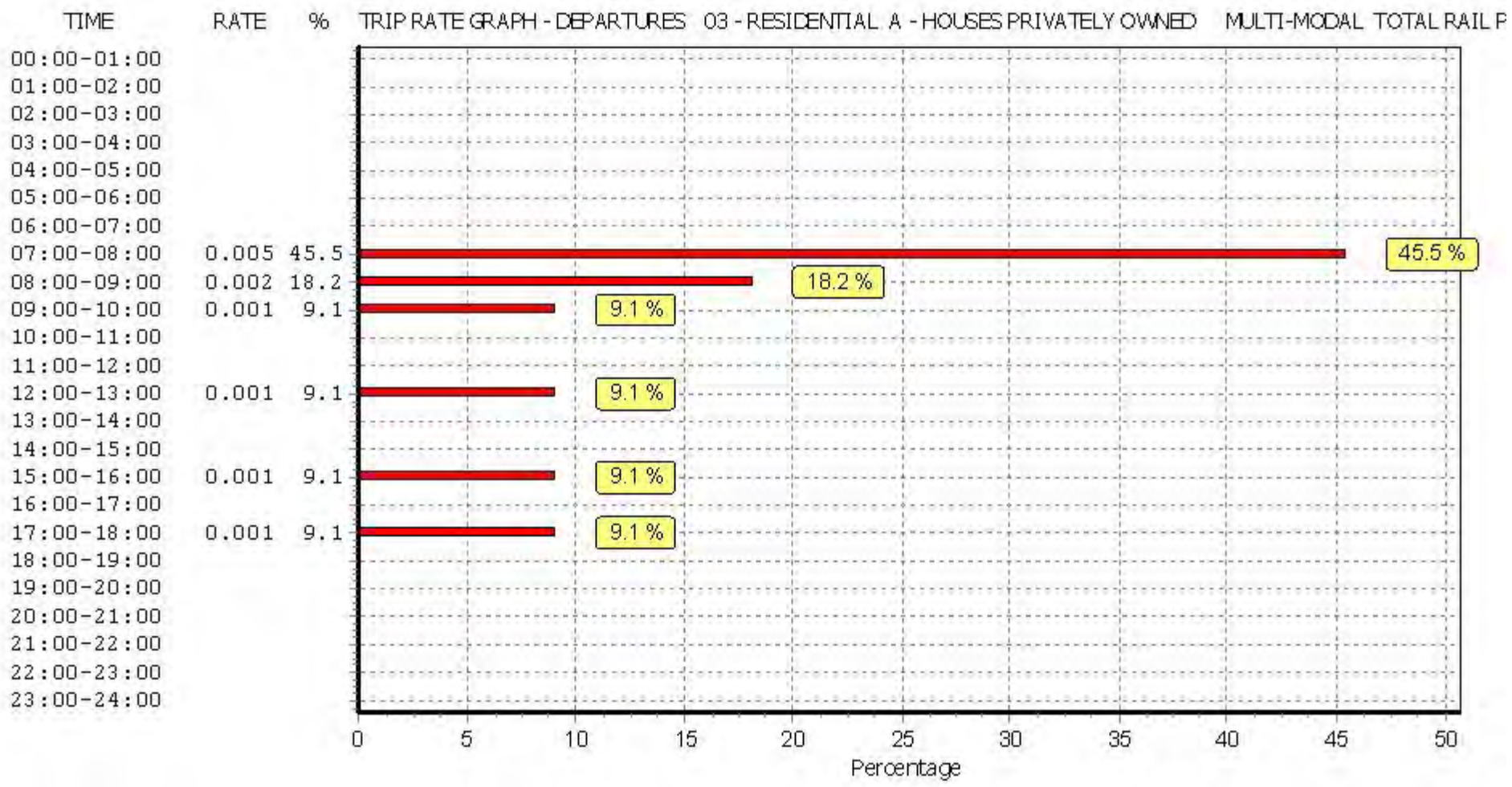
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

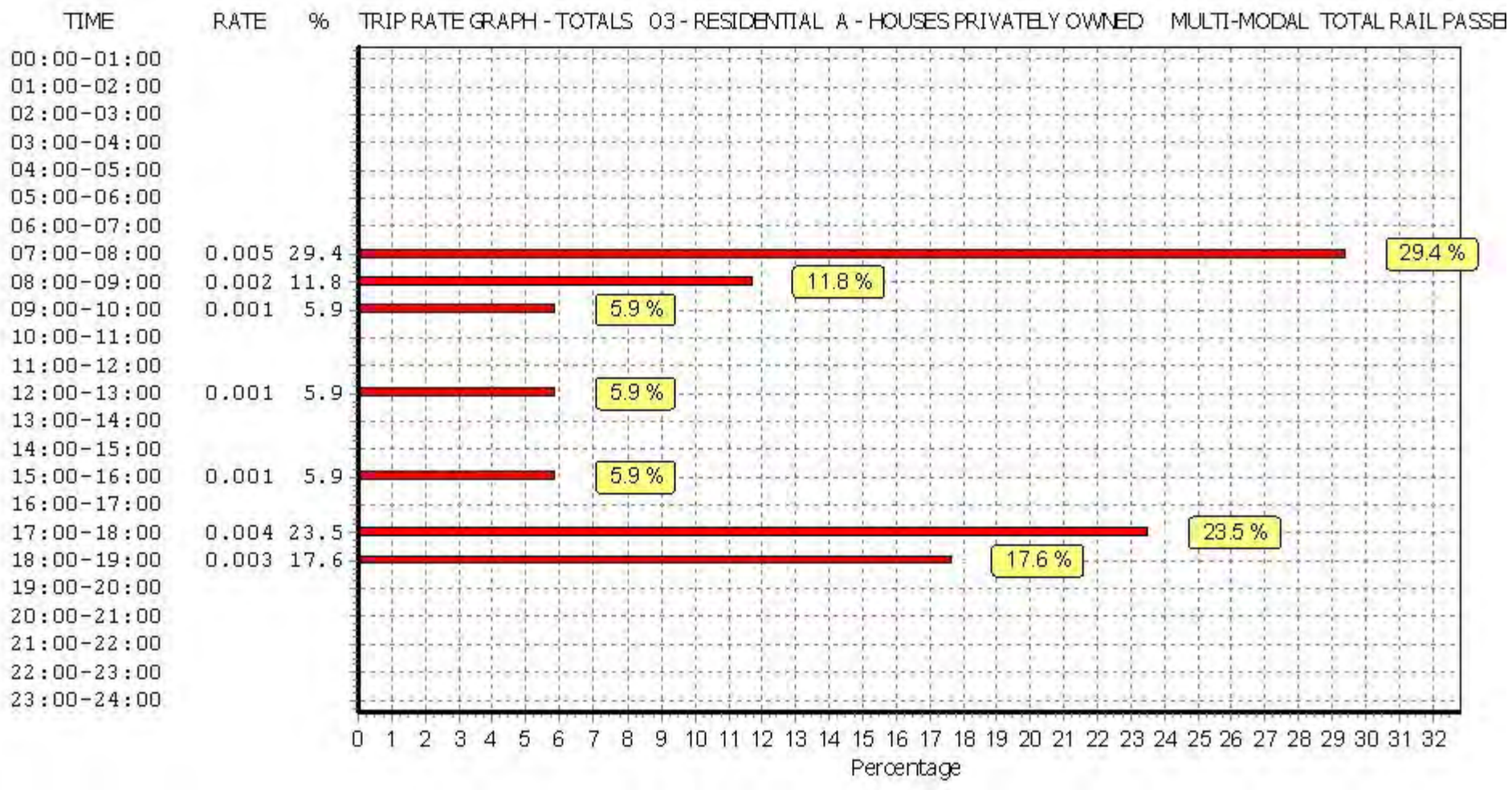
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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/A - HOUSES 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	46	58	0.000	46	58	0.000	46	58	0.000
08:00 - 09:00	46	58	0.000	46	58	0.001	46	58	0.001
09:00 - 10:00	46	58	0.000	46	58	0.000	46	58	0.000
10:00 - 11:00	46	58	0.000	46	58	0.000	46	58	0.000
11:00 - 12:00	46	58	0.001	46	58	0.000	46	58	0.001
12:00 - 13:00	46	58	0.000	46	58	0.000	46	58	0.000
13:00 - 14:00	46	58	0.000	46	58	0.000	46	58	0.000
14:00 - 15:00	46	58	0.000	46	58	0.000	46	58	0.000
15:00 - 16:00	46	58	0.000	46	58	0.000	46	58	0.000
16:00 - 17:00	46	58	0.000	46	58	0.000	46	58	0.000
17:00 - 18:00	46	58	0.000	46	58	0.000	46	58	0.000
18:00 - 19:00	46	58	0.000	46	58	0.000	46	58	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.001			0.002

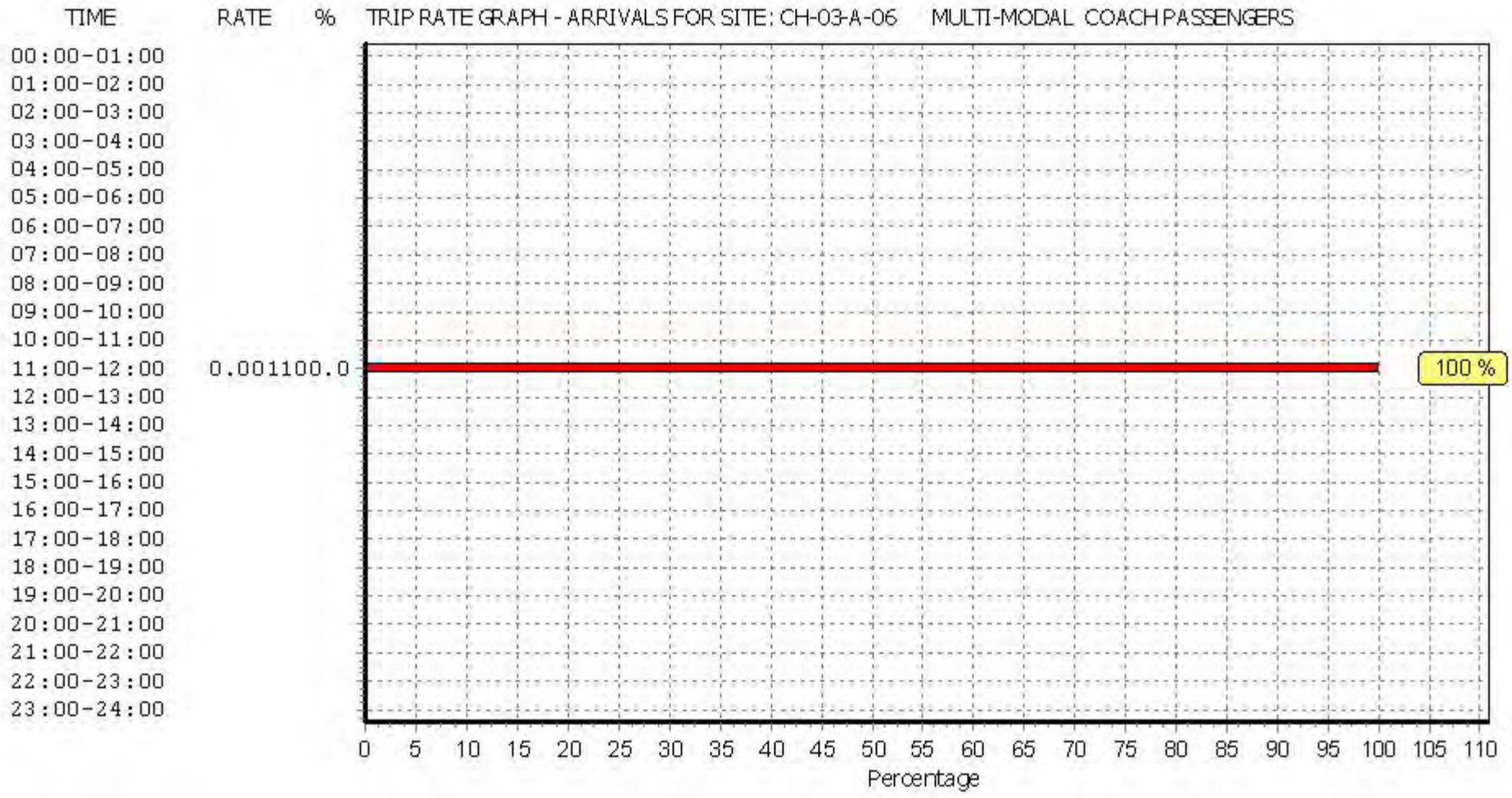
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

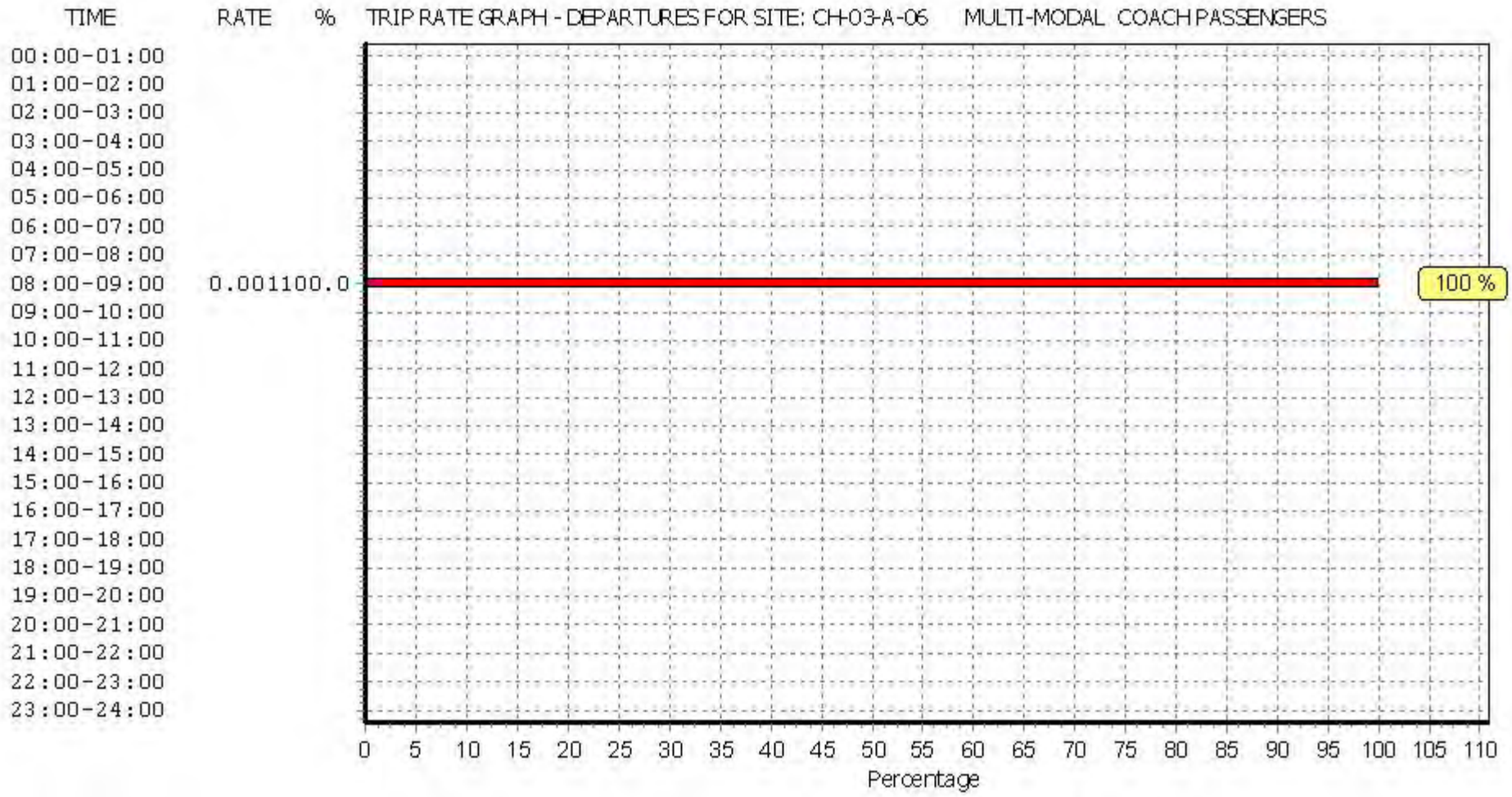
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
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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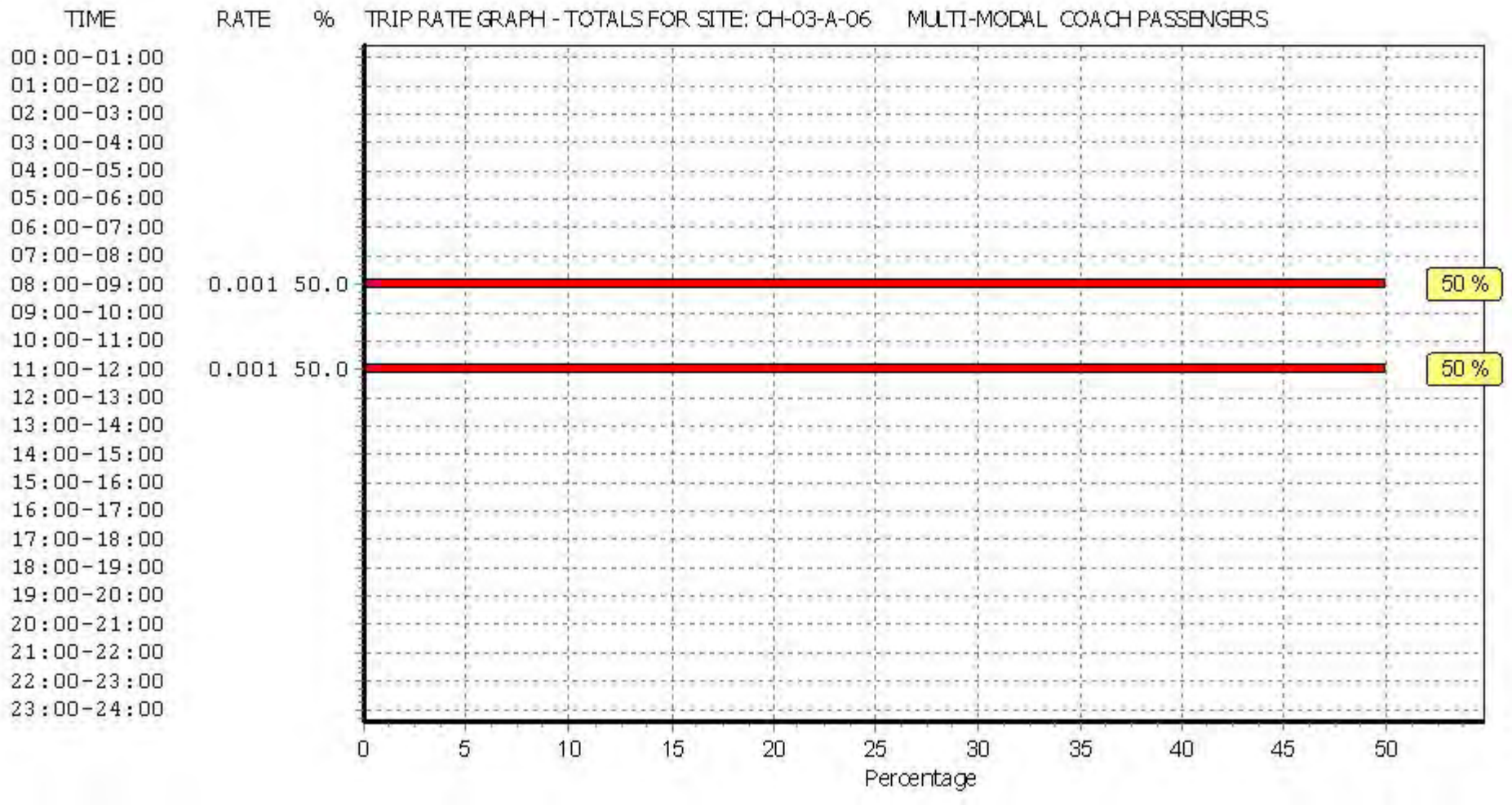

This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through 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/A - HOUSES 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	46	58	0.000	46	58	0.011	46	58	0.011
08:00 - 09:00	46	58	0.002	46	58	0.008	46	58	0.010
09:00 - 10:00	46	58	0.001	46	58	0.006	46	58	0.007
10:00 - 11:00	46	58	0.002	46	58	0.004	46	58	0.006
11:00 - 12:00	46	58	0.004	46	58	0.004	46	58	0.008
12:00 - 13:00	46	58	0.006	46	58	0.005	46	58	0.011
13:00 - 14:00	46	58	0.004	46	58	0.001	46	58	0.005
14:00 - 15:00	46	58	0.003	46	58	0.003	46	58	0.006
15:00 - 16:00	46	58	0.004	46	58	0.003	46	58	0.007
16:00 - 17:00	46	58	0.005	46	58	0.002	46	58	0.007
17:00 - 18:00	46	58	0.010	46	58	0.002	46	58	0.012
18:00 - 19:00	46	58	0.010	46	58	0.000	46	58	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.051			0.049			0.100

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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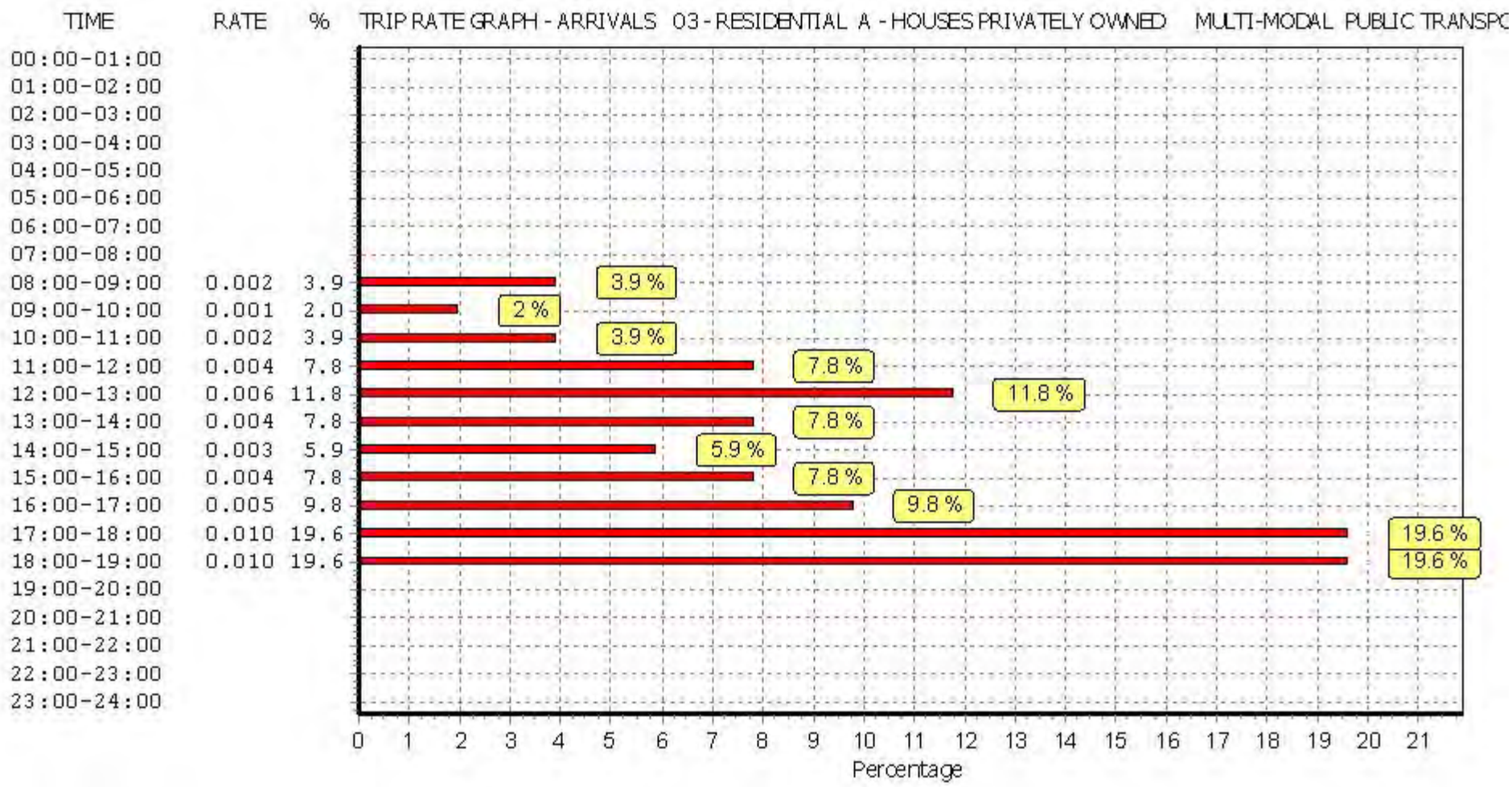
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
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.



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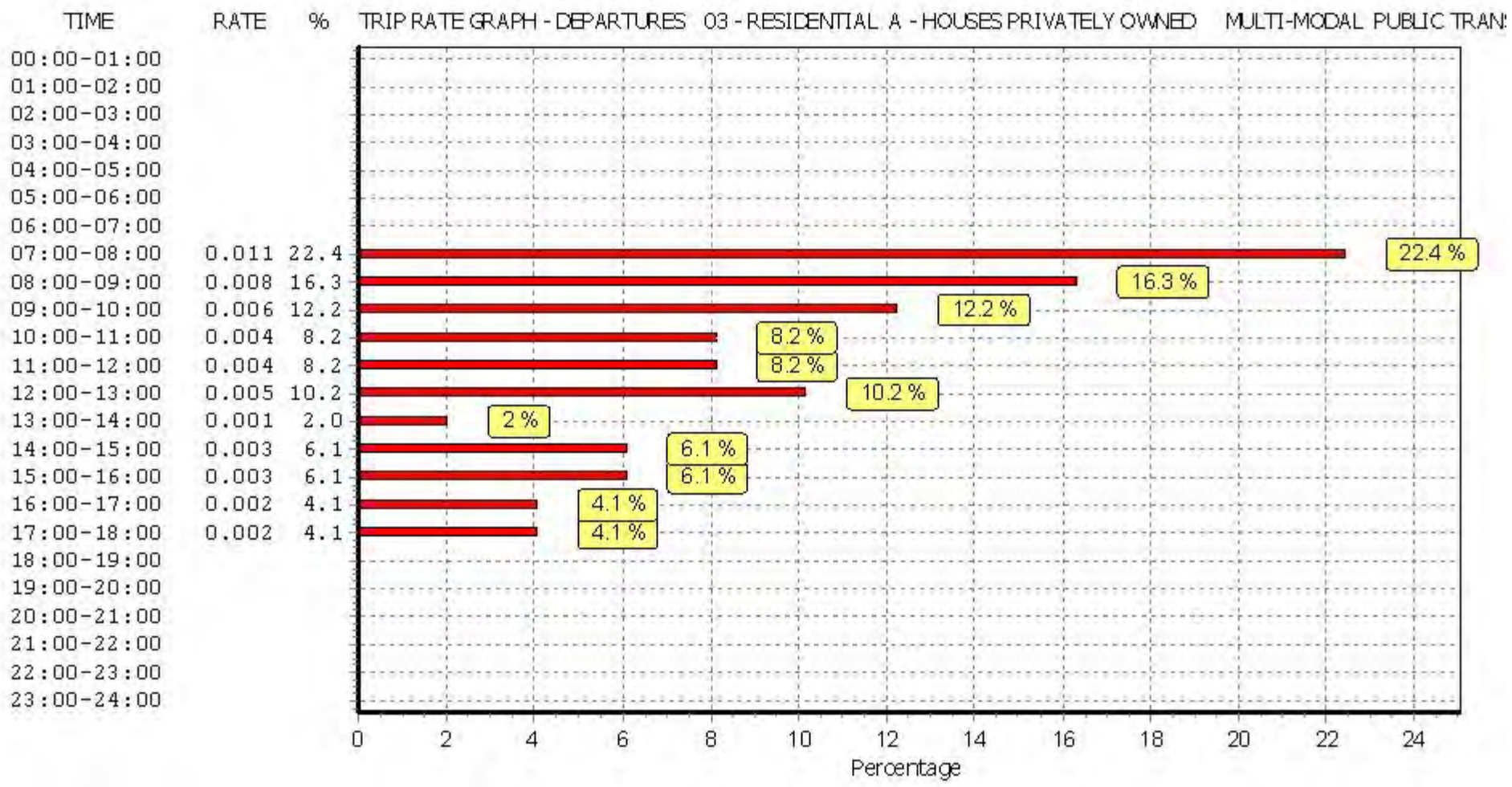

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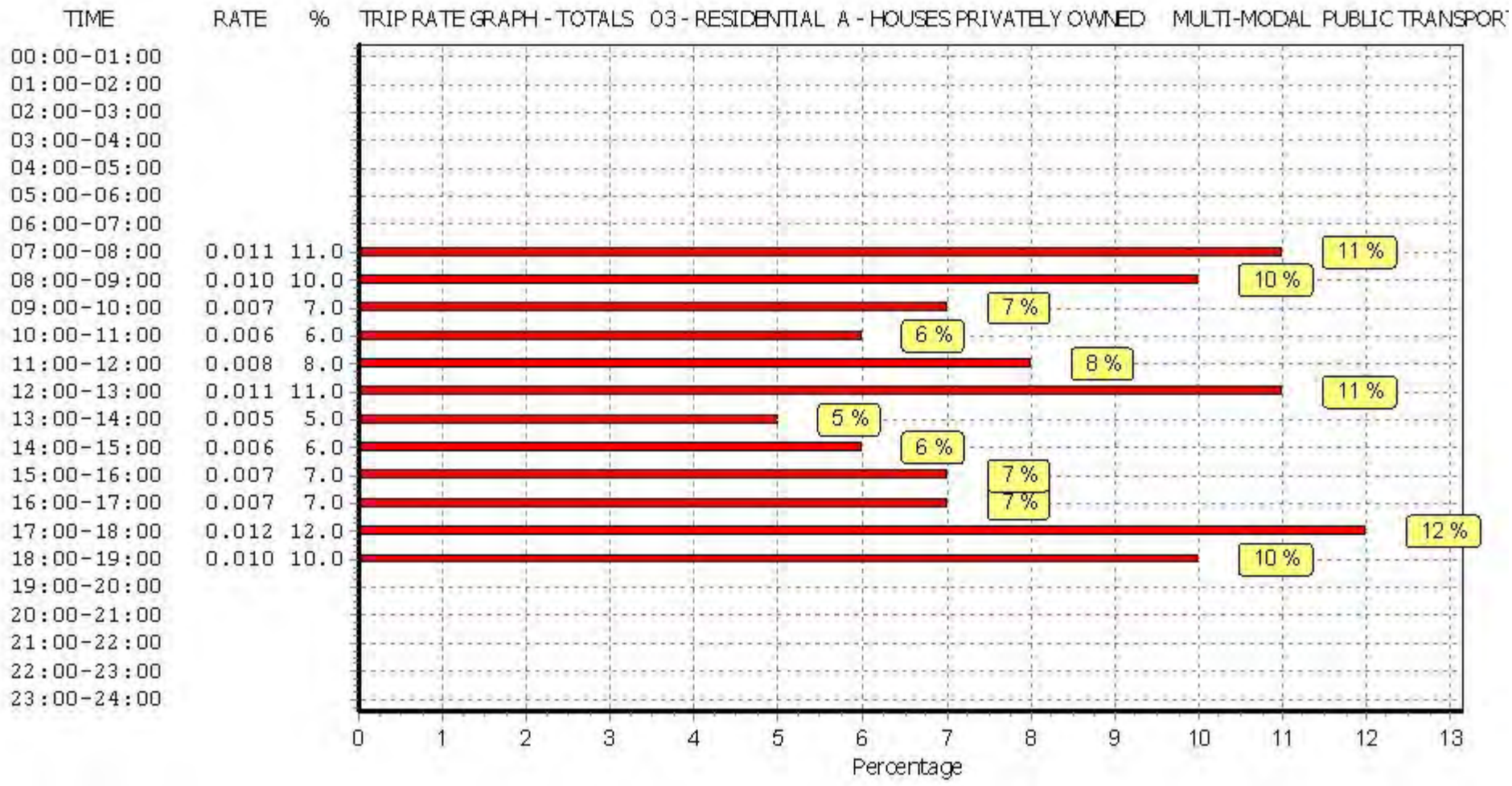

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	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	46	58	0.105	46	58	0.420	46	58	0.525
08:00 - 09:00	46	58	0.220	46	58	0.738	46	58	0.958
09:00 - 10:00	46	58	0.217	46	58	0.285	46	58	0.502
10:00 - 11:00	46	58	0.215	46	58	0.269	46	58	0.484
11:00 - 12:00	46	58	0.233	46	58	0.241	46	58	0.474
12:00 - 13:00	46	58	0.259	46	58	0.240	46	58	0.499
13:00 - 14:00	46	58	0.245	46	58	0.246	46	58	0.491
14:00 - 15:00	46	58	0.256	46	58	0.285	46	58	0.541
15:00 - 16:00	46	58	0.575	46	58	0.344	46	58	0.919
16:00 - 17:00	46	58	0.509	46	58	0.286	46	58	0.795
17:00 - 18:00	46	58	0.525	46	58	0.280	46	58	0.805
18:00 - 19:00	46	58	0.348	46	58	0.268	46	58	0.616
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.707			3.902			7.609

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:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	46
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

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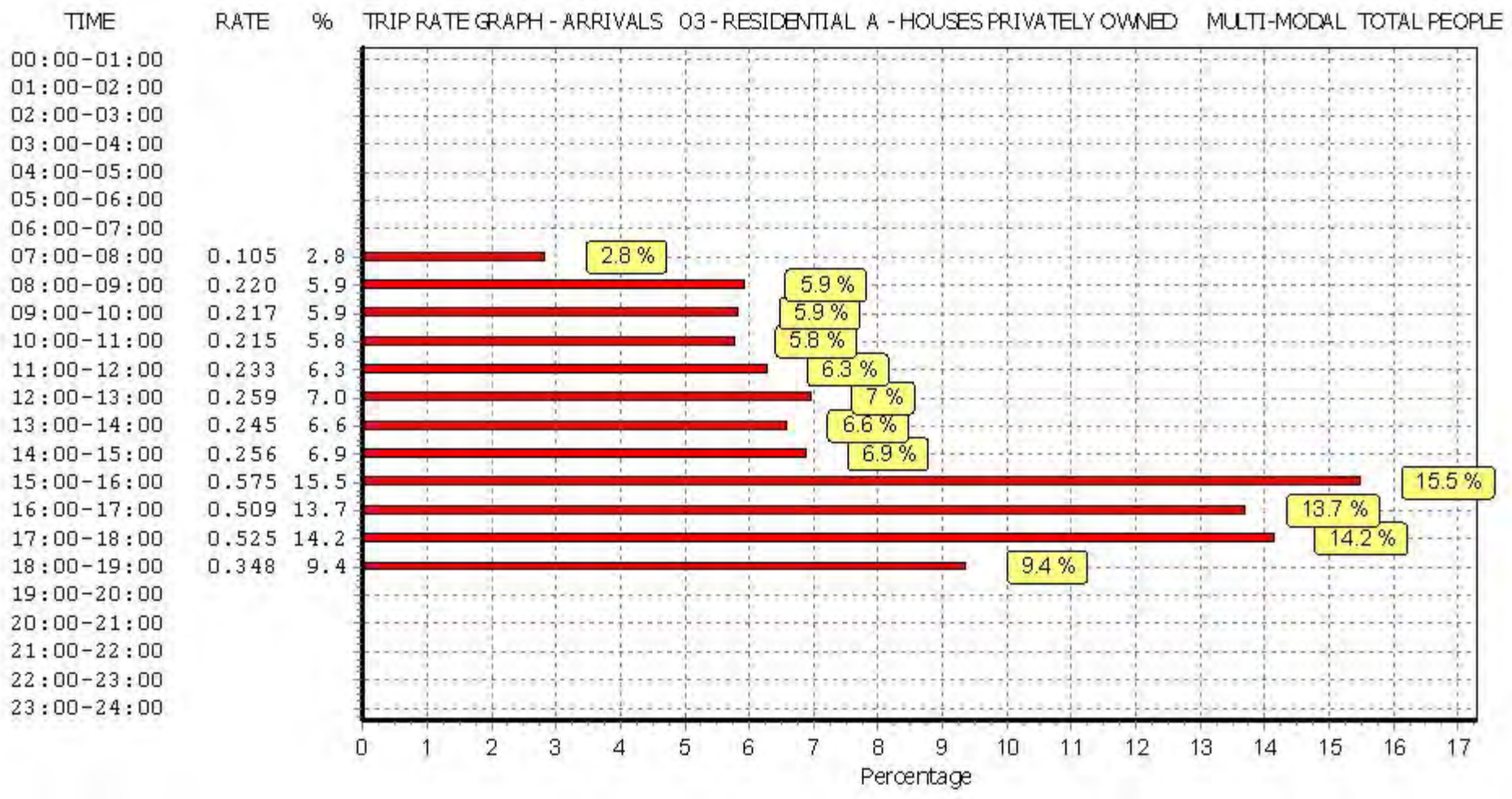

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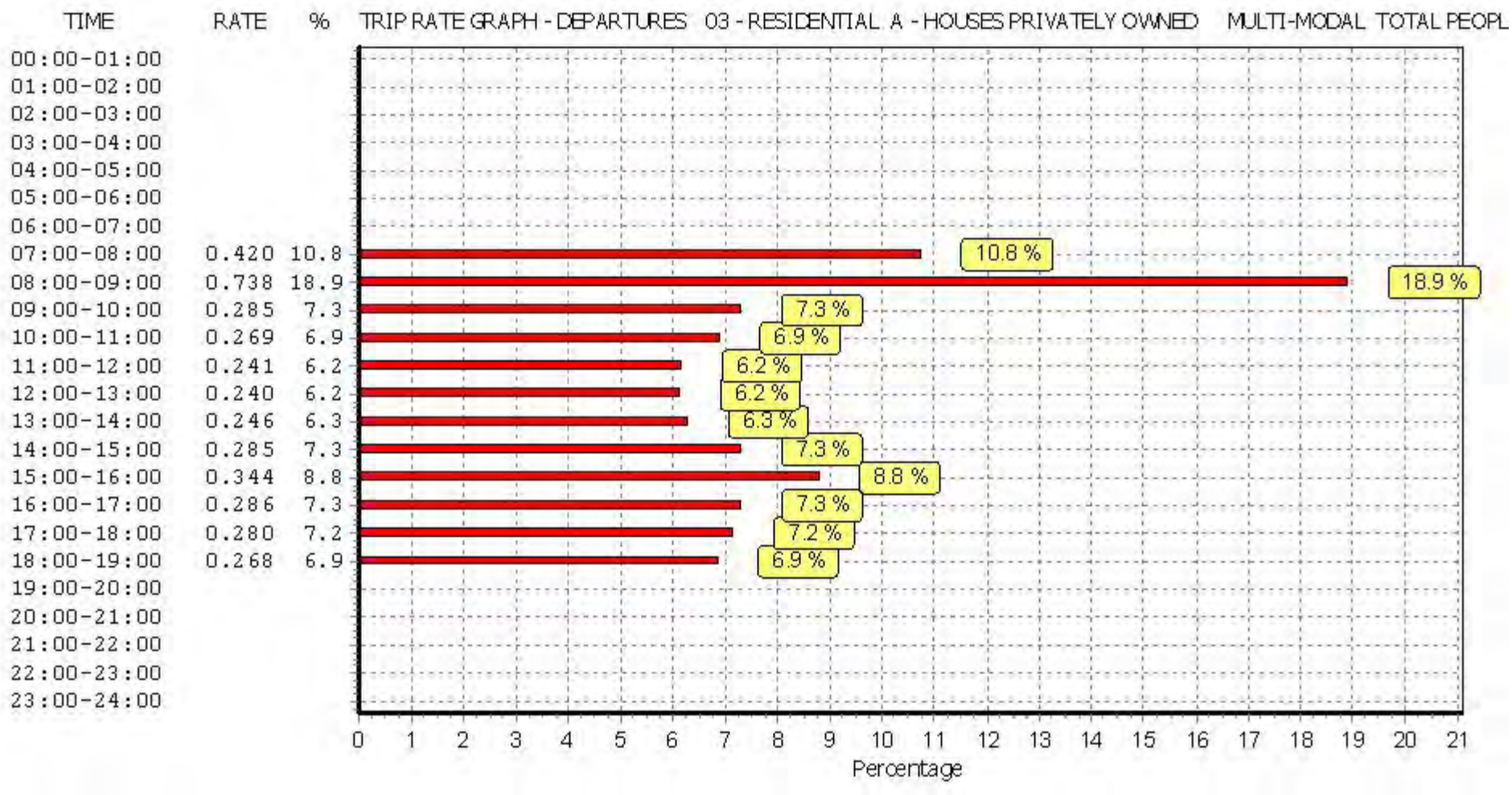

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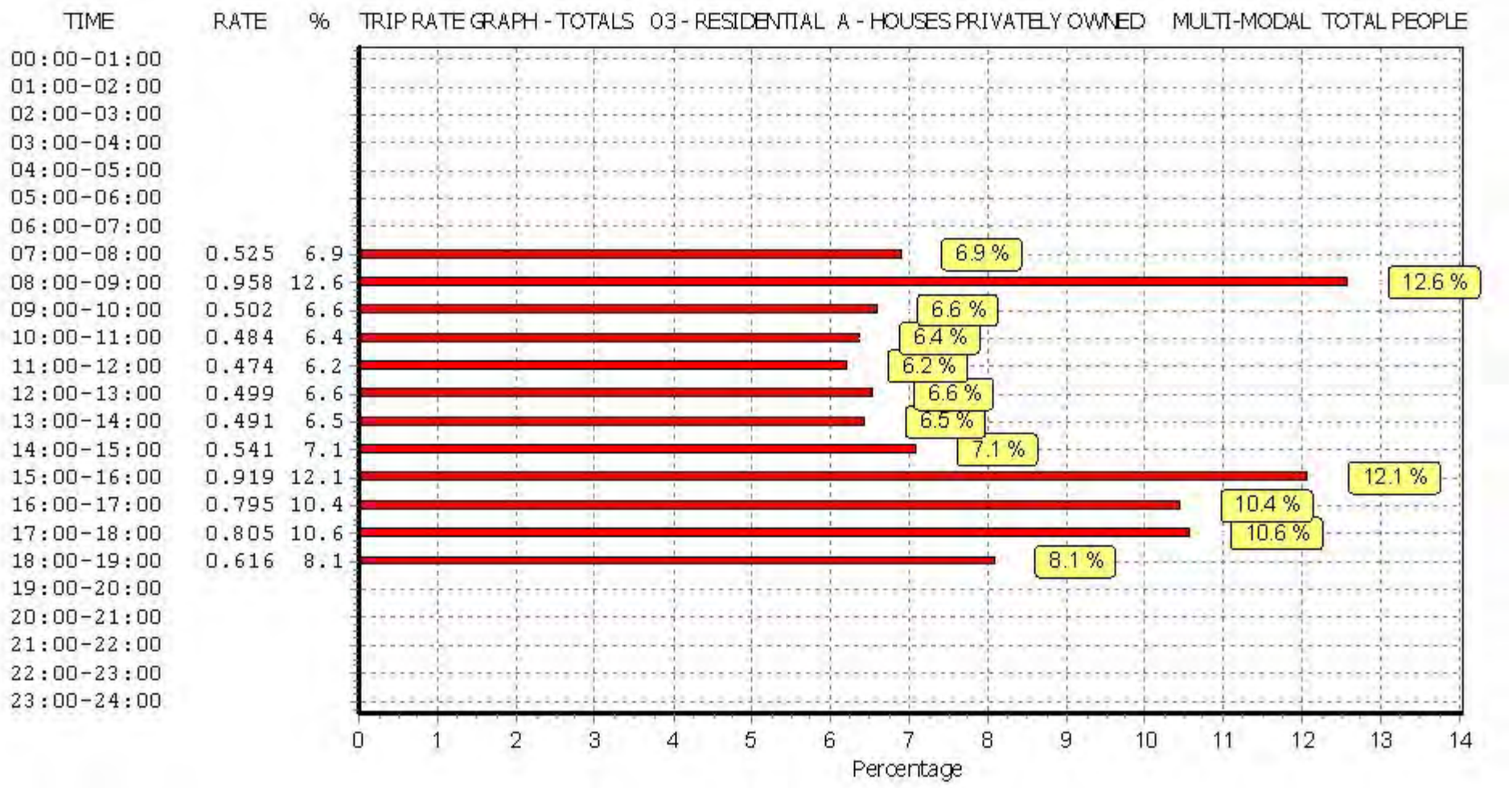

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