



INVICTA HOUSE

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MANCHESTER
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HENRY BOOT DEVELOPMENTS &
KE HOTELS

TRANSPORT STATEMENT

MODE
322785 TS
APRIL 2017



mode

transport planning



KE Hotels/ Henry Boot Developments

Invicta House, Manchester

Transport Statement

March 2017



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Invicta House, Manchester Transport Statement



Project No: J322785



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Status: FINAL

Issue no: 1

Date: 31 March 2017

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1 Introduction

1.1 Background

1.1.1 mode transport planning ('mode') has been commissioned by KE Hotels/ Henry Boot Developments (the 'Client') to provide highways and transportation advice in relation to a planning application for a hotel on the Invicta House site off Atkinson Street in Manchester City Centre.

1.2 Development Proposals

1.2.1 The current development proposals for the hotel include the following:

- 145 bedroom with a bar/ restaurant and gym;
- No on-site car parking; and
- Secure cycle parking.

1.3 Methodology and Scoping Discussions

1.3.1 This Transport Statement (TS) has been produced in accordance with current guidance, Department for Transport (DfT) "Transport Evidence Bases in Plan Making and Decision Taking" (2014) which superseded "Guidance on Transport Assessment" (2007). While the 2014 guidance places a focus on agreeing a scope of works with the Local Highway Authority, the 2007 guidance nonetheless remains instructive and therefore will inform the structure of the TS.

1.3.2 A scoping meeting was held with Manchester City Council (MCC) Development Control Officers on Friday 24th March 2017 at which the methodology for this TD was agreed.

1.3.3 An on-going transport planning process at the site will be required in line with Government Policy to ensure the efficient operation of the site. A Travel Plan will therefore also be implemented at the site. A Framework Travel Plan has also been prepared which includes details of incentives to encourage sustainable travel from the onset of occupation.

1.3.4 This TS together with the Framework Travel Plan considers the impact of the proposed development on the local highway network in line with the methodology and parameters agreed at the scoping meeting.



1.4 Planning History

1.4.1 The proposed development site was subject to a recent planning consent for a commercial development. Details are as follows:

- Planning Application No. 111302/FO/2016/C1
- Redevelopment of Invicta House for office development (Use Class B1) with ground floor ancillary use (Use Classes A1/A2/A3/A4). Partial demolition of existing building with retention and refurbishment of main facade and erection of eight storey building (Use Class B1) to the rear.
- Approved 18th November 2016

1.5 Report Structure

1.5.1 Following this introduction, the TS has been structured as follows:

- **Chapter 2** sets out the relevant national and local transport policy context;
- **Chapter 3** describes the existing situation, including a description of the surrounding transport facilities;
- **Chapter 4** outlines the development proposals;
- **Chapter 5** analyses the recent road accident data;
- **Chapter 6** summarises the sustainable accessibility of the site;
- **Chapter 7** considers the potential highway impact;
- **Chapter 8** provides an overview of construction traffic; and
- **Chapter 9** summarises and concludes the findings of the report.

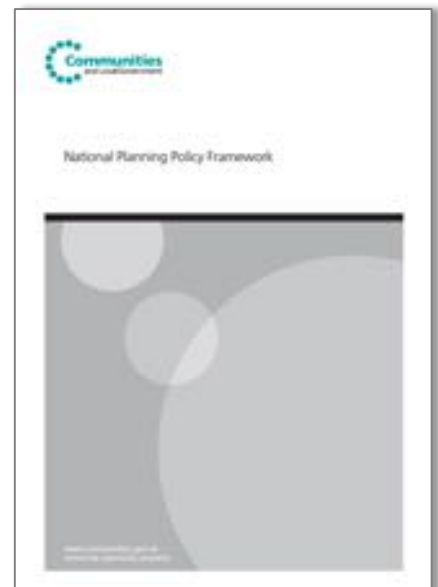
2 Policy Review

2.1 Overview

- 2.1.1 This section considers the key transport-related policies at a national and local level that relate to development planning, and subsequently provides a summary as to how the development proposals will help to deliver policy aims and objectives.

2.2 National Planning Policy Framework

- 2.2.1 The **National Planning Policy Framework**, 2012 (NPPF) was published by the UK Government, superseding the previous national policy documents, Planning Policy Guidance (PPGs) and Planning Policy Statements (PPSs). National planning policies have been revised to place a greater emphasis on the need to promote development, to assist in driving the economy forward, whilst also maintaining a need for sustainability.
- 2.2.2 The NPPF Chapter 4 “Promoting Sustainable Transport” notes that all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment.
- 2.2.3 Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people whereby “the need to travel will be minimised and the use of sustainable travel modes can be maximised” (Paragraph 43), therefore developments should be located and designed where practicable to:
- Accommodate the efficient delivery of goods and supplies;
 - Give priority to pedestrian and cycle movements and have high quality public transport facilities;
 - Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;





- Incorporate facilities for charging plug in and other ultra-low emissions vehicles; and
- Consider the needs of people with disabilities by all modes of transport.

2.2.4 The development proposals relate to an outline planning application, with the internal site layout a reserved matter at this stage. Notwithstanding this, the development proposals, detailed in Section 4, have been developed to maximise the use of sustainable modes by all people. Furthermore, the development site is located to enable advantage to be taken of existing sustainable transport opportunities, as considered in detail in Section 6.

2.2.5 In respect of parking provision, contrary to previous planning guidance, the Framework does not support the setting of standards for maximum or minimum levels. Instead, Paragraph 39 states that when setting local parking standards for residential and non-residential development, local planning authorities should take into account:

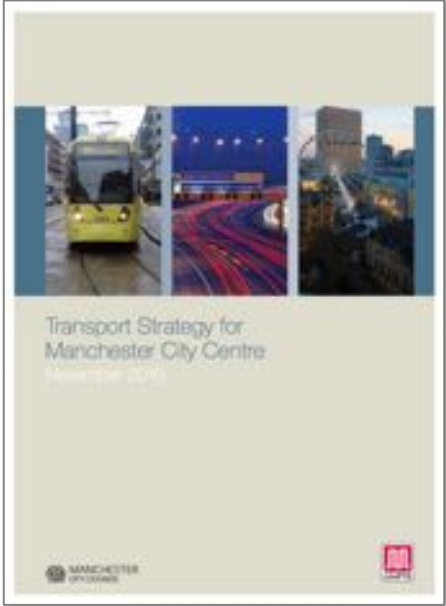
- The accessibility of the development;
- The type, mix and use of the development;
- The availability of and opportunities for public transport;
- Local car ownership levels; and
- The overall necessity to reduce the use of high-emission vehicles.

2.2.6 The development proposals do not provide on-site car parking provision, in recognition of the site's highly accessible location.

2.2.7 In respect of the overall acceptability of development proposals from a transportation perspective, it should be noted that NPPF makes clear that, "Developments should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe" (Paragraph 32). Therefore, based on the findings of the remainder of the TA, the document will conclude with an assessment as to whether or not the transport impact of the proposed development is considered to be "severe".

2.3 The Transport Strategy for Manchester City Centre

2.3.1 The *Transport Strategy for Manchester City Centre* (2010) was developed by MCC and TfGM, in consultation with Salford City Council, to ensure that the transport network can support Manchester's economic growth forecast to 2020, and delivery of the Strategic Plan for Manchester City Centre published in 2009.

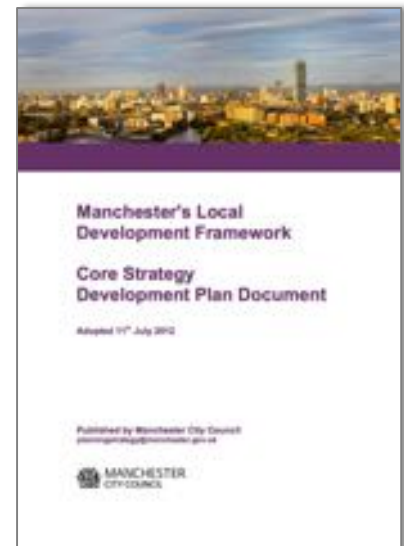
- 2.3.2 The Strategy sets out a transport masterplan to provide the City Centre with a world-class transport system and the City Centre a better place to live, work, invest and relax. The Strategy sets out the potential for employment in the city centre to grow by 50,000 by up to the early 2020s. These new jobs will cause the number of trips into the city centre to grow by a third. To retain essential labour market connectivity, the main thrust of this strategy is to maintain access to the city centre by all modes and to strengthen public transport capacity and quality, together with improving conditions for cyclists and pedestrians. This additional capacity will allow an increasing number of people to switch to more sustainable modes of transport; a process that will be encouraged through a package of measures to promote Smarter Travel and behavioural change.
- 
- 2.3.3 The vision for the transport network in the City Centre is to support the ongoing sustainable economic growth of the city centre, maintaining Manchester's position as a key location where people choose to work, shop and live, this is supported by four key objectives:
- "Supporting the competitive advantage of current and future employer, by ensuring access to the city centre;
 - Providing improved access to the employment, cultural and leisure opportunities that a growing city centre offers to Manchester's residents, workers and visitors;
 - Tackling the issues of climate change and delivering a low-carbon economy in a manner that is both environmentally and economically sustainable; and
 - Improving actual and perceived personal safety and security."
- 2.3.4 As set out in Section 6 of this TS, the proposed development site is centrally located for access to complimentary residential, retail and food/drink land uses nearby in Manchester City Centre that could realistically be walked to be employees based at the development. Section 6 of this TA also demonstrates that the site is highly accessible by sustainable modes of travel from locations further afield. The proposed redevelopment of Invicta

House is therefore considered to be in accordance with the Transport Strategy for Manchester City Centre.

2.4 Manchester Local Development Framework Core Strategy (2012)

2.4.1 The **Manchester Local Development Framework (LDF) Core Strategy (2012)** covers a 15-year period from 2012 – 2027. The Cores Strategy outlines the council's vision for Manchester and identifies policies within six Strategic Objectives (SOs) to deliver that vision, one of which is Transport (SO6), which reads as follows:

Improve the physical connectivity of the City, through sustainable transport networks, to enhance its functioning and competitiveness and provide access to jobs, education, services, retail, leisure and recreation.



2.4.2 In order to meet SO6, the Core Strategy provide three specific polices relating to Transport. These are set out below, followed by consideration as to how the development proposals accord with each of the three Transport policies.

Policy T1 Sustainable Transport

2.4.3 To deliver a sustainable, high quality, integrated transport system to encourage modal shift away from car travel to public transport, cycling and walking, to support the needs of residents and businesses and to prepare for carbon free modes of transport, the Council will support proposals that: -

- “Improve choice by developing alternatives to the car.
- Promote regeneration and economic vitality by relieving traffic congestion and improving access to jobs and services, particularly for those most in need and for those without a car.
- Improve access to transport services and facilities in order to enable disabled people and people with mobility impairments to participate fully in public life.
- Improve pedestrian routes and the pedestrian environment.



- Improve and develop further Manchester's cycle network (for example the Manchester Cycleway and the Trans Pennine Trail).
- Contribute to improvements to the extent and reliability of the public transport network through safe and attractive waiting and interchange facilities, better priority, improved services and information provision.
- Improve and develop appropriate road, rail and water freight transport routes and associated intermodal freight transport facilities in order to assist in the sustainable and efficient movement of goods.
- Facilitate modes of transport that reduce carbon emissions e.g. by incorporating charging points for electric vehicles, subject to their appropriate design and location.
- Would reduce the negative impacts of road traffic, for example, congestion, air pollution and road accident casualties.
- Take account of the needs of road users according to a broad hierarchy consisting of, in order of priority:
 1. *Pedestrians and disabled people*
 2. *Cyclists, public transport,*
 3. *Commercial access,*
 4. *General off peak traffic,*
 5. *General peak time traffic."*

2.4.4 The development proposals, as set out in Section 4, provide 15 cycle bays. Furthermore, as set out in Section 6, the development site is already located in a highly accessible location, which does not require the use of a private car to reach the development for employees and guests.

2.4.5 Policy T2 Accessible areas of opportunity and need

2.4.6 The Council will actively manage the pattern of development to ensure that new development:-

- Is located to ensure good access to the City's main economic drivers, including the Regional Centre, the Oxford Road Universities and Hospitals and the Airport and to ensure good national and international connections.



- Is easily accessible by walking, cycling and public transport; connecting residents to jobs, centres, health, leisure, open space and educational opportunities.
- Priority will be given to providing all residents access to strategic employment sites including:-
 - Links between North Manchester residents and key employment locations, including the City Centre, Central Park, Salford Quays and Chadderton Industrial Estate and Trafford Park.
 - Links within East Manchester to employment locations, Central Park and Eastlands in particular.
 - Links within Central Area between residents and employment, the Corridor in particular and east/west connectivity for residents in Central Area to employment areas in Trafford and East Manchester.
 - Maintaining strong links between residential areas in the South and the Regional Centre and improving connectivity with the Airport.
 - Ensuring good links between Wythenshawe residents and the Airport and further employment opportunities in Stockport, Trafford and the Regional Centre.
- Within the City Centre, provide a level of car parking which reflects the highly accessible nature of the location, as well as the realistic requirements of the users of the development. Elsewhere, all new development should provide appropriate car parking facilities, taking account of the guidance in Appendix B, which reflects policy in the Regional Strategy (RS). In all parts of the City proposals should have regard to the need for disabled and cycle parking, in line with Appendix B. If the RS is revoked the Council will continue to use these standards when applying this policy. Standards are set for two different area types:
 - District Centres
 - Areas not within the City Centre or District Centres
- The car parking standards are maximums and the cycle and disabled car parking standards are minimums. However, the Council will take the circumstances of each proposal into account to establish what level of parking is appropriate.”



- 2.4.7 Total car parking provision, as set out in Section 4, is within the standards set out in Appendix B of the Core Strategy, and represents a reduction from existing on-site parking provision. This is in accordance with Policy T2, which acknowledges the highly accessible nature of Manchester City Centre.

Policy T3 Strategic Integration

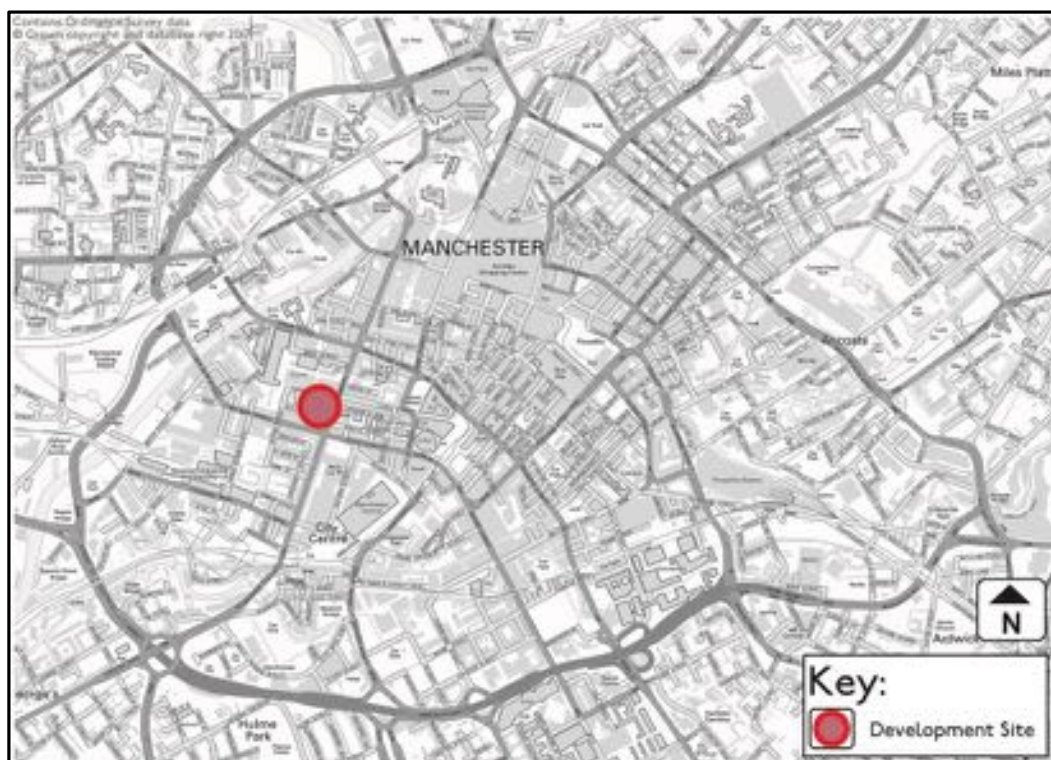
- 2.4.8 The Council will support proposals that contribute to an economically and environmentally sustainable transport network including the following strategic transport initiatives:
- “Metrolink extensions to Rochdale, Oldham, Ashton, South Manchester and the Airport. The Council also supports future aspirations to extend the network to Trafford Park and Stockport.
 - A second Metrolink crossing in the City Centre.
 - A Metrolink extension to Marple on the current heavy rail network.
 - Improvements to the heavy rail infrastructure.
 - The Cross-City Bus Package comprising new connections through the City Centre to Parrs Wood, Middleton and Salford.”
- 2.4.9 The development proposals are in a successfully redeveloped district that now provides a critical mass of centrally-located employment development to make the above strategic transport initiatives viable. The proposals are therefore in accordance with Policy T3.

3 Existing Conditions

3.1 Site Location

3.1.1 The site is located to the west of Deansgate, within the Spinningfields district of Manchester City Centre. The site location is shown in a strategic context in **Figure 3.1**.

Figure 3.1 – Site Location: Strategic Context



3.1.2 The development site comprises the existing Invicta House office and land to the rear currently used as surface-level car parking. Invicta House is located on Atkinson Street, which forms the southern frontage to the site. The surface-level car parking within the site is located on the southern side of Tivoli Street, which connects to Sidney Street, forming a route to Hardman Street to the north. The site is bounded to the east by “The Courthouse” mixed office and restaurant development. To the west, the site fronts a pedestrian walkway, called Scott Place, linking Atkinson Street and Hardman Street. The site location is shown in a local context in **Figure 3.2**.

Figure 3.2 – Site Location: Local Context



- 3.1.3 Invicta House currently comprises B1 office space, with a total building floor space of 9,344sqft (approximately 1,050 Gross Floor Area (GFA)), over three floors and a basement. The surface car park located on Tivoli Street to the rear of the building contains 22 car parking spaces.
- 3.1.4 The Spinningfields district comprises roads to the north and west of the development, including Hardman Street, Byrom Street, Jodrell Street, Wood Street and Gartside Street. The area accommodates a mix of office, restaurant/café, drinking establishment, food retail and non-food retail uses. A similar mix of land uses is located to the east of the development on Deansgate. Furthermore, the office-led mixed use “XYZ” development located on Quay Street/ Byrom Street is on-site and due to complete in 2017.

3.2 Existing Access Arrangements

- 3.2.1 The existing site access on Atkinson Street comprises a pedestrian-only entrance to Invicta House. Adjacent to the main building entrance, to the east, there is a secondary pedestrian entrance located behind a gated area providing direct access to the building basement. Car parking and refuse storage for the site is provided to the rear of the

building, accessed from Tivoli Street via Sidney Street; both of which are adopted highway.

3.2.2 The main pedestrian entrance is shown in **Photograph 3.1**.



Photograph 3.1 – Existing Invicta House Entrance on Atkinson Street

3.2.3 The existing car park is shown in **Photograph 3.2**.



Photograph 3.2 – Existing Invicta House Car Park

3.3 Local Highway Network

Atkinson Street

- 3.3.1 Atkinson Street is a single-carriageway one-way street, extending on an east/ west alignment between Deansgate and Byrom Street. Atkinson Street has a carriageway width of approximately 5.0m with approximately 1.8m to 2.0m wide footways on either side of the carriageway.
- 3.3.2 There are No Waiting at Any Time (NWAAT) parking restrictions in place on either side of the carriageway along the full extent of Atkinson Street, although neither part-time nor full-time loading restrictions are in place.
- 3.3.3 A pedestrianised route, Scott Place, connects Atkinson Street to Hardman Street, to the north-west of the site. Scott Place is approximately 6.0m in width and provides frontage to a restaurant establishment. Dropped kerbs with tactile paving are provided at the junction of Atkinson Street/ Deansgate, as shown in **Photograph 3.3**.



Photograph 3.3 – Uncontrolled Pedestrian Crossing Point Atkinson Street/ Deansgate

Byrom Street

- 3.3.4 Byrom Street is a two-way single carriageway road with one lane in each direction, extending on a south-west/ north-east alignment between Camp Street and Hardman Street. To the south-west of the proposed development site, Byrom Street forms the two minor arms of a four-arm priority crossroads with Quay Street. Byrom Street has a

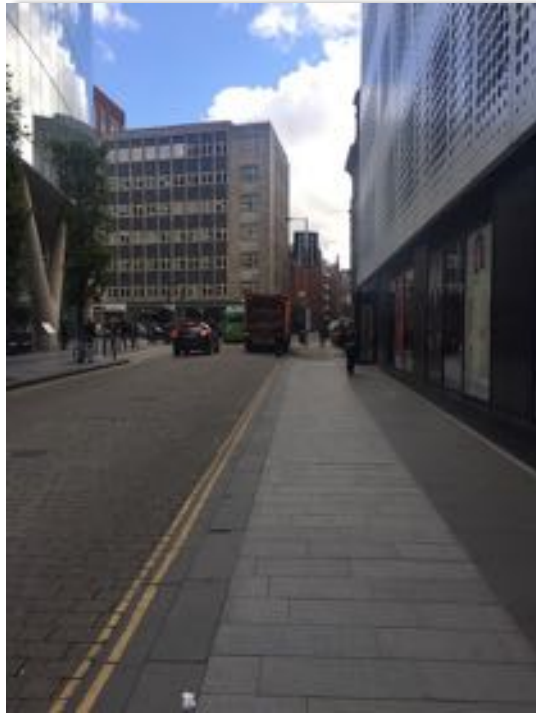


carriageway width of approximately 9.0m. Footways on both sides of Byrom Street are approximately 2.5 to 3.0m wide. Footways are well lit and dropped kerbs and tactile paving at the junction of Byrom Street/ Quay Street.

- 3.3.5 The south-eastern side of Byrom Street between Quay Street and Atkinson Street accommodates on-street loading bays on the southern side of the carriageway, with NWAAT parking restrictions in place between Atkinson Street and Hardman Street.
- 3.3.6 Byrom Street forms the south-eastern boundary of Hardman Square, a pedestrianised public space forming a focal point for the Spinningfields district. As such, several restaurant/café and drinking establishment developments are located within Hardman Square and are accessible on-foot from Byrom Street.
- 3.3.7 Byrom Street, together with Hardman Street, form the South-East Service Road for the wider Spinningfields Development. It is now an established corridor of servicing activity and provides the connection between Quay Street and Deansgate. This route adjoins Deansgate via a priority junction.

Hardman Street

- 3.3.8 Hardman Street is a two-way single carriageway with one lane in each direction, extending on a west/ east alignment between Byrom Street and Deansgate. The road has a carriageway width of approximately 6.5m, with an approximate 3.0m footway on the southern side and an approximate 4.0m footway on the northern side. The generous footway width provided represents the road's central location within the Spinningfields district. The road provides a pedestrian route between Deansgate and Hardman Square and a pedestrian route to "The Avenue" pedestrianised shopping street to the north. Additionally, it provides a route to a dedicated pedestrian connection to Atkinson Street. Footways on Hardman Street can be seen in **Photograph 3.4**.



Photograph 3.4 – Hardman Street, looking eastwards

- 3.3.9 Hardman Street provides servicing access to “The Avenue” via a dedicated service road located at the road’s mid-point, on the northern side of the carriageway. To the west of this point, there are on-street loading bays serving office developments on Hardman Street, while at the eastern end of Hardman Street adjacent to the junction with Deansgate there is a taxi-only waiting bay on the northern side of the carriageway. Elsewhere on Hardman Street, there are NWAAT parking restrictions in place. It should be noted that loading restrictions are only provided on a short section in the vicinity of the junction of Hardman Street/ Deansgate, and on the northern side of the carriageway only.

Tivoli Street/Sidney Street

- 3.3.10 Tivoli Street/ Sidney Street are two adjoined roads forming two-way, single-carriageway cul-de-sac, which together provide access to the rear of the development site.
- 3.3.11 Tivoli Street bounds the site to the north, along a west/east alignment, and currently provides access to the existing Invicta House car park. Tivoli Street is approximately 2.7m in width, with an approximate 1.1m wide footway on the northern side.
- 3.3.12 Tivoli Street forms a bend to connect with Sidney Street to the north-east, which continues on a south/ north alignment to form a priority junction onto Hardman Street. Sidney Street varies in width from approximately 2.9m at its northern end, at the junction

with Hardman Street, to a minimum of approximately 2.2m close to where the road adjoins Tivoli Street. Sidney Street has an approximate 1.9m wide footway on its western side, bounding the Mediacom building, and an approximate 0.9m wide footway on the eastern side, bounding The Courthouse building

3.3.13 Tivoli Street can be seen in **Photograph 3.5**.



Photograph 3.5 – Tivoli Street, looking westwards

3.3.14 Sidney Street accommodates the gap between the existing 1 Hardman Street office development and The Courthouse mixed-use development, both of which have service/refuse accesses onto Sidney Street. In light of the roads' width, servicing vehicles for both buildings load at Hardman Street, and waste containers are wheeled from Sidney Street to Hardman Street and returned following collection. As such, Tivoli Street/Sidney Street together provide vehicular access to the Invicta House car park only and accommodate no other regular vehicular movements.

Deansgate

3.3.15 Deansgate is located to the south-east of the site and is one of the primary pedestrian and vehicular routes through Manchester City Centre. In the site vicinity, Deansgate has a carriageway width of approximately 12m and the footways on either side are approximately 3.0m wide.

3.3.16 NWAAT restrictions apply on Deansgate in the vicinity of the site and there keep clear yellow-box junction at the intersection with Hardman Street.

- 3.3.17 A signalised pedestrian crossing is located on Deansgate to the north at the junction of Deansgate/ Hardman Street, which allows for pedestrian permeability between the site and locations to the east of Deansgate. The section of Deansgate in the vicinity of the site also benefits from having a bus stop on both sides of the carriageway, located to the north of the junction with Hardman Street. This crossing and bus stop are shown in **Photograph 3.6** and **Photograph 3.7** respectively.



Photograph 3.6 – Pedestrian Crossing on Deansgate



Photograph 3.7 – Bus Stop on Deansgate



3.4 Modal Split

3.4.1 The journey to work data for the 2011 census for the four city centre wards in Manchester City Centre has been used to establish the modal split for staff at the proposed hotel.

3.4.2 The modal split is shown in **Table 3.1**.

Table 3.1 – Modal Split

Mode	%
Metro, Light Rail and Tram	6%
Train	16%
Bus	24%
Motorcycle	0%
Taxi	0%
Driving	35%
Car Passenger	4%
Cycle	3%
Walking	12%
Total	100%

4 Development Proposals

4.1 Development Proposals

4.1.1 The current development proposals for the hotel include the following:

- 145 bedrooms with a bar/ restaurant and gym;
- No on-site car parking; and
- Secure cycle parking.

4.1.2 A ground floor plan prepared by the architect, ICA, is attached in **Appendix A**.

4.2 Site Access Arrangements

4.2.1 The site access arrangements for the proposed development comprises:

- The main pedestrian access to the hotel off Scott Place.
- A pedestrian access for staff provided to the rear of the building off Tivoli Street.
- To the rear of the building, separate pedestrian entrances are provided as follows:
 - A service/delivery access into the main building,
 - Access the bin store;
 - A switch room (not accessible from within the main building);
 - A meter room (not accessible from within the main building); and
 - An electricity sub-station (not accessible from within the main building).

4.3 Cycle Parking

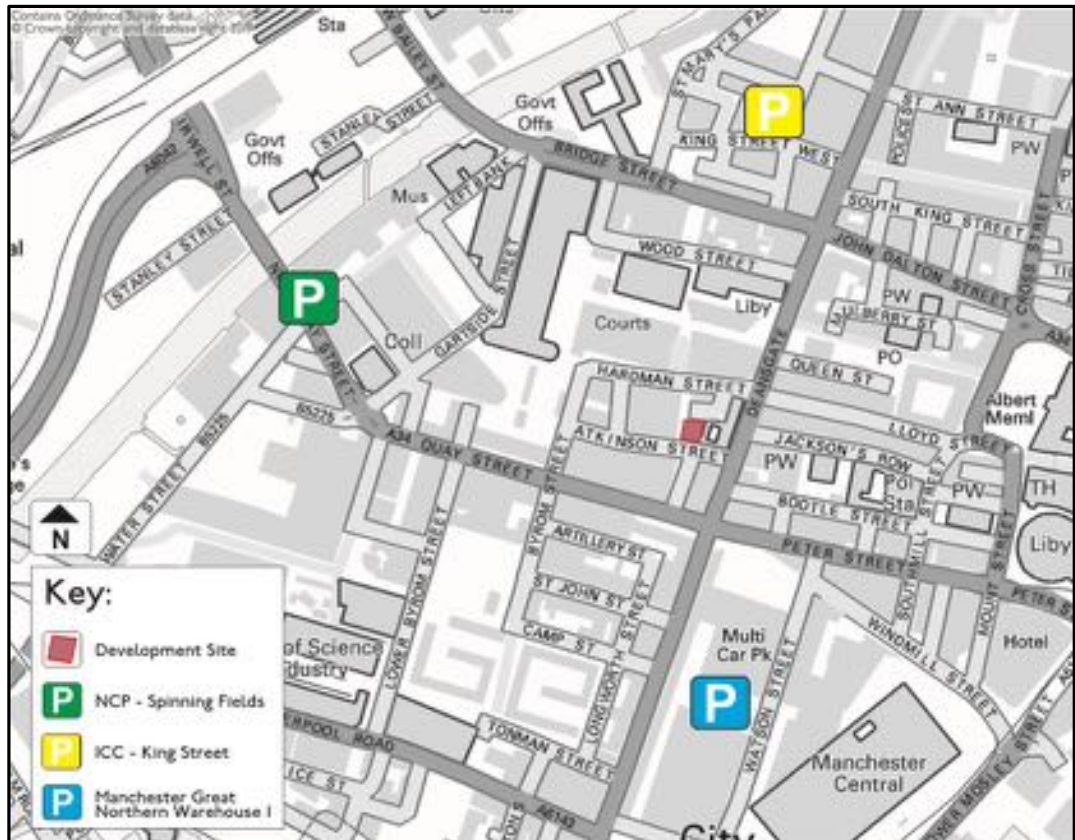
4.3.1 MCC parking standards require the provision of 1 cycle parking space per 10 bedrooms. In accordance with the MCC cycle parking standards a minimum of 15 secure spaces will be provided.

4.4 Parking

4.4.1 No car parking is proposed as part of the development. The existing 22 car parking spaces will be removed to facilitate the new building.

4.4.2 Notwithstanding this, there are plenty of off-site public car parking available in the city centre. The main public car parks within a 500m walk of the site are shown in **Figure 4.1**.

Figure 4.1 – Public Car Parks, 500m Catchment from Site



4.4.3 As can be seen in **Figure 4.1**, there are three major car parks within 500m of the development, which are as follows:

- NCP Spinningfields (Quay Street): 680 spaces, including 35 disabled bays;
- ICC (King Street): 544 spaces, including 5 disabled bays; and
- Manchester Great Northern (Deansgate): 519 spaces, including 24 disabled bays.

4.4.4 This equates to at least 1,743 public car parking spaces accessible 500m from the site all of which is within a 5 to 6 minute walk time.

4.5 Drop-Off/ Pick-Up

4.5.1 There is insufficient space to provide a layby in Atkinson Street. However, it is likely that some taxi drop-offs and pick-ups will occur on Atkinson Street. In addition to this, taxi

drop-offs and pick-ups are likely to take place from Deansgate within the existing buildout adjacent to the retail units on the southern side. **Photograph 4.1** shows the buildout location on Deansgate.



Photograph 4.1 – Existing Buildout on Deansgate

- 4.5.2 To control drop-offs and pick-ups, the hotel will have an agreement with a local taxi company to minimise any waiting vehicles on Atkinson Street.

4.6 Servicing/ Refuse Collection

Deliveries

- 4.6.1 It is anticipated that the operational hotel will have approximately 35 deliveries per week comprising linen, food, drink, cleaning materials and stationary. This equates to 5 deliveries on a typical weekday, which can occasionally rise to 8 deliveries during busy periods.
- 4.6.2 Deliveries will typically be made by car vans and transit vans. Whilst the smaller vehicles will be able to utilise Sidney Street/ Tivoli Street, larger vehicles will make deliveries from Hardman Street, adjacent to The Courthouse.

Refuse

- 4.6.3 It is anticipated that there will be approximately two refuse collection per week.
- 4.6.4 The refuse storage area for the development would be located to the rear of the site on Tivoli Street, which is connected to the wider highway network via Sidney Street.
- 4.6.5 Sidney Street is not suitable for access by large vehicles, therefore promoting refuse vehicle access to the development directly from Sidney Street/ Tivoli Street would be inappropriate.
- 4.6.6 In light of the above, it is proposed that waste collection and servicing movements would be made from Hardman Street. Specifically, a dedicated loading area adjacent to the junction of Hardman Street/ Sidney Street which was previously agreed with MCC Highways and provided as part of the adjacent Courthouse development.
- 4.6.7 **Drawing J32-2785-PS-001** attached in **Appendix B** shows the proposal for a loading/unloading bay in Hardman Street.
- 4.6.8 The location of this bay has been observed in use by a refuse vehicle servicing The Courthouse, as shown in **Photograph 4.2**.



Photograph 4.2 – Servicing Area on Hardman Street



-
- 4.6.9 The expansion of the Invicta House site northwards onto the land currently occupied by surface car parking will mean that the refuse storage area will be located a short distance from Tivoli Street.
- 4.6.10 The use of the above established servicing area on Hardman Street would avoid refuse vehicles having to reverse either into or out of Sidney Street/Tivoli Street, and therefore provides a safe and appropriate location for servicing movements.
- 4.6.11 Deliveries and refuse collections will be managed by on-site staff to ensure compliance BS 5906 'Waste Management in Buildings'.

5 Road Accident Analysis

5.1 Overview

- 5.1.1 Accident analysis has been undertaken in order to determine if the proposed development is likely to have an impact on accident rates.
- 5.1.2 Accident data for the reported Personal Injury Accidents (PIAs) in the local area have been obtained from Transport for Greater Manchester (TfGM) for the most recent five-year period (01/01/2012 – 01/12/2016).
- 5.1.3 The area included Deansgate, Atkinson Street, Hardman Street, Byrom Street and Sidney Street/ Tivoli Street.

5.2 Accident Analysis

- 5.2.1 A total of seven PIAs were recorded during the most recent five year period. **Table 5.1** provides a summary of the accidents by severity.

Table 5.1 – Five Year Personal Accident Data Summary

Severity	Year					
	2012	2013	2014	2015	2016	Total
Fatal	0	0	0	0	0	0
Serious	0	0	0	1	0	1
Slight	0	1	2	3	0	6
Total	0	1	2	4	0	7

- 5.2.2 The data indicates seven PIA records within the search area. The severity of all but one PIA records is categorised as “slight”, with one “serious”.
- 5.2.3 The one serious accident was caused by a pedestrian, travelling south down Deansgate, stepping out into the path of a vehicle turning left from Deansgate onto Lloyd Street.
- 5.2.4 The detailed review of the accidents indicated that there was not a specific cause of the accidents and that they were not attributable to the road design or layout. The types of



accidents were typical of an urbanised network and the frequency and nature of PIA's does not indicate a specific highway safety issue that would need to be addressed as part of these proposals.

5.3 Summary

A review of the PIA data provided by TfGM shows that recorded accident numbers in the local vicinity of the site over a five-year period are low. In addition to this, accidents which have occurred a low in severity with only one accident being serious. There are no correlations identified to suggest that the proposed development will have a negative impact on highway safety.

6 Sustainable Transport Accessibility

6.1 Pedestrian Accessibility

6.1.1 Guideline walking distances provided in the Chartered Institute of Highways and Transportation (CIHT) document, “Guidelines for Providing Journeys on Foot”, are shown in **Table 6.1**.

Table 6.1 – CIHT Guideline Acceptable Walking Distances

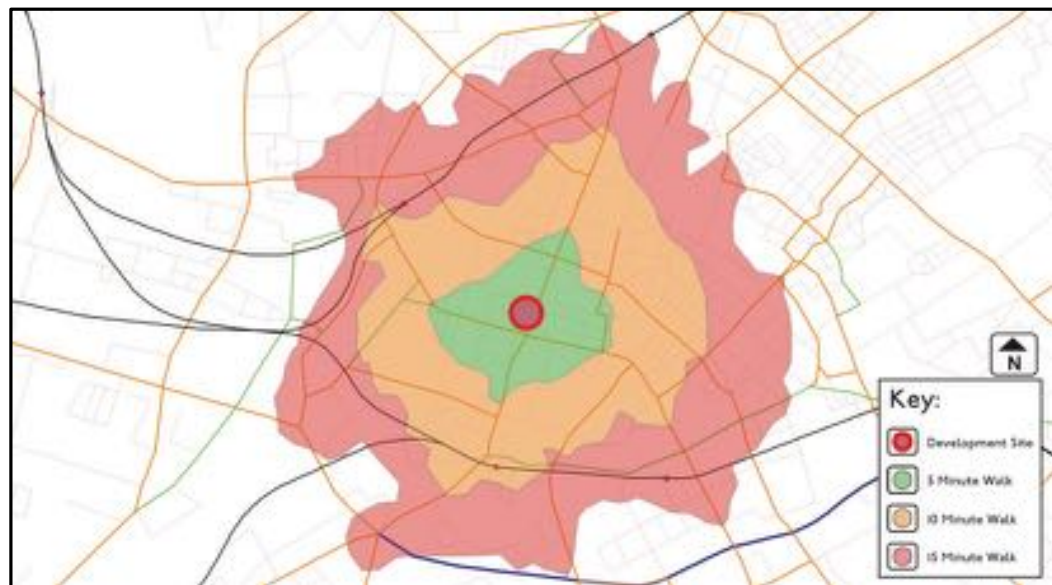
Criteria	Town Centre	Commuting / Sight Seeing	Elsewhere
Desirable	200m	500m	400m
Acceptable	400m	1,000m	800m
Preferred Maximum	800m	2,000m	1,200m

6.1.2 Appropriate walking distances are dependent upon the location of the specific development; more remote locations will see people being prepared to walk further to their end destination. Similarly, appropriate walking distances are also dependent upon the standard of existing pedestrian infrastructure provision, with further walking distances achievable in locations with extensive and high quality pedestrian footways, crossings and pedestrianised areas.

6.1.3 As described in Section 3, good quality pedestrian footways are provided in the vicinity of the site, with minimum 3.0m wide footways on Deansgate and Hardman Street, and with access to restaurant/café and drinking establishment developments within the pedestrianised area of Hardman Square a short distance from the site. Furthermore, the proposed developments location within Manchester City Centre provides opportunities for access on foot to a wide range of surrounding developments in and around the city centre, including pedestrianised retail areas located at King Street, St Anne's Square and Market Street.

6.1.4 **Figure 6.1** presents the walking isochrones around the proposed development site for 5 minutes, 10 minutes and 15 minutes.

Figure 6.1 – Walking Isochrones



6.1.5 As can be seen in **Figure 6.1**, most of the key city centre attractions are located within a 15 minute walking time of the proposed development site including the main transport interchanges.

6.1.6 In light of the facilities available within a walking distance of the site, and the good standard of existing pedestrian infrastructure, it is considered that the site is highly accessible for travel on foot.

6.2 Cycle Accessibility

6.2.1 As with pedestrian accessibility, the level of a site's cycle accessibility depends upon a combination of the distance from local amenities and the standard of existing cycle infrastructure. It should, however, be noted that that cycle infrastructure can include facilities shared with vehicles and pedestrians as well as dedicated cycle infrastructure.

6.2.2 In respect of acceptable cycle distances, "Local Transport Note 2/08: *Cycling Infrastructure Design*", published by DfT, states that many utility cycle trips are less than three miles (approximately five kilometres), but for commuter journeys a distance of over five miles (approximately eight kilometres) is not uncommon.

6.2.3 **Figure 6.2** presents the cycling isochrones around the proposed development site for 15 minutes, 30 minutes and 45 minutes.

Figure 6.2 – Cycle Isochrones



6.2.4 As can be seen in **Figure 6.2**, a significant proportion of Manchester City centre and the surrounding wards are accessible within a 3,000m cycle distance from the site. Due to its central location there are an abundance of city centre amenities that can be accessed within a short distance of the site; these include shops, restaurants, cash machines, bars and Post Offices. Further afield, residential areas including Chorlton to the south, Eccles and Salford to the west; Rushholme to the south-east; Higher Blackley and Moston to the north are accessible from the site within the accepted commuter distance of 8 kilometres, thus making sustainable travel a realistic option for employees of the proposed development.

Existing Cycle Infrastructure

6.2.5 The site benefits from the availability of several on-street cycle parking areas within a short distance of the proposed development which provide an important resource to facilitate and encourage cycle movements. There are two cycle shops located along Deansgate to the south of the site that can be accessed within a short distance, along with 'Sheffield cycle parking stands' that are provided immediately next to Invicta House on Hardman Street and are part of a network of city centre cycle parking locations. As stated in Section 4, the proposed development will provide 15 cycle parking spaces in accordance with MCC parking standards.

- 6.2.6 Furthermore, cycle ahead boxes at local road junctions near to the site, such as those found at the junction of Peter Street/ Deansgate and Quay Street, also those found at the junction of Bridge Street/ Deansgate help to further facilitate and encourage cycle movements within the immediate vicinity of the site.
- 6.2.7 The site is located adjacent to a number of established local cycle routes across Manchester City Centre as seen in **Figure 6.3**.

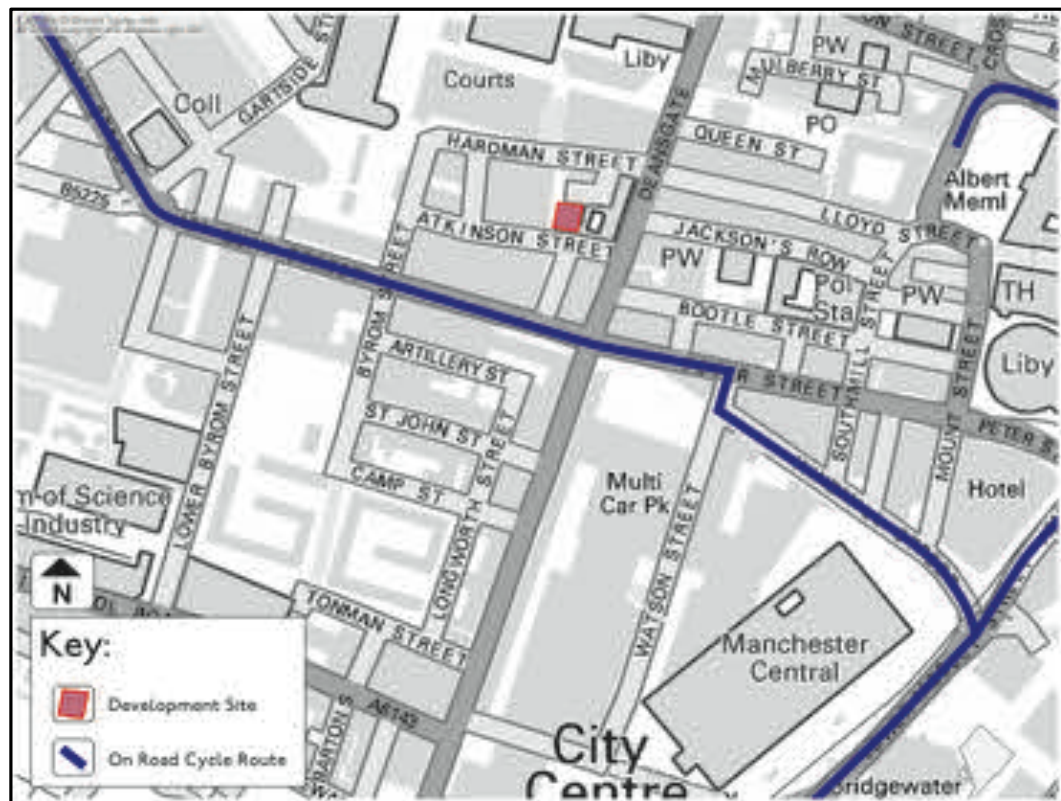
Figure 6.3 – MCC Cycle Network



(Source: TfGM)

- 6.2.8 In addition, the development site is located to recognised on-street route is located to the south of the site along Quay Street as shown on **Figure 6.4**.

Figure 6.4 – Local Cycle Routes



6.2.9 The route shown in **Figure 6.4** provides an on-street route to Salford to the north and to other parts of the city centre via Mosley Street to the south-east. Furthermore, National Route 6 is located to the south of the site on Liverpool Road providing access to South Manchester and Salford, this route in turn connects to National Route 55 which provides access to Eccles and beyond.

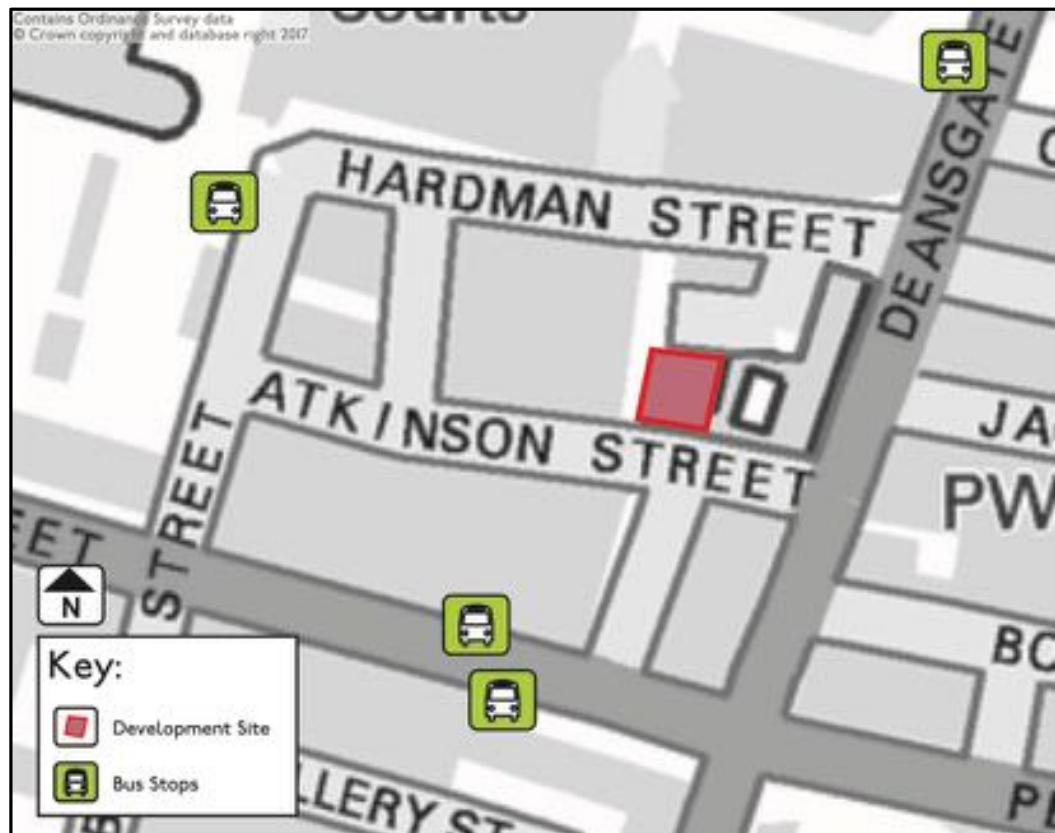
6.3 Public Transport Accessibility

Bus Services

6.3.1 The CIHT document “Planning for Public Transport in Developments” (1999) recommends a walking distance of up to 400m to bus waiting facilities from new developments, which is equivalent to a five-minute walk based on approximately 1.4m/s walking speed.

6.3.2 **Figure 6.5** provides an overview of the bus stop locations in the vicinity of the site.

Figure 6.5 – Local Bus Stops



6.3.3 As shown in **Figure 6.5**, the nearest bus stop to the site is located at the corner of Byrom Street/Hardman Street, which is less than 100m walk from the site. These bus stops are served by the Metroshuttle 2 service only. Additional bus stops within a 400m walk are located on Deansgate to the north-east of the site, and Quay Street to the south west of the site, which are served by Metroshuttle routes 1 and 2.

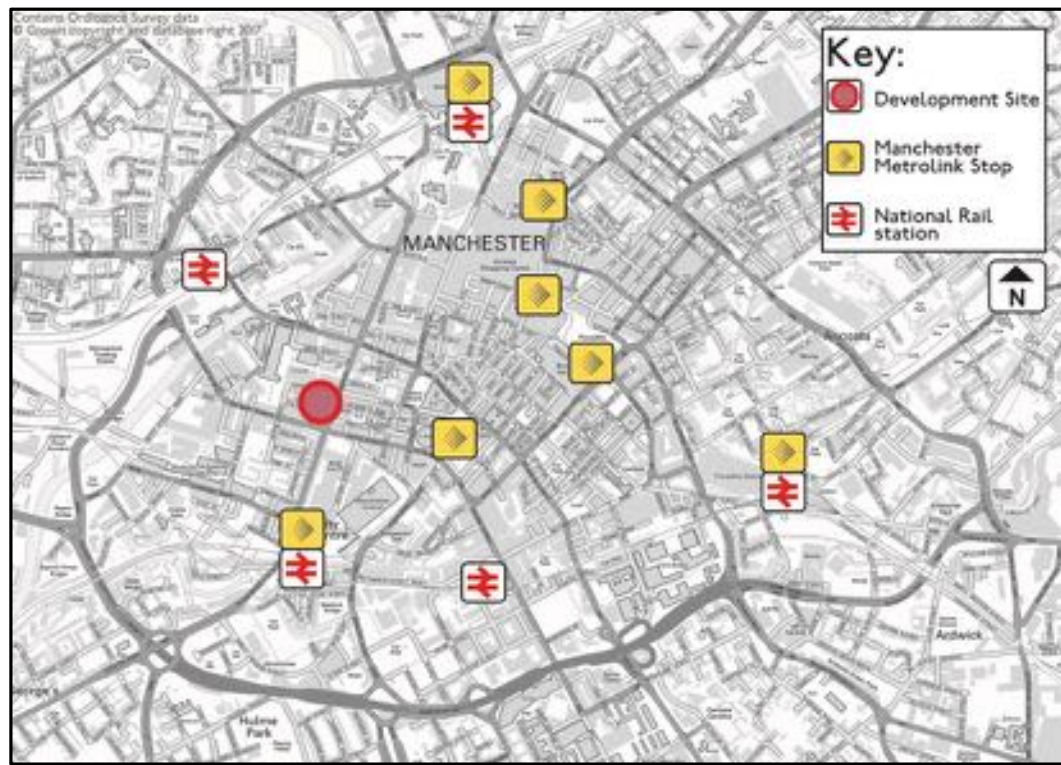
6.3.4 Given the number and frequency of bus services accessible from the site a complete list of destinations has not been presented but further information can be sourced directly from http://www.tfgm.com/journey_planning.

Rail Services

6.3.5 “*Planning for Public Transport in Developments*” recognises that people are often prepared to walk for longer to access rail services compared to bus services, suggesting a typical upper distance threshold of 800m. This is equivalent to a five-minute walk based on approximately 1.4m/s walking speed.

6.3.6 **Figure 6.6** provides an overview of the nearest Manchester Metrolink stops and National Rail stations to the site.

Figure 6.6 – Metrolink and Rail Stations



- 6.3.7 The nearest rail service to the site is accessible from St Peter's Square Metrolink stop, located approximately 500m walking distance to the east of the site. Additionally, Metrolink services can be accessed from Deansgate-Castlefield, approximately 600m walking distance from the site.
- 6.3.8 The nearest National Rail services to the site are accessible from Deansgate Railway Station, located approximately 600m walking distance to the south of the site, while Salford Central Railway Station is also accessible within an 800m walking distance to the north-west of the site. As noted above, the development site is also served by the free Metroshuttle service, which calls at all of the National Rail stations within Manchester City Centre, allowing access between the site and destinations regionally and nationally.
- 6.3.9 In summary, the site is located within a reasonable walking distance to Manchester Metrolink services at St Peter's Square or Deansgate-Castlefield, and is also accessible within a reasonable walking distance to three of the six National Rail stations within Manchester City Centre. The site can therefore be considered to be highly accessible by rail.

6.4 Car Clubs

- 6.4.1 Car Clubs provide employees with the opportunity to participate in a car sharing scheme which offers hourly payment for hire via a fleet of low-emission vehicles located across the city centre. There are a number of locations across Manchester City Centre, with the nearest located at Queen Street, as shown in **Photograph 6.7**.



Photograph 6.7 – Car Club Bays, Queen Street

- 6.4.2 Additional locations within the City Centre are as follows:

Manchester M1

- Tariff Street, City Centre East, M1 2FJ
- Piccadilly Place (off Whitworth St), City Centre, M1 3BG
- Bloom Street NCP, City Centre, M1 3WE
- City Tower (off York Street), Piccadilly, M1 4BE
- Cambridge Street, City Centre South, M1 5GF
- Whitworth Street West, City Centre South, M1 5ND
- Samuel Ogden Street, City Centre, M1 7AX

Manchester M2

- Fountain Street, City Centre, M2 2AN
- Queen Street, Deansgate, M2 5JB

Manchester M3

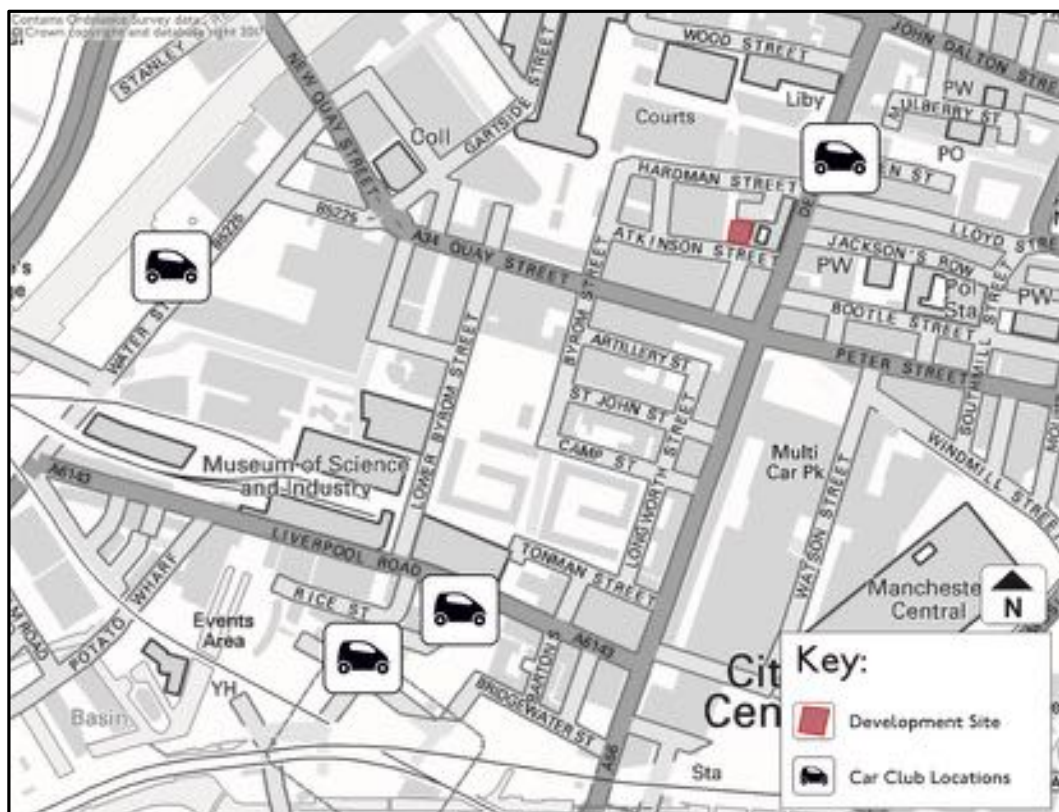
- St Mary's Parsonage, Deansgate, M3 2LG
- Duke Street, Deansgate, M3 4NF

Manchester M4

- High Street, City Centre, M4 1BD
- Chips Building, New Islington, M4 6BX

6.4.3 A plan of Car Club locations in the vicinity of the site is shown in **Figure 6.8**.

Figure 6.8 – Car Club Locations



6.5 Framework Travel Plan

6.5.1 It should be noted that this Transport Statement has been produced in parallel with a Framework Travel Plan (FTP) report, which outlines initial strategies and measures for encouraging employees and guests to travel by sustainable modes. The strategy will be built into the day to day management of the development. The FTP also outlines how the modal split travel patterns of employees will be recorded by on-going surveys and review.



6.6 Summary

- 6.6.1 A review has been undertaken of the site's accessibility by walking, cycling, public transport and sustainable car sharing. The site is located within a reasonable walking distance of local services, and existing pedestrian infrastructure, comprising footways, public squares and pedestrianised areas; controlled crossings is considered to be appropriate to employees and guests of the proposed hotel development.
- 6.6.2 Public transport links are considered to be excellent, with the site being located adjacent to well-served existing bus stops and with rail services accessible within a 5-minute walk and with all railway stations in Manchester City Centre accessible by interchange with an existing free bus service.
- 6.6.3 In addition to the above non-car modes, there is also the opportunity for sustainable car travel to and from the proposed development via shared low-emission vehicles, using Car Clubs.
- 6.6.4 In summary, the development site is considered to be highly accessible by sustainable modes of travel.

7 Traffic Impact Assessment

7.1 Trip Generation

7.1.1 In order to estimate the likely number of vehicular trips to be generated by the proposed development, the industry standard TRICS (7.3.4) database can be interrogated to obtain trip rates, which can in turn be used to estimate the volume of traffic generated by the existing and proposed development.

7.1.2 The full TRICS outputs are attached in **Appendix C**.

7.1.3 A summary of AM and PM peak hour trip rates from the TRICS analysis, calculated per rooms, is shown in **Table 7.1**.

Table 7.1 – Peak Hour Trip Rates for Proposed Developments

	Arrivals	Departures	Total Trips
08:00 – 09:00	0.049	0.123	0.172
17:00 – 18:00	0.088	0.052	0.14

7.1.4 The trips generated by the 145 room proposed development are shown in **Table 7.2**.

Table 7.2 – Peak Hour Trips Generated by Proposed Developments

	Arrivals	Departures	Total Trips
08:00 – 09:00	8	18	25
17:00 – 18:00	13	8	21

7.1.5 Trips generated by the existing office use was established in the 2015 Transport Assessment, produced by AECOM, for the consented commercial scheme at Invicta House. **Table 7.3** shows the existing trips for Invicta House.

Table 7.3 – Existing Peak Hour Trips Generated at Invicta House

	Arrivals	Departures	Total Trips
08:00 – 09:00	5	1	6
17:00 – 18:00	1	5	6

- 7.1.6 Taking account of the existing Invicta House trips, the residual trip generation by the proposed development is shown in **Table 7.4**.

Table 7.4 – Residual Peak Hour Trips Generated at Proposed Development

	Arrivals	Departures	Total Trips
08:00 – 09:00	3	17	19
17:00 – 18:00	12	3	15

7.2 Highway Impact

- 7.2.1 The residual trip generation shown in **Table 7.4** above indicates a marginal increase in vehicular trips to the proposed development compared to the existing Invicta House reflects the linear method in which TRICS estimates increases in total trip generation. In practice, given that the quantum of parking at the proposed development will reduce compared to current on-site provision, and given the site's excellent level of sustainable accessibility it is reasonable to assume that a higher proportion of trips will be made by sustainable modes compared to the existing Invicta House.
- 7.2.2 This increase is considered to be negligible in the context of the wider highway network, and could also be considered to be an overestimation given the proposed reduction in on-site parking provision.
- 7.2.3 Given that the development would result in a negligible increase in vehicle trips and parking demand, the proposals could not be considered to have a **severe** impact on the local highway network, in the context of the NPPF.



8 Construction Traffic Management

8.1 Overview

- 8.1.1 A Construction Traffic Management Plan (CTMP) will be drawn up for the Invicta House hotel development prior to commencement of works on site. This is a common approach for development sites. It would need to be discussed and agreed with MCC, prior to commencement of any construction works and is subject to planning approval being granted.

8.2 Development Phasing

- 8.2.1 Further details of the phasing and construction programme elements, the methodology and traffic management plan proposed will be outlined in a full CMTP document prepared ahead of commencement of the proposed development.

8.3 Impact and Proposals

- 8.3.1 It is considered that the majority of construction works would be constrained within the site boundary, however should there be an impact on the highway network or pedestrian footways MCC would be consulted and suitable traffic management measures agreed.
- 8.3.2 All traffic movements to the site would be strictly scheduled to ensure that there would be no traffic congestion caused by waiting vehicles unable to enter the site. Wherever possible, deliveries would be scheduled outside the morning and evening rush hours, thereby not adding to traffic congestion to the surrounding highway network during peak hours.
- 8.3.3 Routes to and from the site and the working hours for the site would be agreed with MCC prior to commencement of the works; a full CTMP would be submitted to MCC by the contractor prior to commencement of the works on site.

8.4 Construction Traffic Movement and Distribution

- 8.4.1 Appointed contractors will be required to operate in accordance with a full CTMP. This will contain identified construction traffic routes to the site, estimated movements per day and safety procedure, including but not limited to:
- Integration of a traffic management scheme with surrounding construction developments and any traffic engineering or traffic calming measures;
 - Access, egress, drop off and turning area;



- Temporary alterations to local traffic routes (both vehicular and pedestrian);
- Additions, alterations and position of any temporary signage, road markings or protection barriers;
- Pedestrian access around site and relevant protection, lighting and signage schemes;
- Temporary suspension/relocation of parking bays and bus stops;
- Segregation of plant, materials and pedestrians on-site and safe access routes between welfare and site areas;
- The provision of car parking, and public transport strategy to all site staff; and
- Loading bays, hoist positions and crane areas.

8.4.2 The principal objective of the CTMP is to minimise the impact of construction operations on the surrounding properties, local highways and public space.

8.4.3 Deliveries will endeavour to be made outside of peak network hours to minimise local disruption to the highway network. Construction traffic routes will be outlined and agreed with MCC as part of the CTMP ahead of commencement of site works.

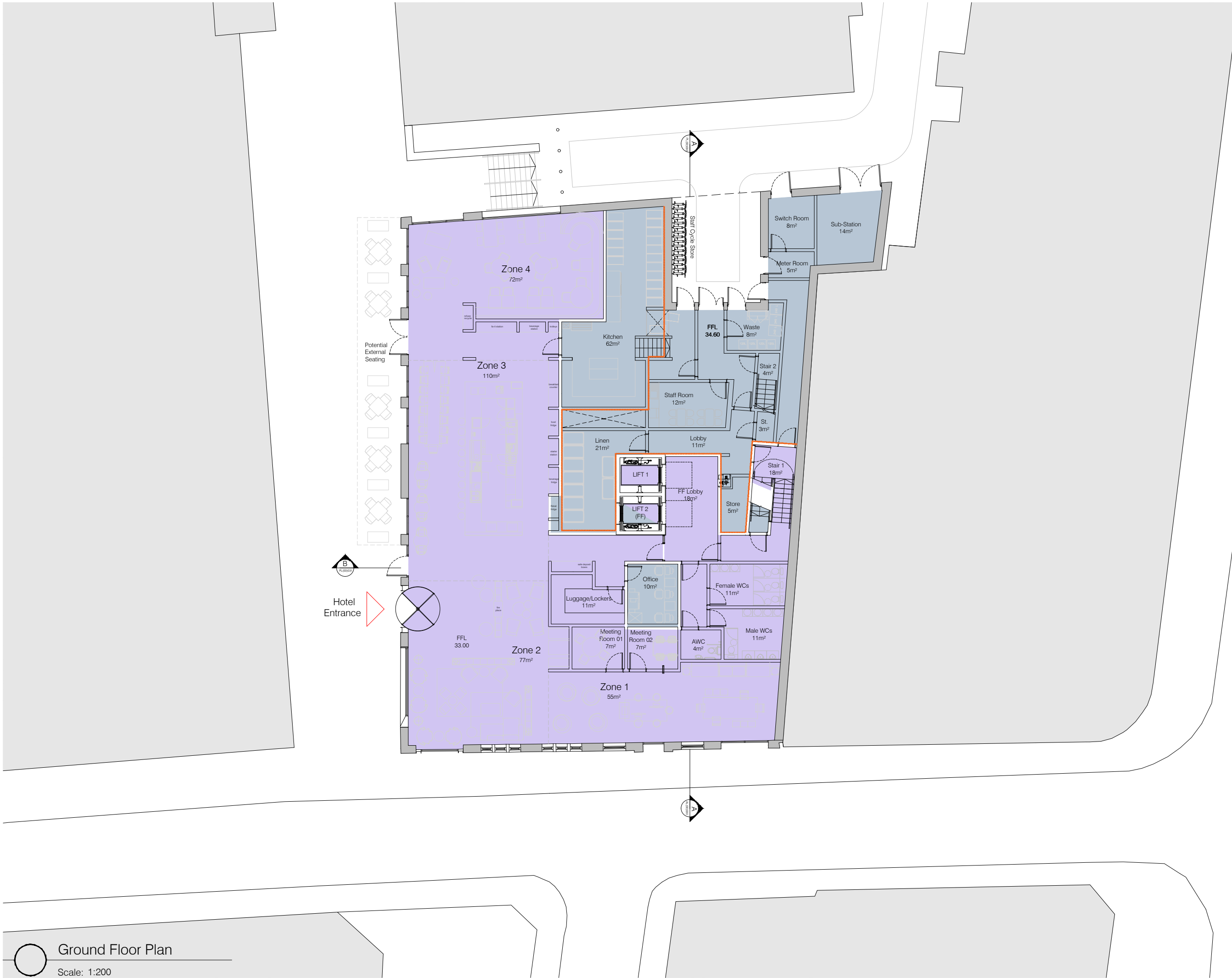


9 Summary and Conclusions

- 9.1.1 mode transport planning ('mode') has been commissioned by KE Hotels/ Henry Boot Developments (the 'Client') to provide highways and transportation advice in relation to a planning application for a hotel on the Invicta House site off Atkinson Street in Manchester City Centre.
- 9.1.2 This Transport Statement has been prepared in line with the methodology agreed with MCC Highway Development Control Officers on 24th March 2017.
- 9.1.3 The development proposals comprise 145 bedroom hotel with a bar/ restaurant and gym. There are 15 secure cycle spaces proposed in accordance with current parking standards, but no on-site car parking.
- 9.1.4 In summary, this Transport Statement has demonstrated that:
- Following a review of the most recent incident records, there is no evidence to show the proposed development will have a detrimental impact on highway safety;
 - The site is located to take full advantage of the sustainable transport modes, with easy access by walking cycling, bus, light rail and rail;
 - Although no car parking is proposed on-site, there is ample car parking available in surrounding public car parks; and
 - There is an appropriate servicing and delivery strategy for the proposed development.
- 9.1.5 In conclusion, it is considered that there should be no highways or transportation reasons that prevents this planning application from being approved.



Appendix A Ground Floor Plan



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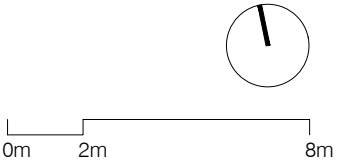
revisions //	by //	date //
Rev - PLANNING SUBMISSION	NVR	31.03.17

HOTEL GUESTROOMS:	
8th:	12 no. guestrooms
7th:	18 no. guestrooms
6th:	18 no. guestrooms
5th:	19 no. guestrooms
4th:	19 no. guestrooms
3rd:	19 no. guestrooms
2nd:	20 no. guestrooms
1st:	20 no. guestrooms
Mezzanine:	FOH/BOH
Ground:	FOH
Basement:	FOH/BOH
Total:	145 no. guestrooms

inc. 9 deluxe rooms (6%)
inc. 8 acc. guestrooms (5%)

General Notes:
Scheme subject to survey, planning,
boundary confirmation and brand
approval. All dimensions and areas
are approximate.

- Key
- Front Of House
 - Back Of House
 - Bedroom Accommodation
 - Change in level @ GF



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G1 1LG

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weareica.com



project title //
Invicta House
Manchester
Moxy Hotel

drawing title //
Ground Floor Plan

issue stage //
PLANNING

date //	drawn //	scale @ A3 //
JAN17	NVR	1:200
project //	dwg number //	revision //
781	PL(00)011	-



Appendix B Servicing and Delivery Plan



DO NOT SCALE OFF THIS DRAWING.

This drawing has been produced by mode transport planning. No responsibility will be accepted for the use of this drawing in any other project.

Existing Loading Bay

Existing Taxi Rank

Proposed Loading Bay

Existing Shared Taxi/Loading Bay

drawing title	Servicing / Deliveries	client	KE Hotels / Henry Boot Developments	mode transport planning		scale	I:500@A3	-	28-03-17	Issued	
		drawn	LCW								
	job title	Invicta House				t 0161 974 3208 e info@modetransport.co.uk w www.modetransport.co.uk	checked	ME	rev	date	remarks
							created	March '17	drawing no. J32-2785-PS-001		



Appendix C TRICS Outputs

Calculation Reference: AUDIT-754101-170329-0333

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
 Category : A - HOTELS

VEHICLESSelected regions and areas:

03	SOUTH WEST	
	WL WILTSHIRE	1 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
09	NORTH	
	TV TEES VALLEY	1 days
10	WALES	
	CF CARDIFF	1 days
11	SCOTLAND	
	HI HIGHLAND	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 bedrooms
 Actual Range: 84 to 213 (units:)
 Range Selected by User: 73 to 218 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/08 to 25/07/15

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

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	1 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Town Centre	5
-------------	---

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

Selected Location Sub Categories:

Commercial Zone	2
Built-Up Zone	2
High Street	1

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

Secondary Filtering selection:Use Class:

A3	1 days
C1	3 days

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

Population within 1 mile:

5,001 to 10,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	3 days

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

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	1 days
250,001 to 500,000	3 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	3 days

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

Travel Plan:

No	5 days
----	--------

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

PTAL Rating:

No PTAL Present	5 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	CF-06-A-04	TRAVELODGE	CARDIFF
	THE FRIARY		
	CARDIFF		
	Town Centre		
	Built-Up Zone		
	Total Number of bedrooms:	96	
	Survey date: MONDAY	16/07/12	Survey Type: MANUAL
2	DS-06-A-02	JURY'S INN	DERBYSHIRE
	KING STREET		
	DERBY		
	Town Centre		
	Commercial Zone		
	Total Number of bedrooms:	213	
	Survey date: TUESDAY	19/07/11	Survey Type: MANUAL
3	HI-06-A-04	HOTEL	HIGHLAND
	ACADEMY STREET		
	INVERNESS		
	Town Centre		
	High Street		
	Total Number of bedrooms:	84	
	Survey date: FRIDAY	13/05/11	Survey Type: MANUAL
4	TV-06-A-04	THISTLE	TEES VALLEY
	FRY STREET		
	MIDDLESBROUGH		
	Town Centre		
	Commercial Zone		
	Total Number of bedrooms:	132	
	Survey date: THURSDAY	03/10/13	Survey Type: MANUAL
5	WL-06-A-02	HOLIDAY INN EXPRESS	WILTSHIRE
	BRIDGE STREET		
	SWINDON		
	Town Centre		
	Built-Up Zone		
	Total Number of bedrooms:	134	
	Survey date: WEDNESDAY	27/11/13	Survey Type: MANUAL

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

VEHICLES**Calculation factor: 1 BEDRMS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	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	5	132	0.049	5	132	0.079	5	132	0.128
08:00 - 09:00	5	132	0.049	5	132	0.123	5	132	0.172
09:00 - 10:00	5	132	0.082	5	132	0.077	5	132	0.159
10:00 - 11:00	5	132	0.056	5	132	0.042	5	132	0.098
11:00 - 12:00	5	132	0.029	5	132	0.059	5	132	0.088
12:00 - 13:00	5	132	0.050	5	132	0.046	5	132	0.096
13:00 - 14:00	5	132	0.062	5	132	0.050	5	132	0.112
14:00 - 15:00	5	132	0.036	5	132	0.053	5	132	0.089
15:00 - 16:00	5	132	0.052	5	132	0.062	5	132	0.114
16:00 - 17:00	5	132	0.077	5	132	0.041	5	132	0.118
17:00 - 18:00	5	132	0.088	5	132	0.052	5	132	0.140
18:00 - 19:00	5	132	0.099	5	132	0.049	5	132	0.148
19:00 - 20:00	5	132	0.059	5	132	0.044	5	132	0.103
20:00 - 21:00	5	132	0.038	5	132	0.023	5	132	0.061
21:00 - 22:00	5	132	0.030	5	132	0.014	5	132	0.044
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.856			0.814			1.670

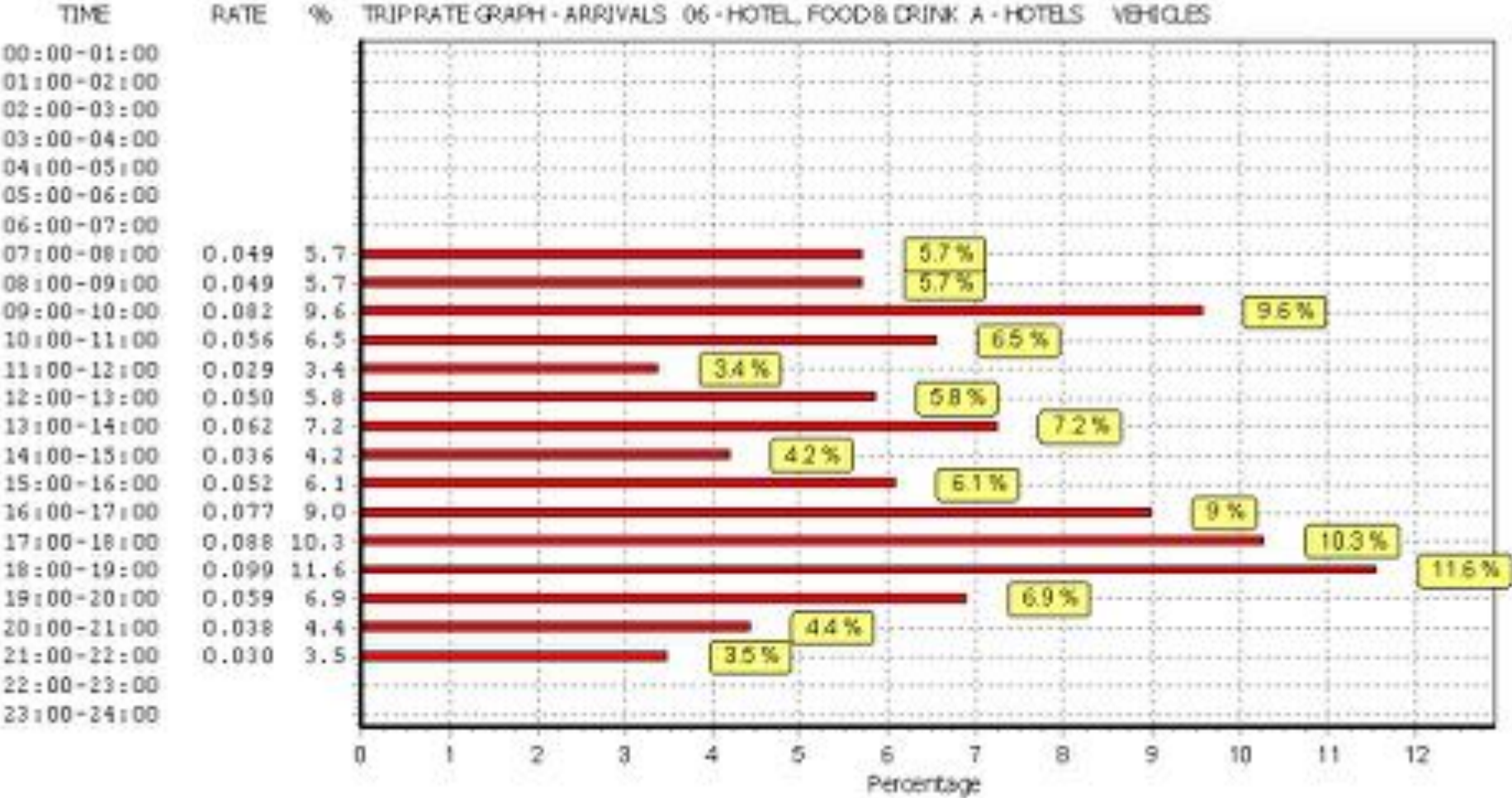
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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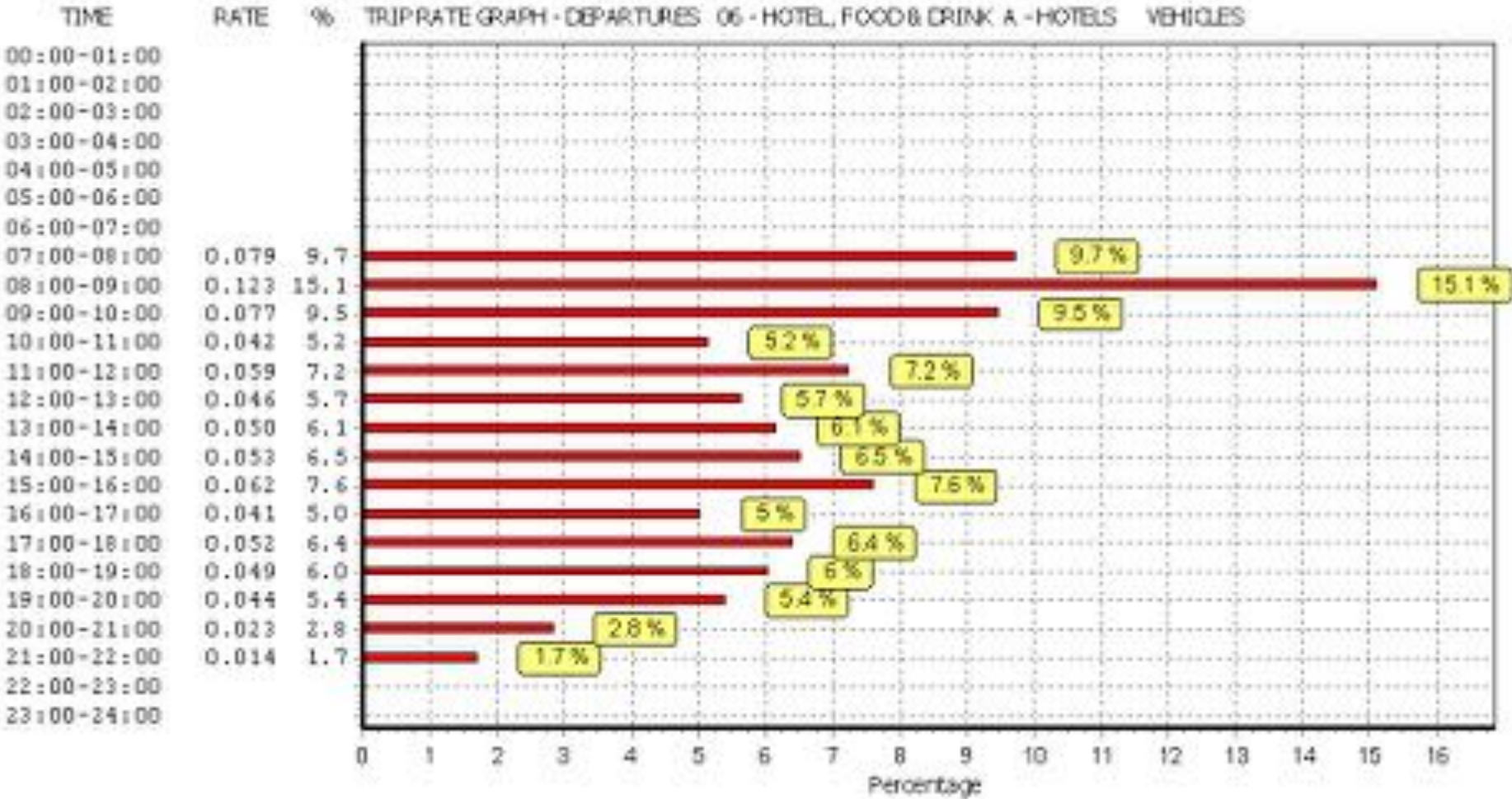
Parameter summary

Trip rate parameter range selected:	84 - 213 (units:)
Survey date range:	01/01/08 - 25/07/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

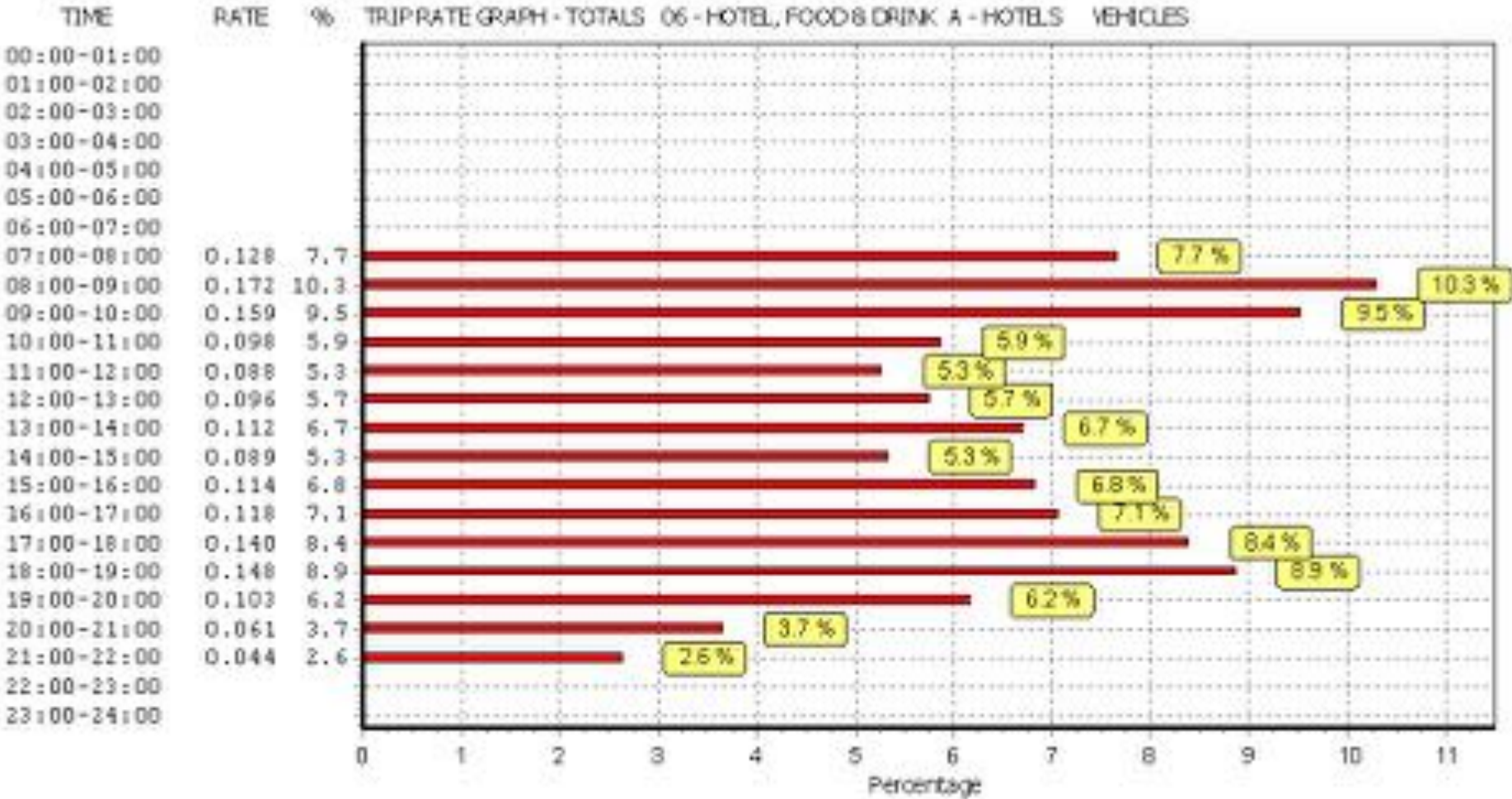
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

TAXIS**Calculation factor: 1 BEDRMS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	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	5	132	0.003	5	132	0.003	5	132	0.006
08:00 - 09:00	5	132	0.003	5	132	0.005	5	132	0.008
09:00 - 10:00	5	132	0.006	5	132	0.008	5	132	0.014
10:00 - 11:00	5	132	0.006	5	132	0.006	5	132	0.012
11:00 - 12:00	5	132	0.006	5	132	0.006	5	132	0.012
12:00 - 13:00	5	132	0.006	5	132	0.006	5	132	0.012
13:00 - 14:00	5	132	0.008	5	132	0.008	5	132	0.016
14:00 - 15:00	5	132	0.006	5	132	0.005	5	132	0.011
15:00 - 16:00	5	132	0.000	5	132	0.002	5	132	0.002
16:00 - 17:00	5	132	0.000	5	132	0.000	5	132	0.000
17:00 - 18:00	5	132	0.005	5	132	0.003	5	132	0.008
18:00 - 19:00	5	132	0.008	5	132	0.006	5	132	0.014
19:00 - 20:00	5	132	0.000	5	132	0.000	5	132	0.000
20:00 - 21:00	5	132	0.002	5	132	0.002	5	132	0.004
21:00 - 22:00	5	132	0.003	5	132	0.003	5	132	0.006
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.062			0.063			0.125

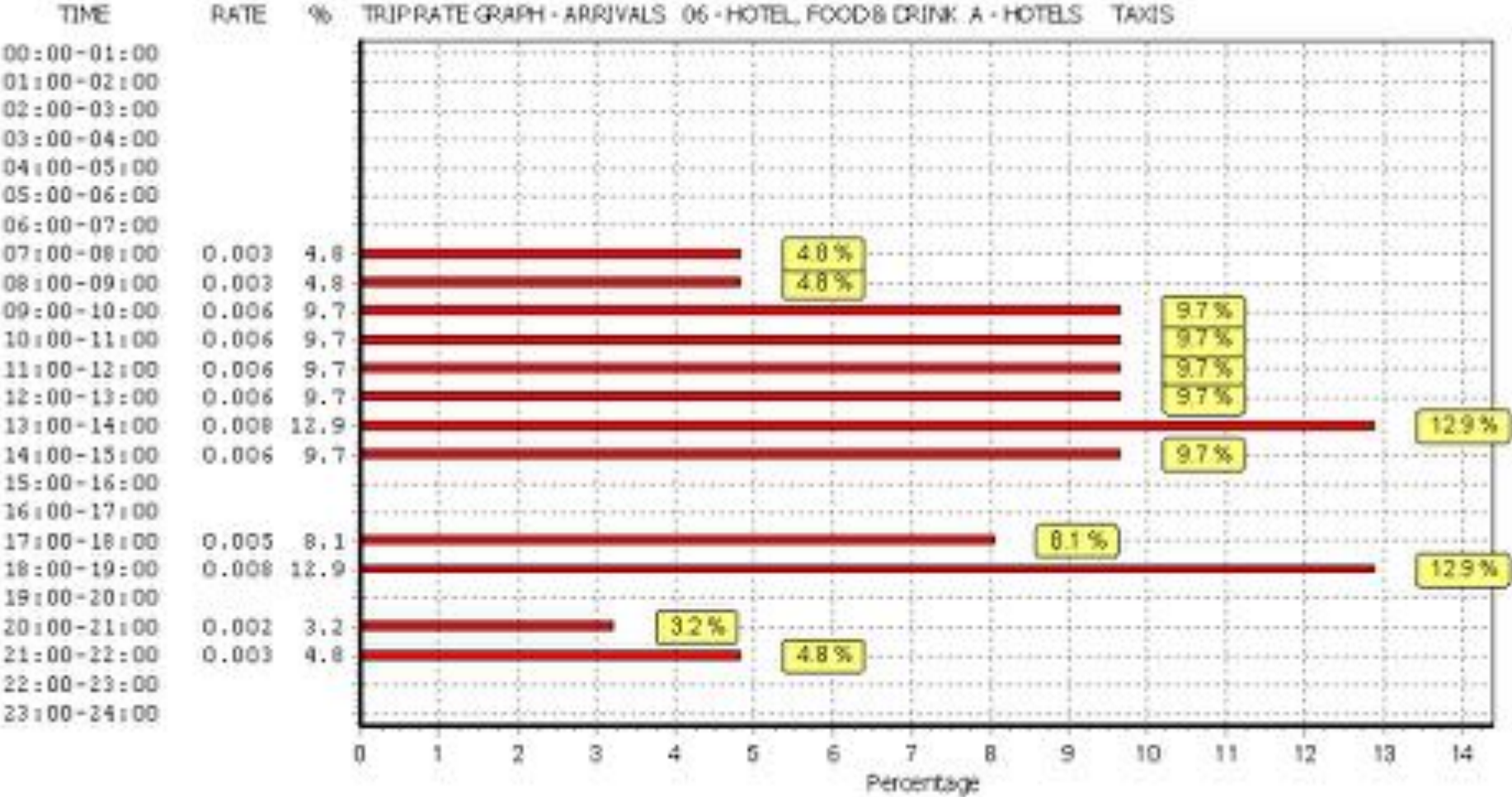
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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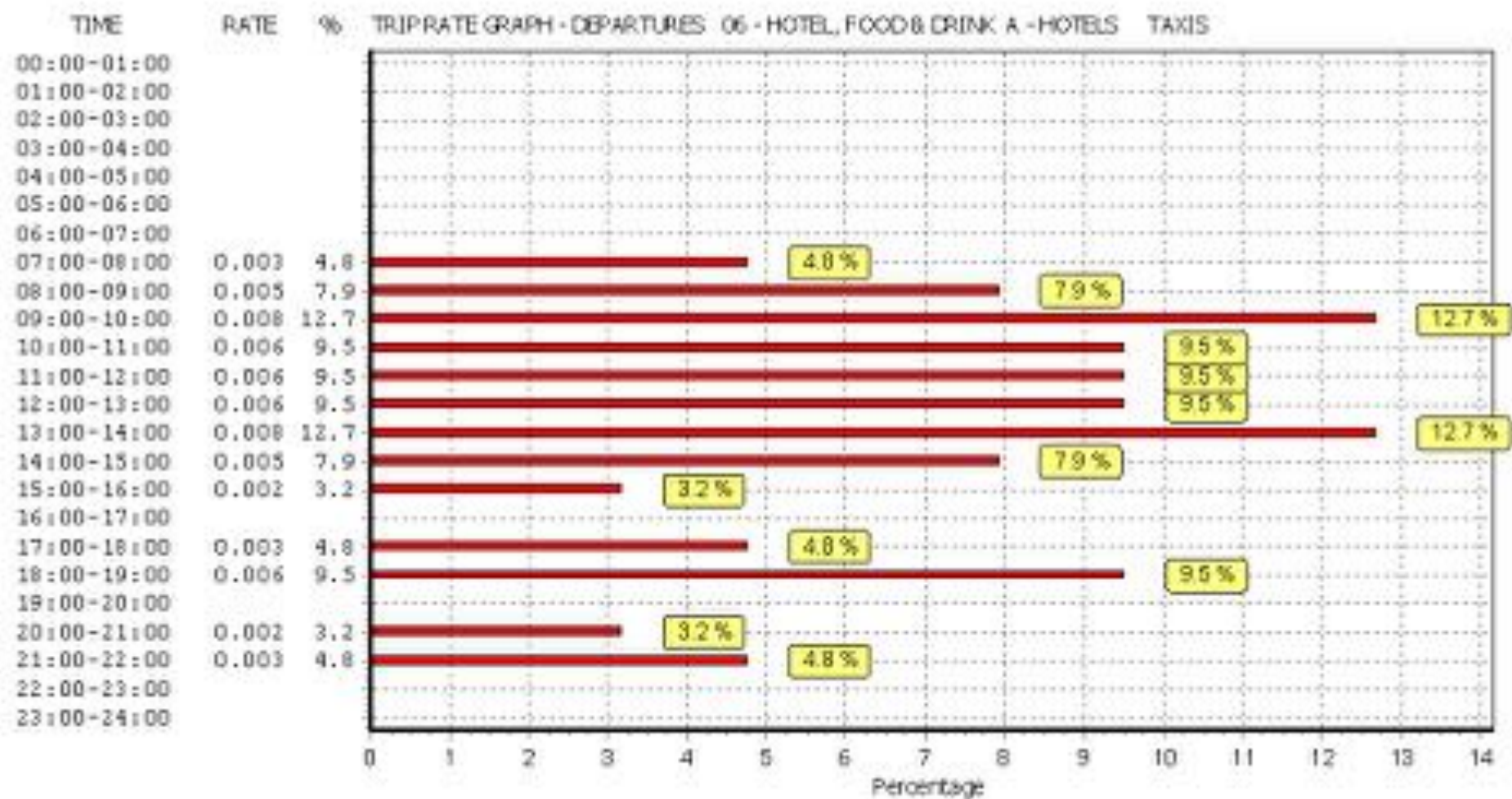
Parameter summary

Trip rate parameter range selected:	84 - 213 (units:)
Survey date range:	01/01/08 - 25/07/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

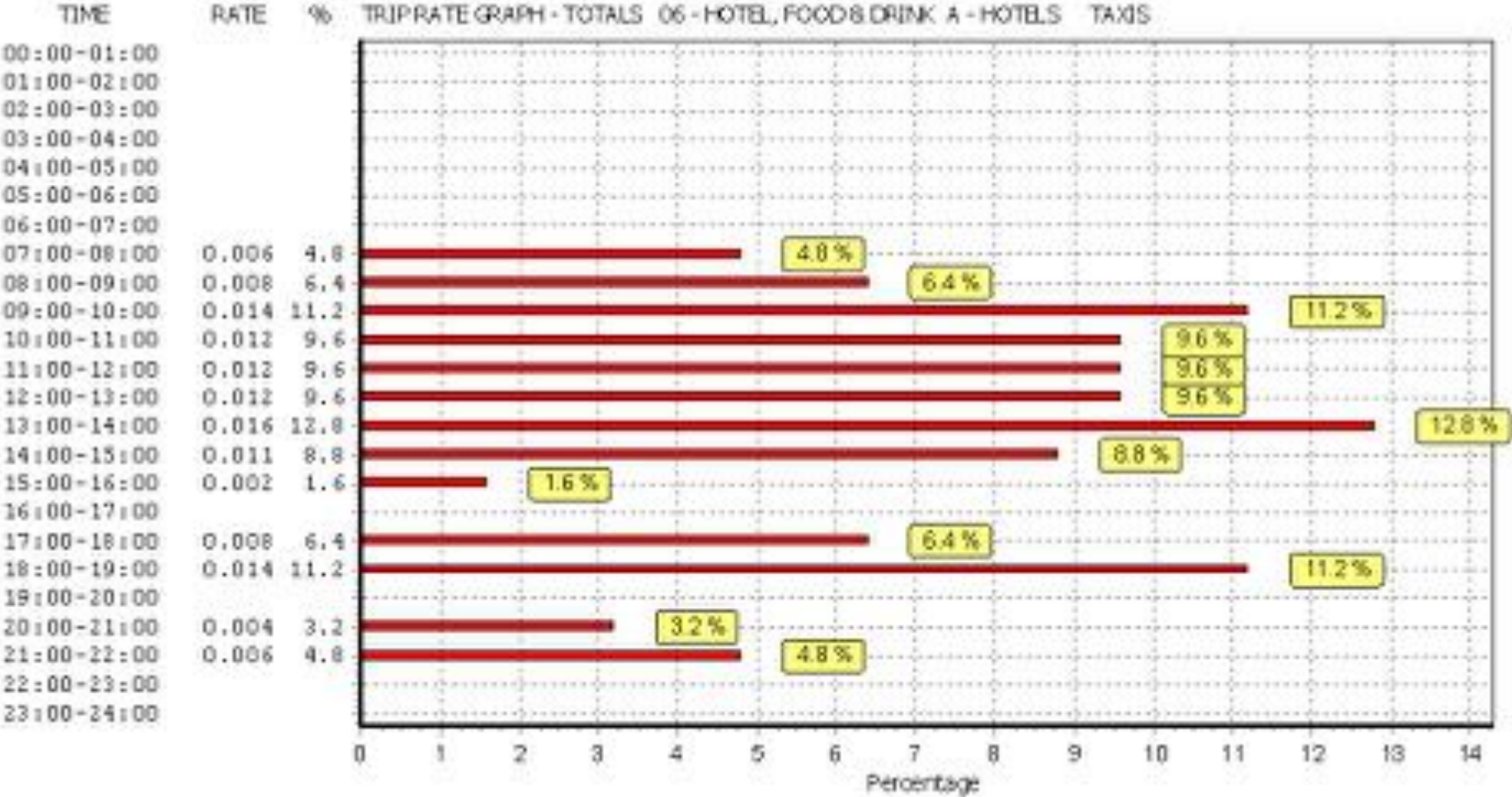
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

OGVS**Calculation factor: 1 BEDRMS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	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	5	132	0.000	5	132	0.000	5	132	0.000
08:00 - 09:00	5	132	0.002	5	132	0.002	5	132	0.004
09:00 - 10:00	5	132	0.003	5	132	0.002	5	132	0.005
10:00 - 11:00	5	132	0.000	5	132	0.002	5	132	0.002
11:00 - 12:00	5	132	0.000	5	132	0.000	5	132	0.000
12:00 - 13:00	5	132	0.000	5	132	0.000	5	132	0.000
13:00 - 14:00	5	132	0.002	5	132	0.002	5	132	0.004
14:00 - 15:00	5	132	0.002	5	132	0.002	5	132	0.004
15:00 - 16:00	5	132	0.002	5	132	0.002	5	132	0.004
16:00 - 17:00	5	132	0.000	5	132	0.000	5	132	0.000
17:00 - 18:00	5	132	0.000	5	132	0.000	5	132	0.000
18:00 - 19:00	5	132	0.000	5	132	0.000	5	132	0.000
19:00 - 20:00	5	132	0.000	5	132	0.000	5	132	0.000
20:00 - 21:00	5	132	0.000	5	132	0.000	5	132	0.000
21:00 - 22:00	5	132	0.000	5	132	0.000	5	132	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.012			0.023

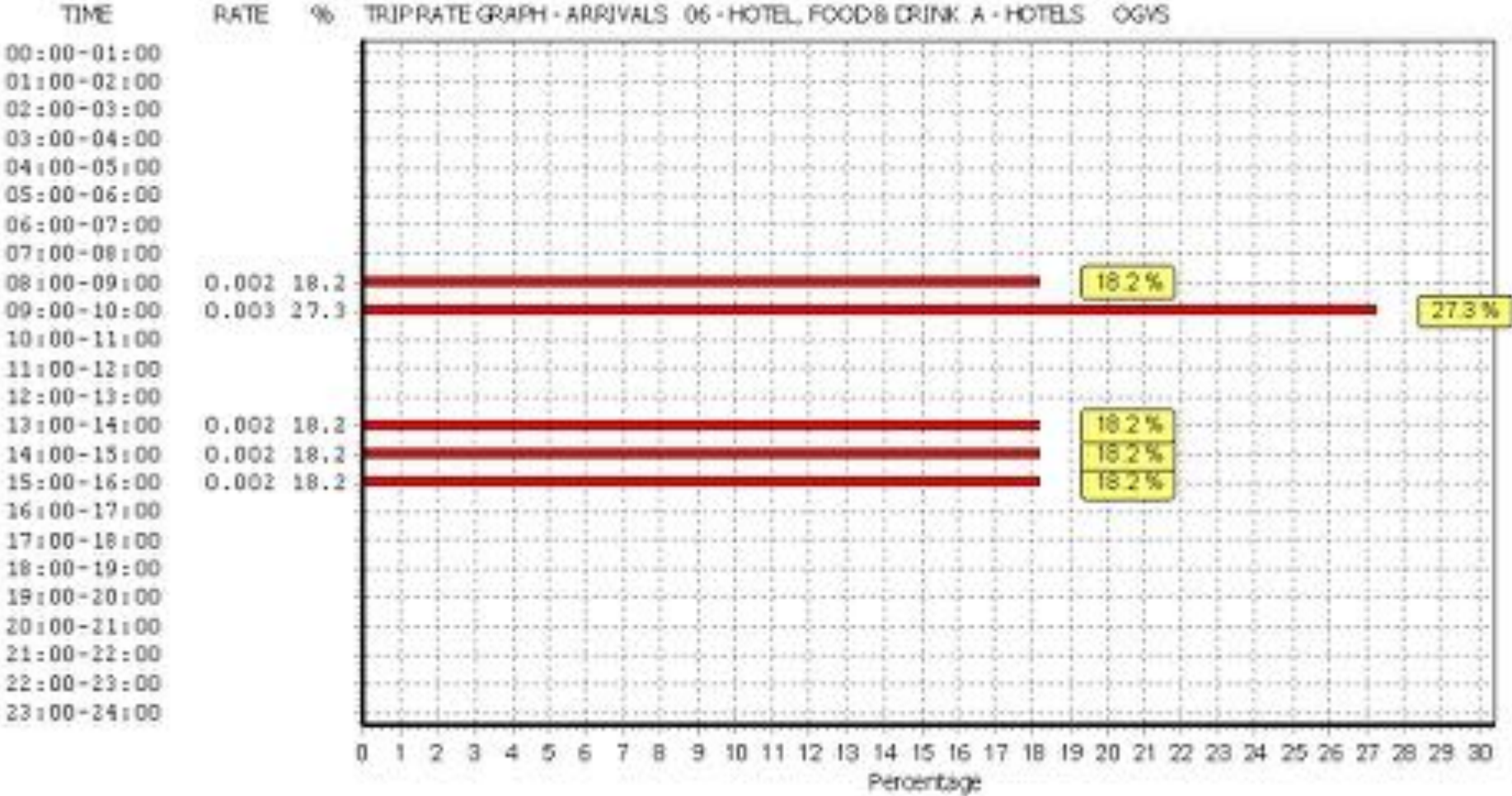
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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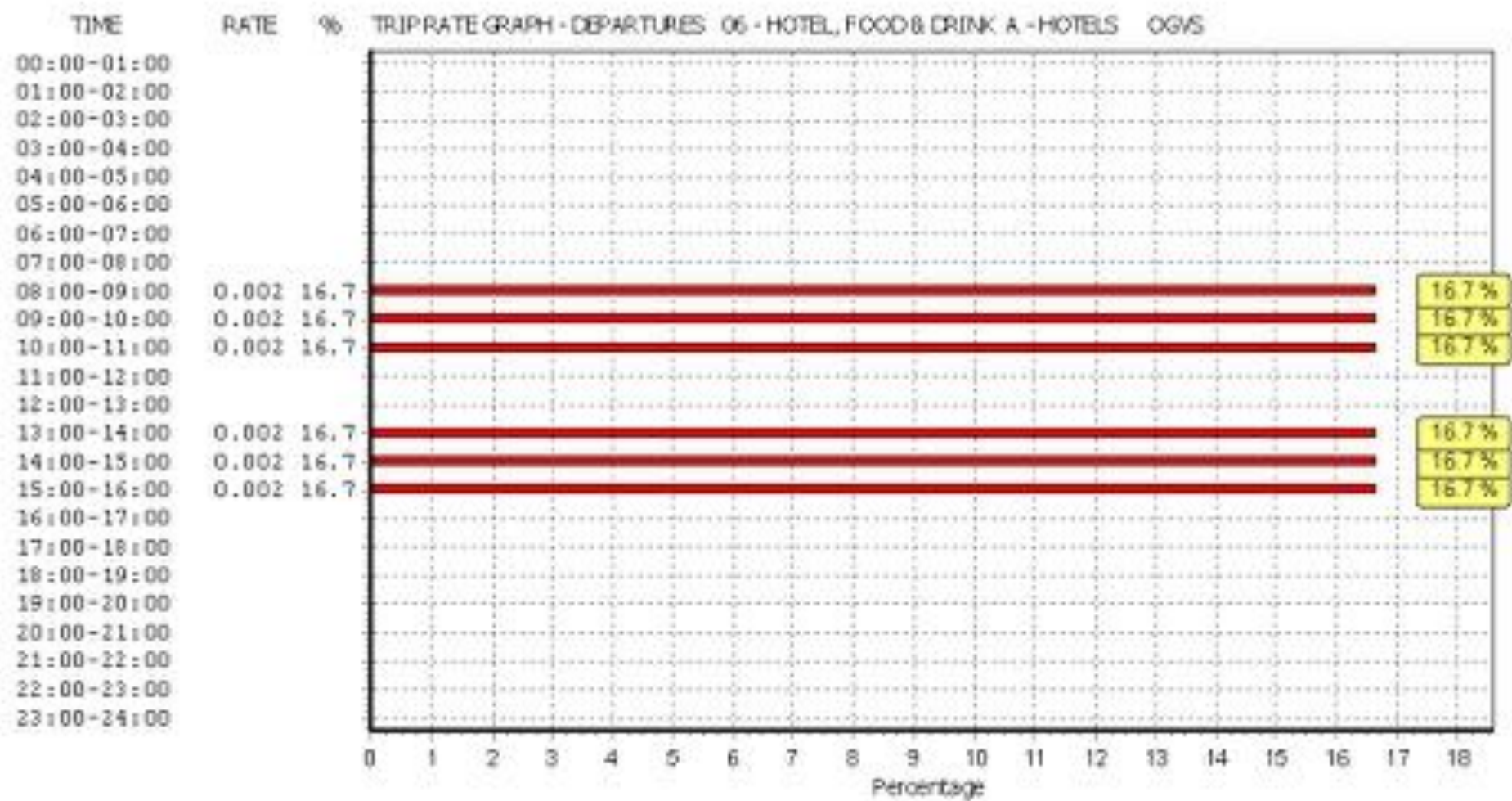
Parameter summary

Trip rate parameter range selected:	84 - 213 (units:)
Survey date range:	01/01/08 - 25/07/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

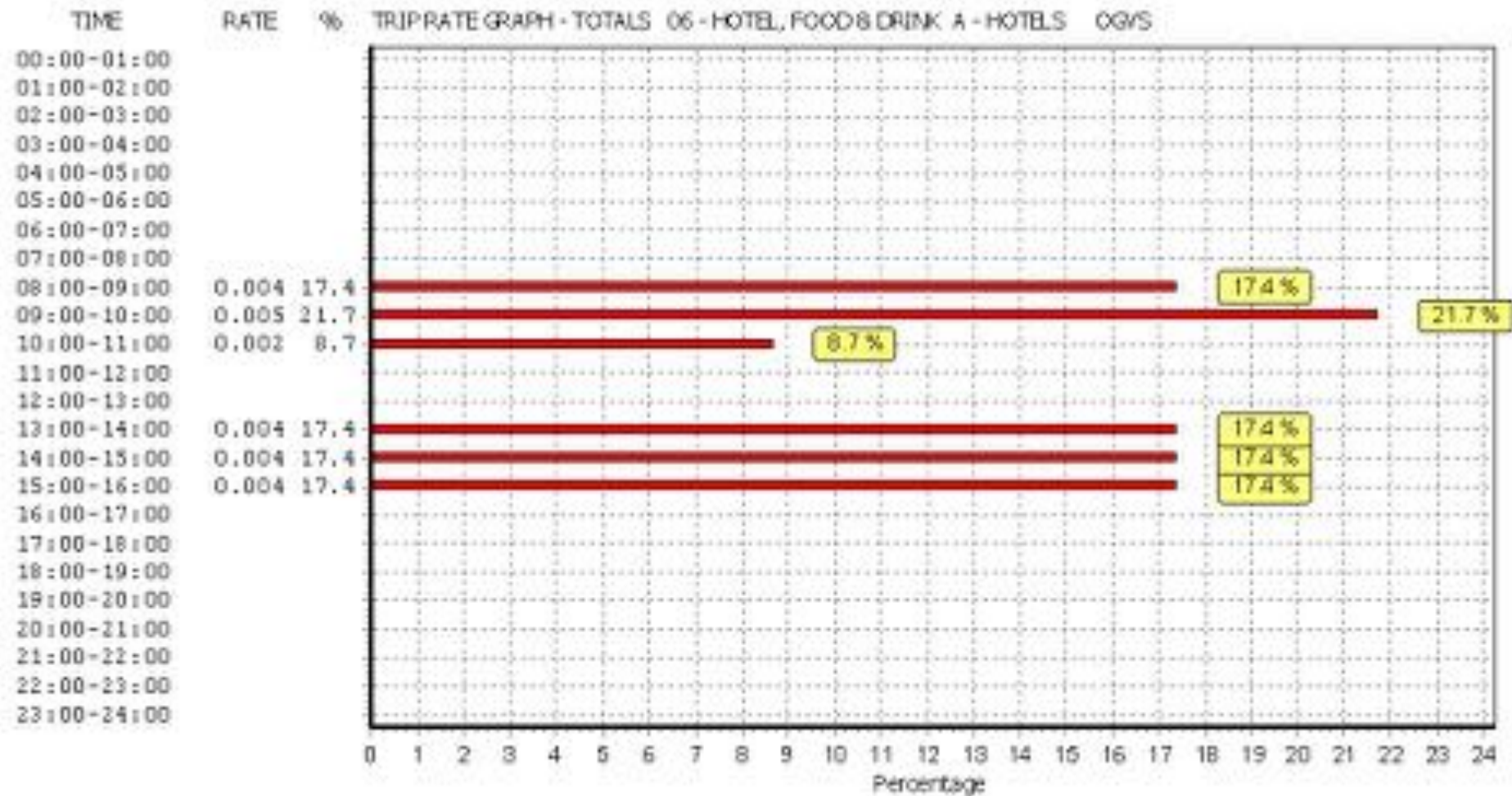
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

PSVS**Calculation factor: 1 BEDRMS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	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	5	132	0.000	5	132	0.000	5	132	0.000
08:00 - 09:00	5	132	0.002	5	132	0.002	5	132	0.004
09:00 - 10:00	5	132	0.000	5	132	0.000	5	132	0.000
10:00 - 11:00	5	132	0.000	5	132	0.000	5	132	0.000
11:00 - 12:00	5	132	0.000	5	132	0.000	5	132	0.000
12:00 - 13:00	5	132	0.000	5	132	0.000	5	132	0.000
13:00 - 14:00	5	132	0.000	5	132	0.000	5	132	0.000
14:00 - 15:00	5	132	0.000	5	132	0.000	5	132	0.000
15:00 - 16:00	5	132	0.002	5	132	0.002	5	132	0.004
16:00 - 17:00	5	132	0.002	5	132	0.000	5	132	0.002
17:00 - 18:00	5	132	0.003	5	132	0.003	5	132	0.006
18:00 - 19:00	5	132	0.002	5	132	0.002	5	132	0.004
19:00 - 20:00	5	132	0.000	5	132	0.000	5	132	0.000
20:00 - 21:00	5	132	0.000	5	132	0.000	5	132	0.000
21:00 - 22:00	5	132	0.000	5	132	0.000	5	132	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.009			0.020

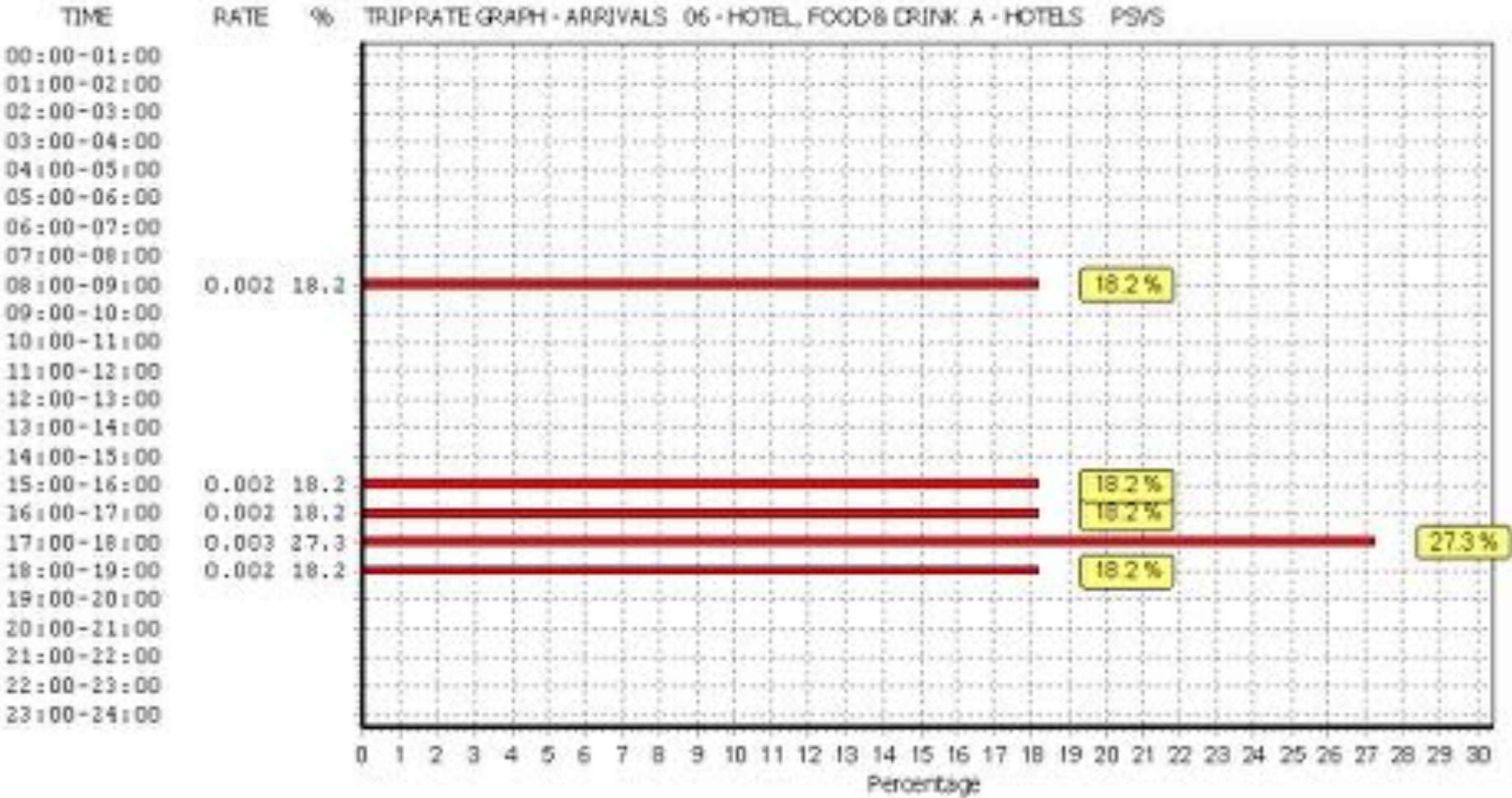
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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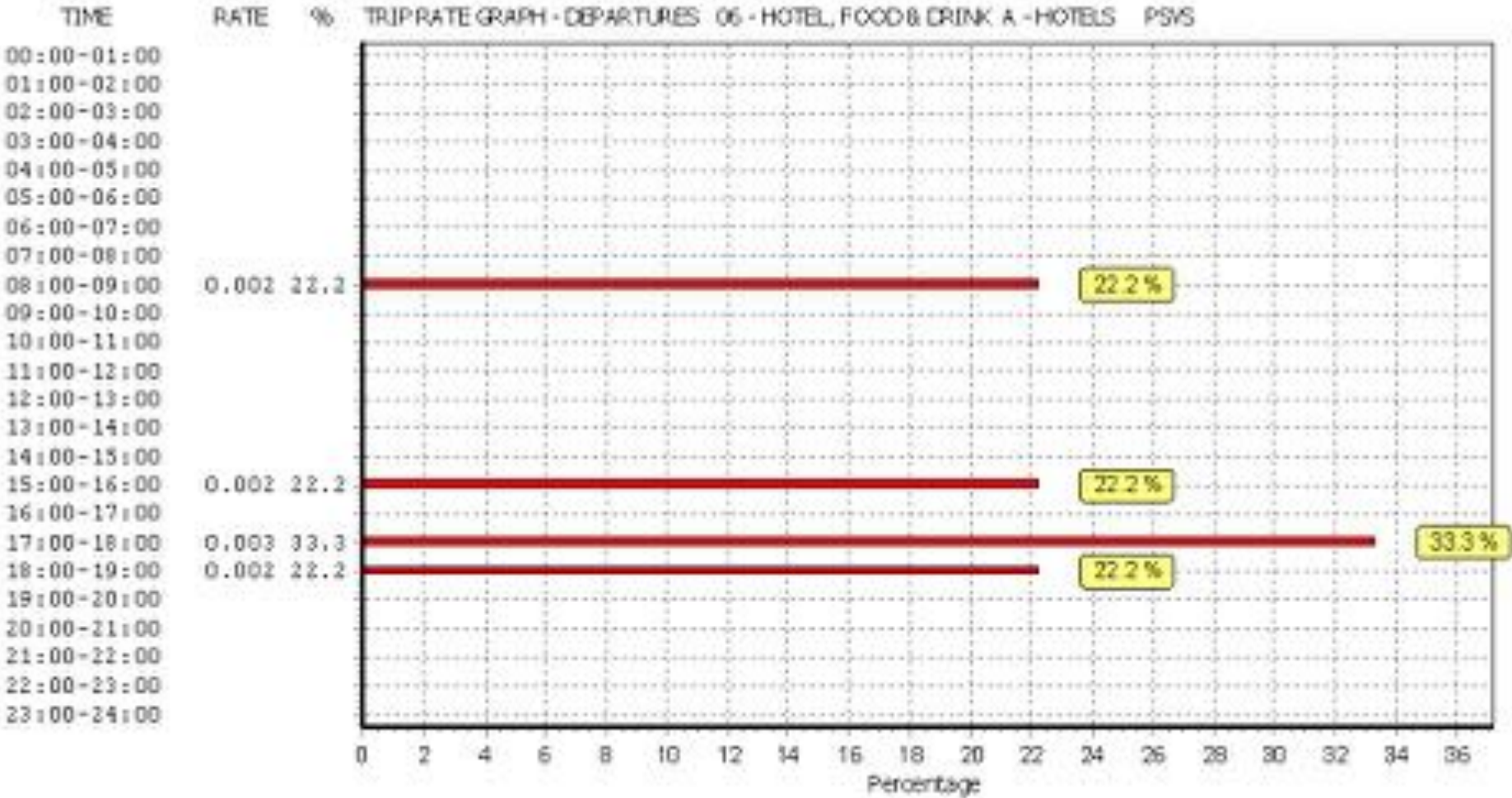
Parameter summary

Trip rate parameter range selected: 84 - 213 (units:)
 Survey date range: 01/01/08 - 25/07/15
 Number of weekdays (Monday-Friday): 5
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

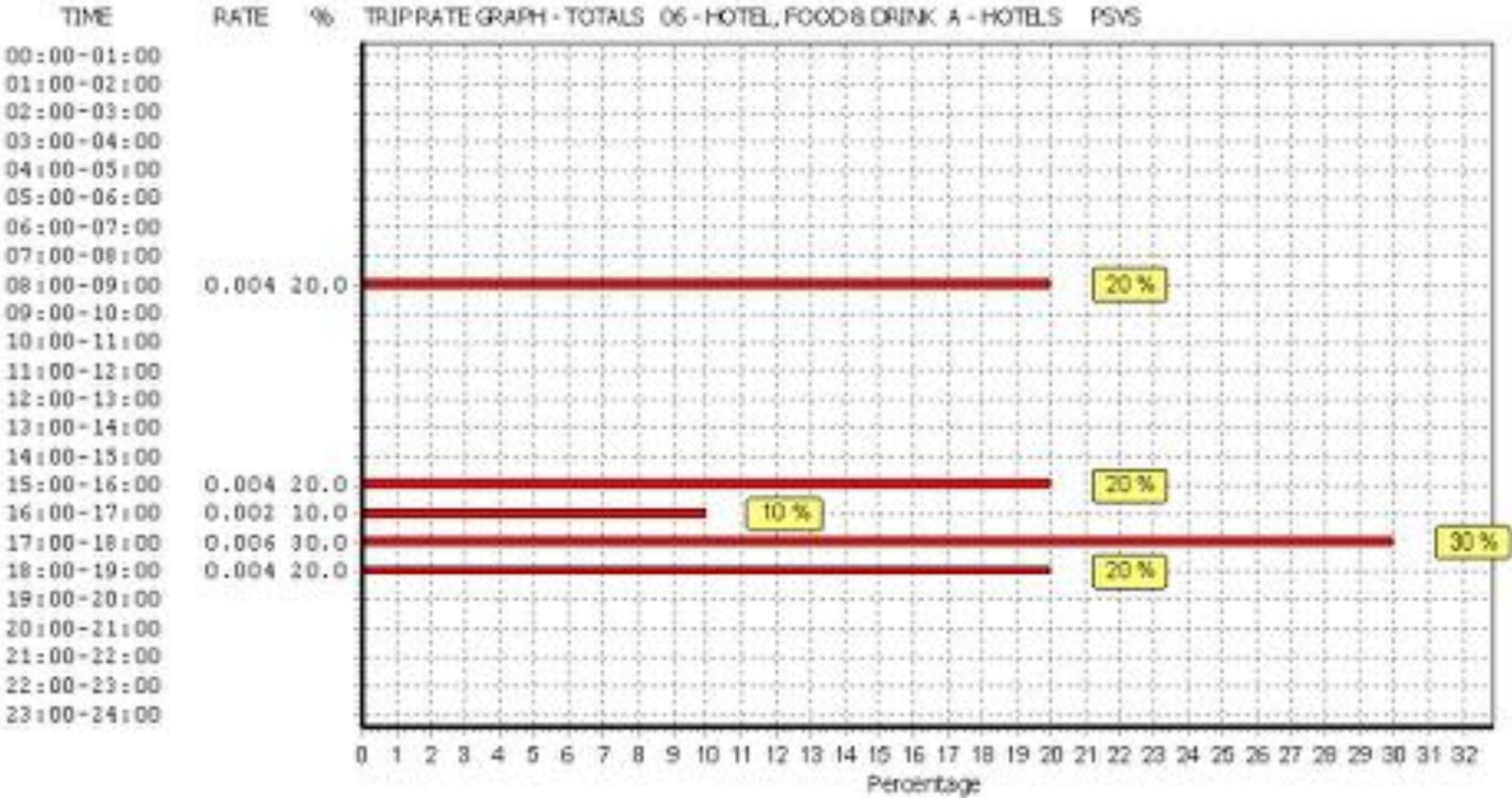
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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

CYCLISTS**Calculation factor: 1 BEDRMS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	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	5	132	0.003	5	132	0.000	5	132	0.003
08:00 - 09:00	5	132	0.000	5	132	0.000	5	132	0.000
09:00 - 10:00	5	132	0.000	5	132	0.000	5	132	0.000
10:00 - 11:00	5	132	0.000	5	132	0.000	5	132	0.000
11:00 - 12:00	5	132	0.000	5	132	0.000	5	132	0.000
12:00 - 13:00	5	132	0.000	5	132	0.000	5	132	0.000
13:00 - 14:00	5	132	0.000	5	132	0.002	5	132	0.002
14:00 - 15:00	5	132	0.000	5	132	0.000	5	132	0.000
15:00 - 16:00	5	132	0.000	5	132	0.002	5	132	0.002
16:00 - 17:00	5	132	0.002	5	132	0.002	5	132	0.004
17:00 - 18:00	5	132	0.000	5	132	0.000	5	132	0.000
18:00 - 19:00	5	132	0.000	5	132	0.000	5	132	0.000
19:00 - 20:00	5	132	0.000	5	132	0.000	5	132	0.000
20:00 - 21:00	5	132	0.000	5	132	0.000	5	132	0.000
21:00 - 22:00	5	132	0.000	5	132	0.000	5	132	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.005			0.006			0.011

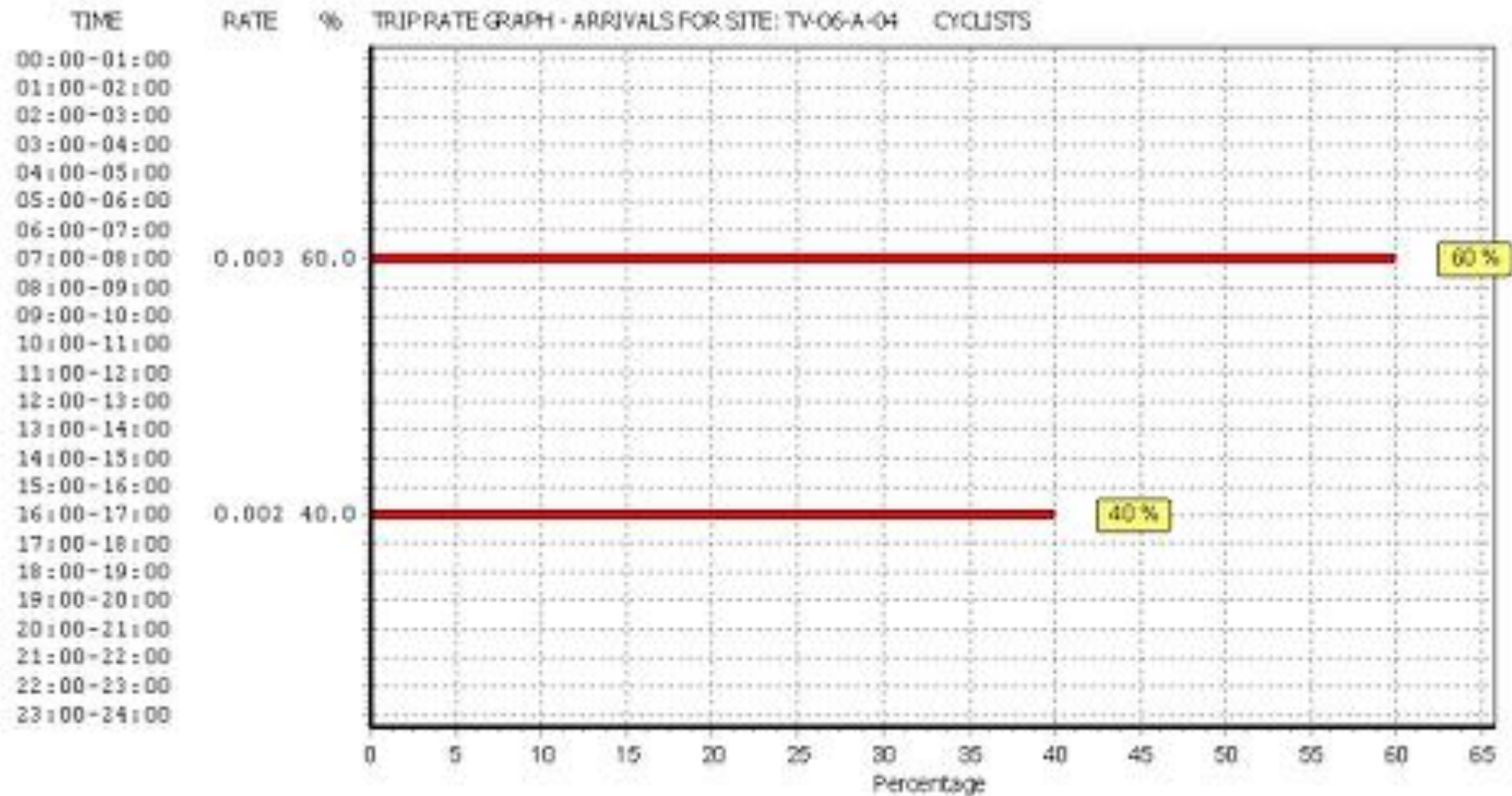
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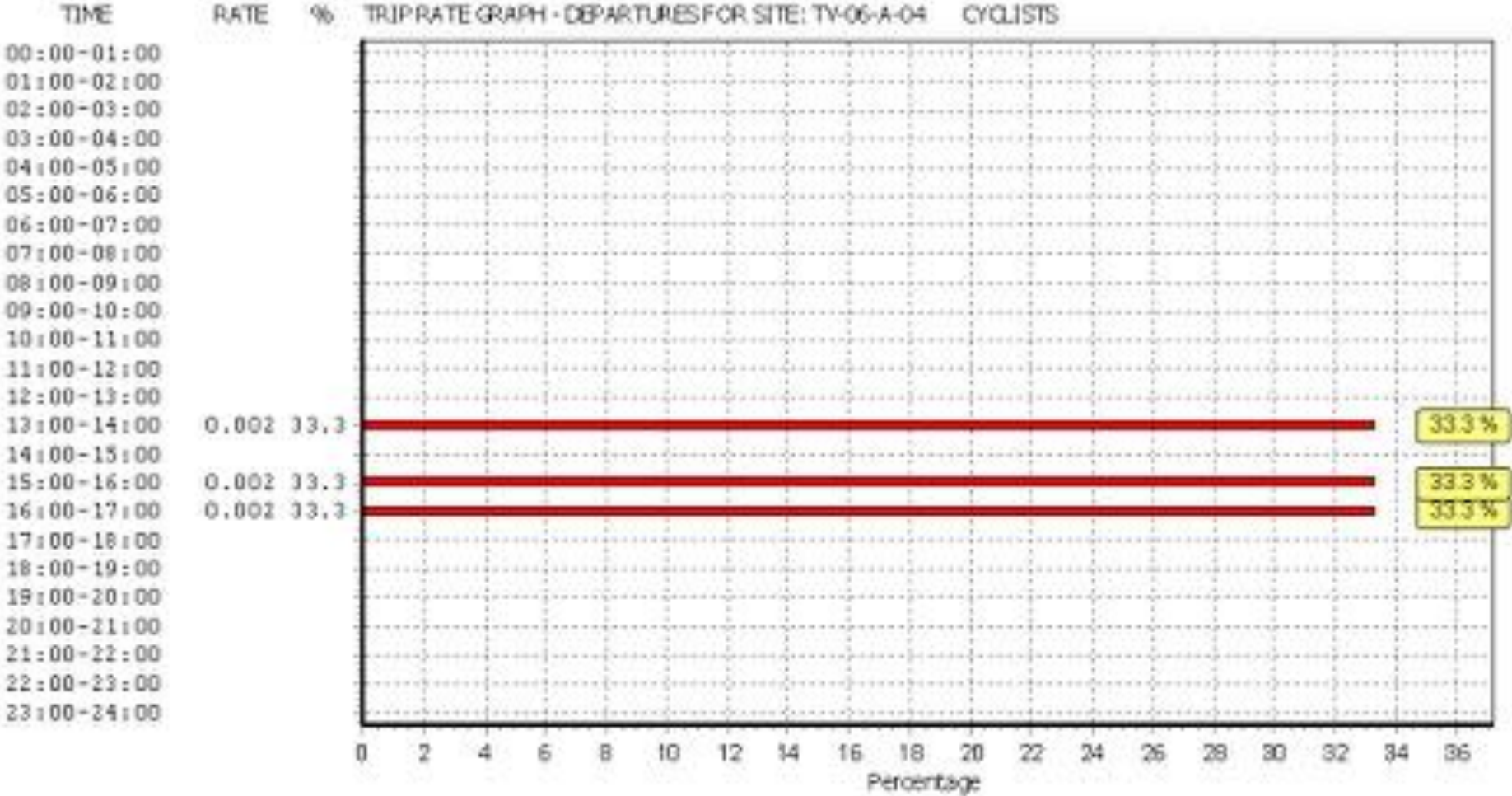
Parameter summary

Trip rate parameter range selected:	84 - 213 (units:)
Survey date range:	01/01/08 - 25/07/15
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

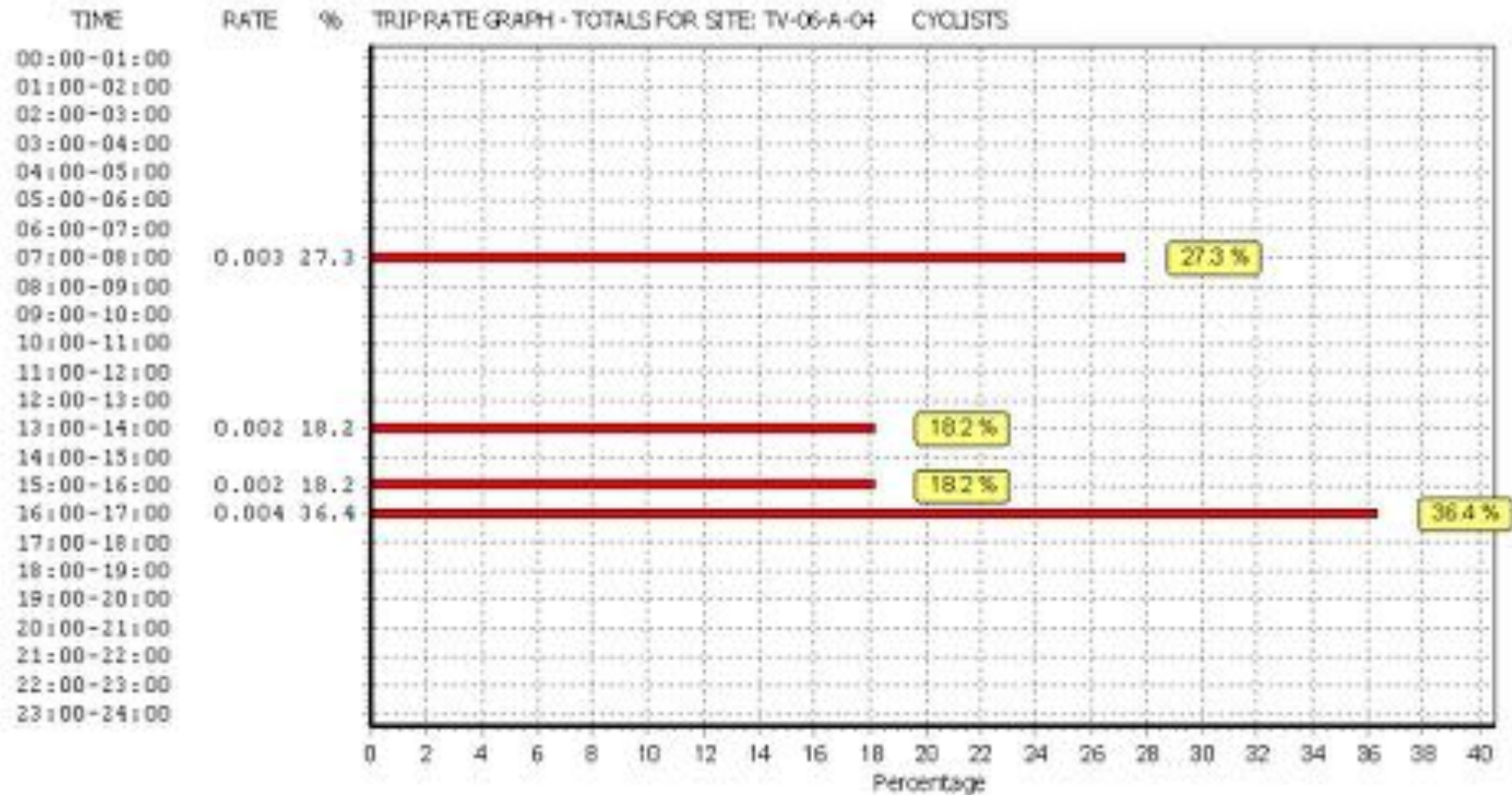
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