



NHS COASTAL WEST SUSSEX CLINICAL
COMMISSIONING GROUP
LITTLEHAMPTON GP SURGERY
COURTWICK LANE, LITTLEHAMPTON

TRANSPORT STATEMENT

APRIL 2014



the journey is the reward

**NHS COASTAL WEST SUSSEX CLINICAL
COMMISSIONING GROUP
LITTLEHAMPTON GP SURGERY
COURTWICK LANE, LITTLEHAMPTON**

TRANSPORT STATEMENT

APRIL 2014

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NHS Coastal West Sussex Clinical Commissioning Group
Littlehampton GP Surgery
Courtwick Lane, Littlehampton
Transport Statement

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1 Introduction

- 1.1 Mayer Brown has been commissioned by NHS Coastal West Sussex Clinical Commissioning Group (NCWSCCG) to prepare a Transport Statement to support their proposal to redevelop part of the existing 'Enterprise Hub' site at Courtwick Lane, Wick, Littlehampton.
- 1.2 The development proposals will enable NCWSCCG to merge the facilities at their two existing Medical Centre practices onto one site. The development for which planning permission is sought is a Medical Centre (Littlehampton GP Surgery) which will occupy 947sqm of the existing 'Enterprise Hub' and will include a GP surgery, drop-in centre and a health centre.
- 1.3 The site is located on the southern side of Courtwick Lane and to the west of the A284 Lyminster Road. Its location in relation to the local highway network is shown in **Figure 1.1** below.

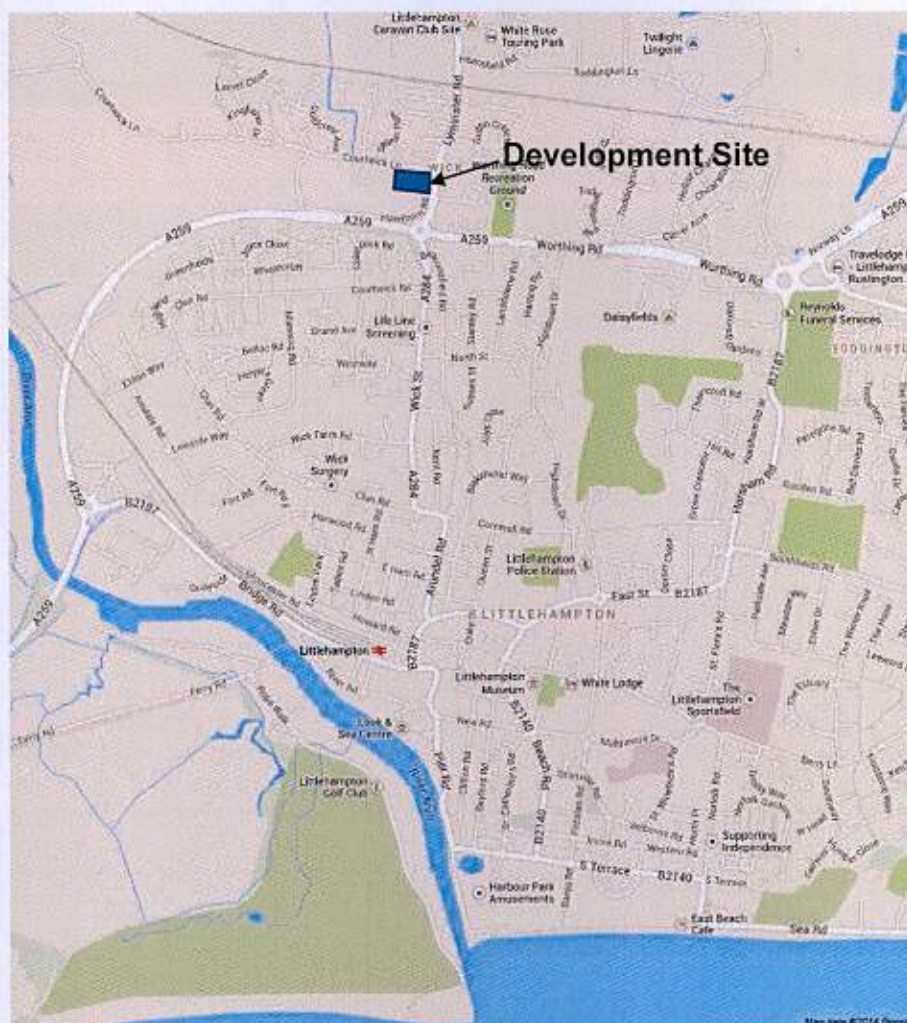


Figure 1.1: Site Location in Relation to the Local Highway Network

- 1.4 The Department for Transport (DfT) *Guidance on Transport Assessment*, Appendix B, sets guidance thresholds based on size or scale of land use to determine if a Transport Assessment, Transport Statement or No assessment is required. For Non-Residential Institutions (D1) the Medical Centre proposal lies within the Transport Statement requirements range, >500<1,000sqm.
- 1.5 This report therefore takes the form of a Transport Statement (TS) and examines the accessibility of the site by non-car modes of transport and sets out the transport issues relating to the existing and proposed development.
- 1.6 The remainder of this report consists of the following sections:
- Existing Conditions;
 - Proposed Development; and
 - Summary and Conclusions.
- 1.7 This report concludes that the proposed development is accessible by sustainable modes of transport, has the appropriate level of parking and will not have a detrimental impact on the operation or safety of the local highway network. Hence, there are no reasons why this development should be resisted on transport related grounds.

2 Existing Conditions and Site Location

Site Location

- 2.1 The application site is located in Wick, on the outskirts of Littlehampton and to the north of the A259 Worthing Road. It occupies part of the existing 'Enterprise Hub' site which is accessed from Courtwick Lane, via the A284 Lyminster Road, situated to the east of the site. To the south of the site is the Morrisons Foodstore and the site is bordered to the west by industrial units. The site is situated close to residential areas located to the north of Courtwick Lane, to the east of the A284 Lyminster Road and to the south of the A259 Worthing Road.
- 2.2 The existing 'Enterprise Hub' offers small and medium sized businesses start up space on short term lets. It contains office suites from 200sqft which are suitable for a wide range of business requirements from established businesses, start up and small businesses although it is understood that there has been little interest in the office units and the building continues to remain vacant.
- 2.3 There are 92 car parking spaces within the parking area provided for the existing 'Enterprise Hub' and seven Sheffield Cycle Stands which provides parking for up to 14 cycles.

Adjacent Highway Network

- 2.4 The site is currently accessed from a single priority junction on Courtwick Lane which provides direct access to the 92 space car park. The Morrisons Foodstore to the south of the site has 270 car parking spaces and these cannot be accessed by vehicles from Courtwick Lane or those within the existing 'Enterprise Hub' car park. There is a pedestrian access between the Morrisons site and the 'Enterprise Hub' site and this arrangement will be improved as part of the development proposals to encourage linked trips between the two sites. This will ensure vehicle trips are kept to a minimum by allowing residents to visit Morrisons Foodstore and the new Medical Centre as part of one trip and hence will provide general benefits to the operation of the local highway network.

3 Development Proposals

- 3.1 As set out above, the development for which planning permission is sought is a Medical Centre which will occupy approximately 947sqm of the 'Enterprise Hub' and 53sqm of new build (total area of 1,000sqm) and will include a GP surgery, a drop-in centre and a health centre. The Medical Centre (1,000sqm) will be allocated 39 car parking spaces, which will be accessed via a new access junction on Courtwick Lane.
- 3.2 The remaining 2,418sqm of the building will be retained as an 'Enterprise Hub' for office use with 47 parking spaces, which will be accessed via the existing car park access on Courtwick Lane.
- 3.3 As set out in the introduction to this statement, the development scheme is being proposed so that the Arun Medical Group (AMG) can merge their two existing Medical Centres together within the existing 'Enterprise Hub' building at Wick.
- 3.4 The two existing Medical Centres are currently located on East Street, Littlehampton and Sea Road, East Preston and the locations of these surgeries together with the proposed surgery are shown in **Figure 3.1** below.



Figure 3.1: Locations of the Existing and Proposed Surgeries

Servicing

- 3.5 The proposed Medical Centre will be serviced by small light goods vehicles which will be able to access the site from Courtwick Lane via the new car park access.
- 3.6 General and business waste from the site will be collected during office hours by existing on-street refuse collection services.

3.7 Clinical waste will be collected separately, usually during out of office hours in the early morning period.

3.8 It is anticipated that the following waste collection bins will be stored on site:

- x1 660l clinical waste bin
- x1 660l business waste bin
- x1 330l waste bin
- x1 330l clinical waste bin
- x1 recycling bin

Changes to site Layout

3.9 The development proposals will provide an additional pedestrian access to the site from Courtwick Lane and adjustments will be made to the footway layout within the site so that it links to both the existing footway and pedestrian crossing on Lyminster Road. The existing pedestrian access between the Morrisons site and the 'Enterprise Hub' site will be improved as part of these development proposals

3.10 As described previously, the development scheme will also provide a new vehicle access from Courtwick Lane to the area of the car park which will be used solely for the proposed Medical Centre. The location of the access has been designed to provide adequate separation from the main Courtwick Lane junction with Lyminster Road. There will be an intervisibility splay between the proposed new access and the Courtwick Lane/Lyminster Road junction of 2.4m x 43m and a western visibility splay from the new access of at least 2.4m x 43m. Manual for Streets recommends 43m stopping site distances for 30mph roads and thus the visibility achievable at the proposed access is appropriate for the local road conditions. It is also proposed to introduce 'no-waiting at any time' restrictions on Courtwick Lane at its junction with Lyminster Road to ensure this junction is kept clear of parking at all times.

3.11 The layout of the car park is also proposed to be revised to suit the needs of the proposed medical centre, including disabled parking spaces and an Ambulance waiting area.

3.12 The layout of the proposed development is shown in **Figure 3.2** below.

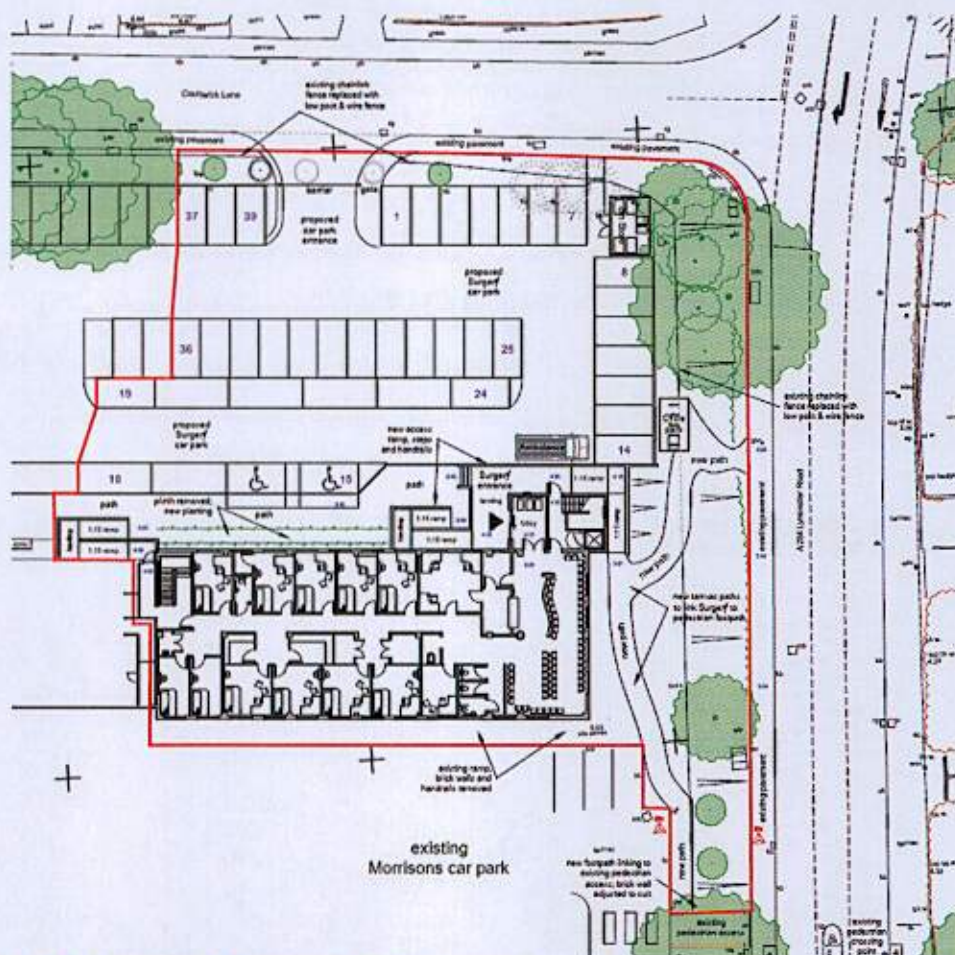


Figure 3.2: Layout of Proposed Development

Bus Accessibility

- 3.13 There are two bus stops located very close to the site on Lyminster Road that are within a convenient and easy walking distance (2-3minutes) of the site. The southbound bus stop is provided with a bus shelter. There are four additional bus stops that are located within a 640m walk distance and these are located on Wick Street and Courtwick Road, which are to the south of the A259.
- 3.14 The peak frequency of the key bus services that serve these bus stops, within the 640m walk distance, are summarised in **Table 3.1** below.

Bus	Route	Peak Frequency		
		Weekday	Saturday	Sunday
12	Tesco, Littlehampton - Wick - Anchor Springs - Rustington - Sainsbury's Rustington	Every 60 minutes	Every 60 minutes	No Service
700	Southsea - Portsmouth - Havant - Chichester - Bognor Regis - Arundel - Littlehampton - Worthing - Brighton	Every 30 minutes	Every 30 minutes	Every 60 minutes

Table 3.1: Bus Services Accessible from the Site

- 3.15 The above table identifies that the site is accessible by two bus services that provide regular services within Littlehampton and East Preston and also to the towns and villages surrounding Littlehampton.
- 3.16 The accessibility of the key bus services in the Littlehampton and East Preston area are summarised in **Figure 3.3** below and also identifies the number of patients currently registered to the existing surgeries to be relocated, by postcode area.
- 3.17 This indicates that most Littlehampton and East Preston residents have access to at least one of these key bus services and there are currently circa. 5,560 existing registered patients who are within a 400m walk distance of a bus stop on these routes.

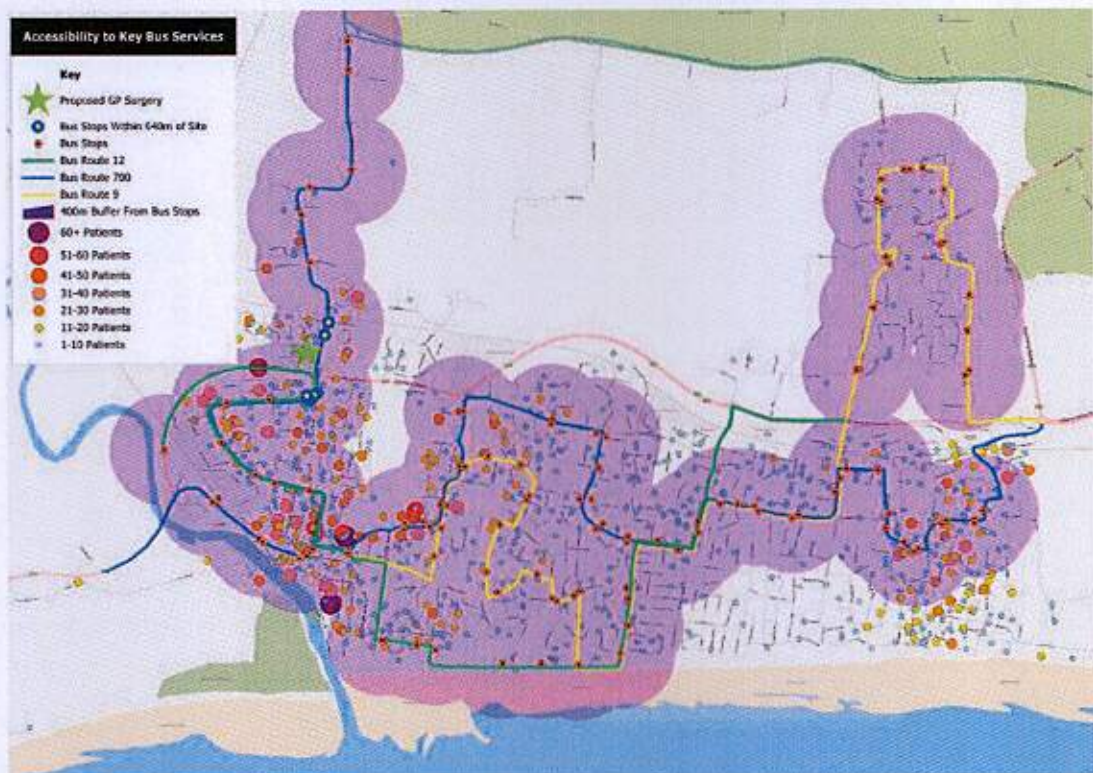


Figure 3.3: Accessibility to Key Bus Services

Rail Accessibility

- 3.18 The nearest railway station to the site is Littlehampton Railway Station. This station is located approximately 1,600m from the site which is approximately a 20minute walk (assuming an average walking speed of 80m/min). It is also a 6minute cycle ride (assuming a comfortable cycle speed of 260m/minute) from the site. Hence, the site has rail access, particularly for staff travelling to and from the site.
- 3.19 The station is managed by Southern and the rail services from Littlehampton Station are summarised in **Table 3.2**.

Route	Peak Frequency		
	Weekday	Saturday	Sunday
Littlehampton – Barnham - London Victoria	3 per hour	3 per hour	2 per hour
Littlehampton – Barnham - Hove	3 per hour	2 per hour	2 per hour
Littlehampton – Barnham - Portsmouth Harbour	2 per hour	1 per hour	1 per hour
Littlehampton – Barnham - Portsmouth & Southsea	2 per hour	2 per hour	1 per hour

Table 3.2: Rail Services from Littlehampton Station

- 3.20 The above table identifies that Littlehampton Station provides regular services to Barnham, London, Portsmouth Harbour and Portsmouth & Southsea.

Cycle Accessibility

- 3.21 There are currently seven Sheffield Cycle Stands on site, which provide cycle parking for 14 cycles at the 'Enterprise Hub'. This on-site cycle parking provision will be improved as a result of the proposals by providing five new cycle stands at the Medical Centre end of the site in addition to retaining the generous existing cycle parking provision at the 'Enterprise Hub'.
- 3.22 Cycle access to the site is currently achieved via the existing local highway network. There are shared cycle/footway facilities provided within the area near the site and also mandatory cycle lanes provided on the A259 to the south of the Morrisons Foodstore.

Walk Accessibility

- 3.23 Pedestrian access to the site is currently achieved via the existing footways alongside Lyminster Road and Courtwick Lane. The existing footways provide easy access to the bus stops on Lyminster Road. The roundabout junction of the A259 Worthing Road with A284 Wick Street and Lyminster Road incorporates pedestrian crossings with push button facilities on the A259 Worthing Road and the A284 Wick Street arms.
- 3.24 As previously set out in this report, the existing footway, located to the east of the 'Enterprise Hub' building will be improved to enable linked trips between Morrisons and the proposed Medical Centre.

Accessibility Summary

- 3.25 The above identifies that the site is served by a regular bus service and is accessible by cycle and on foot.

Existing Staff, Patient and Visitor Travel Surveys

Patient and Visitor Surveys

- 3.26 Travel surveys were undertaken of all staff, patients and visitors to each of the two existing medical centres to identify their mode of travel to the sites. The surveys were undertaken on the five weekdays from Wednesday 5th to Tuesday 11th February 2014.
- 3.27 The average of the five days data from the Travel Surveys for patients and visitors at the East Street Surgery and the Sea Road surgery and the average of both surgeries were calculated and are summarised in **Table 3.3** below:

Mode of Transport	East Street Surgery	Sea Road Surgery	Average of both surgeries
Car (Driver)	47%	51%	48%
Car (Passenger)	11%	11%	11%
Taxi / Minicab	3%	0%	2%
Motorbike	0%	0%	0%
Bus	3%	2%	2%
Train	0%	0%	0%
Cycle	1%	1%	1%
Walk	34%	33%	34%
Other (Wheel Chair / Scooter)	1%	2%	1%
Total	100%	100%	100%

Table 3.3: 5-Day Average Patients & Visitor Mode Share at the Existing Surgeries

- 3.28 The results in **Table 3.3** identify that on average 48% of patients drive and 34% of patients walk to the existing surgeries.

Staff Survey

- 3.29 With regard to staff travel, the travel survey of staff identified that 89% of staff drove, 4% used the train and 7% walked to the existing surgeries.

Proposed Site Accessibility and Patient Catchment

- 3.30 The number of patients who are currently registered by home postcode, at the two existing surgeries and the walk catchment isochrones for the proposed surgery are shown in **Figure 3.4** below.
- 3.31 The patient postcode plot in **Figure 3.4** identifies that the circa. 600 patients live within an 800m walk distance of the proposed surgery on Courtwick Lane.

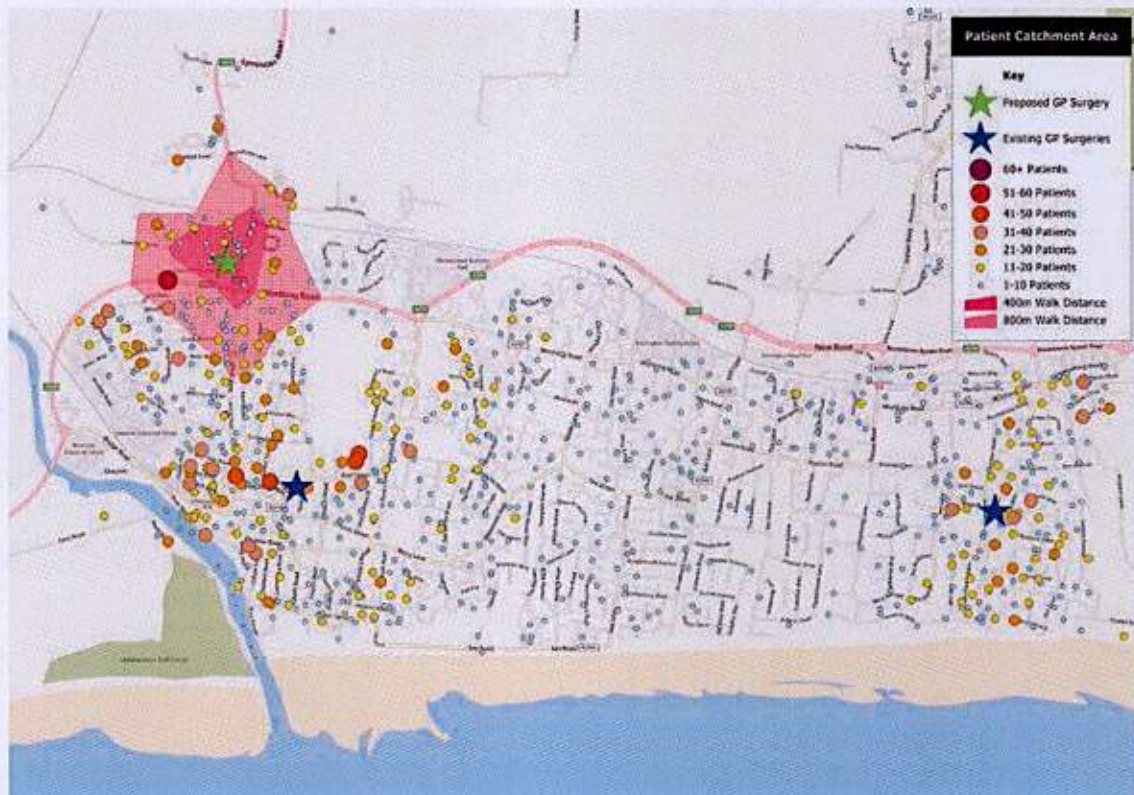


Figure 3.4: Number of Registered Patients by Postcode

In terms of total population catchment, there are circa 3,800 people who live within an 800m walk distance of the proposed surgery.

Existing Traffic Attraction

- 3.32 It is understood that the entire 'Enterprise Hub' is currently unoccupied and is therefore not attracting any vehicle trips. To determine the potential impact of Weekday AM and PM Peak Hour traffic that the existing 'Enterprise Hub' would have on the local highway network, the traffic attraction has been estimated by reference to the TRICS (Trip Rate Information Computer System) database. This is an accepted tool in determining the likely traffic attraction to sites based on Land Use within the UK.

3.33 This assessment is based on sites within the "Employment – Business Park" category and has been carried out for both the Weekday AM and PM Peak Hours and the full TRICS assessment is contained in Appendix A. The traffic attraction of the following areas of the 'Enterprise Hub' have been summarised in **Table 3.4**:

- Entire existing 'Enterprise Hub' (3,365sqm)
- Part of 'Enterprise Hub' (947sqm) converted to proposed Medical Centre
- Retained 'Enterprise Hub' (2,418sqm)

'Enterprise Hub' Areas	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Arrivals (Vehs)	Departures (Vehs)	Total (Vehs)	Arrivals (Vehs)	Departures (Vehs)	Total (Vehs)
Entire Hub (3,365sqm)	70	10	80	8	58	66
Redeveloped Hub (947sqm)	20	3	23	2	16	18
Retained Hub (2,418sqm)	50	7	57	6	42	48

Table 3.4: Existing Enterprise Hub Weekday AM / PM Peak Hour Traffic Attraction

3.34 The arrival and departure vehicle flows shown in **Table 3.4** identify that the weekday AM Peak Hour would be slightly busier than the weekday PM Peak Hour.

Proposed Traffic Attraction

3.35 To determine the traffic attraction for the proposed Medical Centre the TRICS database was interrogated to obtain representative trip rates for the land use "Health – GP Surgeries" and the full TRICS assessment contained in Appendix A. These trip rates were applied to the proposed Medical Centre (1,000sqm) and the resulting vehicle flows summarised in **Table 3.5**. The vehicle flows for the retained 'Enterprise Hub' area and the total for the completed redevelopment are also summarised in **Table 3.5**.

Proposed Development Areas	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Arrivals (Vehs)	Departures (Vehs)	Total (Vehs)	Arrivals (Vehs)	Departures (Vehs)	Total (Vehs)
Proposed Medical Centre (1,000sqm)	56	30	86	35	48	84
Retained Hub (2,418sqm)	50	7	57	6	42	48
Total	106	37	143	41	90	132

Table 3.5: Post Redevelopment Weekday AM and PM Peak Hour Traffic Attraction

- 3.36 It can be seen in **Table 3.5** that the proposed development could, at worst, result in 106 vehicles arriving and 37 vehicles departing from the site during the AM Peak Hour and 41 vehicles arriving and 90 vehicles departing during the PM Peak Hour.
- 3.37 The net additional vehicle attraction of the proposed Medical Centre proposal is shown in **Table 3.6** below.

Land Use	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Arrivals (Vehs)	Departures (Vehs)	Total (Vehs)	Arrivals (Vehs)	Departures (Vehs)	Total (Vehs)
Proposed Medical Centre (1,000sqm)	+36	+27	+63	+33	+32	+65

Table 3.6: Net Additional Weekday AM and PM Peak Hour Traffic Attraction

- 3.38 It can be seen from **Table 3.6** that the proposed development could, at worst, result in an additional 36 vehicles arriving and 27 vehicles departing from the site during the AM Peak Hour and an additional 33 vehicles arriving and 32 vehicles departing from the site during the PM Peak Hour. However, this does not include an allowance for linked trips between the Morrisons Foodstore, the Medical Centre and the retained 'Enterprise Hub' and hence represents a worst scenario.

Highway Capacity Assessment

- 3.39 A capacity assessment of the A284 Lyminster Road junction with Courtwick Lane has been undertaken using the TRL (Transport Research Laboratory) "PICADY" (Priority Intersection Capacity And Delay) junction modelling software.
- 3.40 The PICADY output provides a measure of the "Ratio of Flow to Capacity" (RFC), with an RFC of 1 indicating that a junction is operating at maximum theoretical capacity (i.e. 100% capacity).
- 3.41 It is generally accepted however that junctions can continue to operate beyond theoretical capacity without additional detriment to the adjacent highway.

Existing 2014 Base

- 3.42 The existing traffic flows at this junction were obtained via a Classified Vehicle Video Survey which was undertaken on Friday 31st January 2014 between 07:30-12:00hrs and 15:00-19:00hrs. The survey also recorded vehicles stopping in the yellow box markings when the rail level crossing barriers were down. The survey identified only four vehicles stopping/blocking the box junction during the duration of the surveys. The traffic survey data is contained in Appendix B of this report and the surveyed Weekday AM and PM Peak Hour flows are shown in **Figure 3.5**.

- 3.43 The results from the PICADY assessment for the existing 2014 Base scenario are shown in **Table 3.7** below. The results identify that the junction operates with significant spare capacity in both the Weekday AM and PM Peak hours and the full PICADY Output is contained in Appendix C of this report.

Traffic Movements	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	Max. RFC	Max Queue	Max. RFC	Max Queue
Courtwick Lane (Left Turn)	0.059	0.1	0.071	0.1
Courtwick Lane (Right Turn)	0.227	0.3	0.217	0.3
A284 Lyminster Road (Right Turn)	0.059	0.1	0.038	0.0

Table 3.7: Existing 2014 Base PICADY Model Results

2014 Base + Medical Centre + Remainder of Enterprise Hub

- 3.44 As previously discussed in this report, the 'Enterprise Hub' continues to remain unoccupied and therefore, to ensure that a robust assessment of the A284 Lyminster Road junction with Courtwick Lane has been undertaken, the remainder of the 'Enterprise Hub' traffic attraction has been included in this scenario.
- 3.45 The results from the PICADY assessment for the 2014 Base + Medical Centre + Remainder of 'Enterprise Hub' scenario are shown in **Table 3.8** below and the AM and PM Peak Hour flows are shown in **Figure 3.6**.
- 3.46 The results identify that the junction would continue to operate satisfactorily and with significant spare capacity in both the AM and PM Peak hours and the full PICADY Output is contained in Appendix D of this report.

Traffic Movements	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	Max. RFC	Max Queue	Max. RFC	Max Queue
Courtwick Lane (Left Turn)	0.087	0.1	0.145	0.2
Courtwick Lane (Right Turn)	0.335	0.5	0.414	0.7
A284 Lyminster Road (Right Turn)	0.142	0.2	0.053	0.1

Table 3.8: 2014 Base + Medical Centre + Enterprise Hub PICADY Model Results

Parking Standards and Parking Provision

- 3.47 The Revised County Parking Standards and Transport Contributions Methodology Supplementary Planning Guidance adopted by West Sussex County Council (WSCC), November 2003, state that the Maximum Parking Standard for Office use is 1 space per 30sqm. The Maximum Parking Standard for Doctors, Dentists, Vets and Medical Centres it is 1 space per practitioner plus four spaces per consulting/examination room for visitors and staff, plus 1 space per 20 square metres of office space for administrative and support staff.
- 3.48 The application of the WSCC Maximum Parking Standards to the existing 'Enterprise Hub' would result in a maximum permitted car parking provision of 112 spaces at the site. However, the actual provision, as previously stated in this report, is 92 parking spaces, 20 spaces less than the maximum permitted under the current standards.
- 3.49 The application of the WSCC Maximum Parking Standards to the proposed Medical Centre would result in a maximum allowable parking provision of up to 81 spaces and up to 81 spaces for the retained 'Enterprise Hub', giving a total maximum provision of up to 162 spaces.
- 3.50 However, the above relates to maximum permitted levels and do not take into account the operational needs of the proposals. It is also acknowledged in the West Sussex Structure Plan 2001 – 2016 Deposit Draft, Policy DEV5 – Parking Provision that:
- "(a) Development should not be permitted unless the level of parking is compatible with the need to avoid environmental or safety problems and the need to encourage walking, cycling and the use of passenger transport, where this is, or can be, a realistic alternative."*
- 3.51 Therefore, a parking accumulation assessment has been undertaken using the trip rates from the TRICS Business Park and Medical Centre sites that have been used in the existing and proposed traffic attraction sections of this report. The TRICS data identifies that these Medical Centre sites have, on average, 78% of trips being made by vehicles, 19% of trips on foot and 1% by Public Transport, Cycle and Taxis which are a greater percentage arriving by car and less on foot than that identified by the travel surveys undertaken at the existing Medical Centres. Hence, the use of these modal splits produce a robust assessment of the proposed parking provision.

3.52 The resulting parking accumulation for the existing 'Enterprise Hub' (3,365sqm) and the proposed Medical Centre (1,000sqm) and remainder of the 'Enterprise Hub' (2,418sqm), using the TRICS site data is shown in **Table 3.9** below.

Time Range	Parking Accumulation			
	Existing 'Enterprise Hub'	Proposed Medical Centre	Remaining 'Enterprise Hub'	Medical Centre + Remaining 'Enterprise Hub'
07:00-08:00	18	13	13	26
08:00-09:00	77	39	56	95
09:00-10:00	106	39	76	115
10:00-11:00	105	37	75	112
11:00-12:00	100	37	75	112
12:00-13:00	88	30	63	93
13:00-14:00	96	32	69	101
14:00-15:00	94	31	68	99
15:00-16:00	87	35	62	97
16:00-17:00	66	29	48	77
17:00-18:00	16	16	12	28
18:00-19:00	3	1	2	3

Table 3.9: Parking Accumulation at the Site

3.53 The parking accumulation shown in **Table 3.9** identifies that the maximum parking accumulation for the proposed Medical Centre is 39 spaces and 76 spaces for the remaining 'Enterprise Hub' which would result in a total maximum demand for 115 parking spaces between 09:00 and 10:00hrs on a typical weekday.

3.54 However, the travel surveys that were undertaken at the existing medical centres identified, as previously described in this report, that on average only 48% of patients and visitors currently drive and 34% walk to the existing medical centres. An adjustment of the TRICS Medical Centre parking accumulation to reflect the actual car use identified by the travel surveys would result in a maximum parking accumulation at the site of 24 spaces.

3.55 Therefore the theoretical parking demand for the site is between 100 and 115 parking spaces.

3.56 The proposed development scheme provides the following parking provision:

- Proposed Medical Centre (1,000sqm) – 39 spaces
- Retained 'Enterprise Hub' (2,418sqm) – 47 spaces
- **TOTAL PROVISION = 86 SPACES**

- 3.57 As a comparison, if the existing 'Enterprise Hub' site parking ratios are applied pro-rata to the retained 'Enterprise Hub' as described above, this would result in 65 spaces being required which is only 18 spaces more than the proposed provision of 47 spaces. It is proposed that this small shortfall of 18 spaces can be mitigated through the use of a comprehensive Travel Plan.
- 3.58 It is proposed that the cycle parking provision at the site will, as a minimum, meet those stated within the current standards.

4 Summary and Conclusions

- 4.1 Mayer Brown has been commissioned by NHS Coastal West Sussex Clinical Commissioning Group (NCWSCCG) to prepare a Transport Assessment to support their proposal to redevelop the 'Enterprise Hub' site at Courtwick Lane, Wick Littlehampton.
- 4.2 The development proposals will enable NCWSCCG to merge the facilities at their two existing Medical Centre practices onto this site. The development for which planning permission is sought is a Medical Centre (Littlehampton GP Surgery) which will occupy approximately 947sqm of the 'Enterprise Hub' and 53sqm of new build and will include a GP surgery, a drop-in centre and a health centre.
- 4.3 It is proposed that 39 car parking spaces, including 2 disabled bays will be allocated to the Medical Centre and 47 spaces for the remainder of the 'Enterprise Hub'. A new car park access is proposed to be provided for the Medical Centre. There is a pedestrian access between the Morrisons Foodstore and the 'Enterprise Hub' which will be improved as part of the development proposals to encourage linked trips between these two sites.
- 4.4 The 'Enterprise Hub' offers small and medium sized businesses start up space on short term lets. It contains employment space for approximately 200 people and the site can currently be accessed from a priority junction on Courtwick Lane. There are currently 92 parking spaces provided for the 'Enterprise Hub' and the remainder of the 'Enterprise Hub' would be provided with 47 spaces post development.
- 4.5 This report concludes that the proposed development is accessible by sustainable modes of transport has the appropriate level of parking and will not have a detrimental impact on the operation or safety of the local highway network. Hence, there are no reasons why this development should be resisted on transport related grounds.

APPENDIX A: TRICS Outputs

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : B - BUSINESS PARK

VEHICLESSelected regions and areas:

03 SOUTH WEST	
DC DORSET	1 days
WL WILTSHIRE	1 days
04 EAST ANGLIA	
NF NORFOLK	1 days
05 EAST MIDLANDS	
NT NOTTINGHAMSHIRE	1 days
06 WEST MIDLANDS	
WO WORCESTERSHIRE	1 days
07 YORKSHIRE & NORTH LINCOLNSHIRE	
NO NORTH LINCOLNSHIRE	1 days

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

Filtering Stage 2 selection:

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

Parameter: Gross floor area
 Actual Range: 1570 to 7400 (units: sqm)
 Range Selected by User: 1300 to 121275 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 27/11/12

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

Selected survey days:

Monday	1 days
Tuesday	1 days
Thursday	4 days

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

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

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

Selected Locations:

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

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

Selected Location Sub Categories:

Industrial Zone	1
Residential Zone	2
Retail Zone	1
Built-Up Zone	1
No Sub Category	1

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

Filtering Stage 3 selection:Use Class:

B1

6 days

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

Population within 1 mile:

5,001 to 10,000 1 days

10,001 to 15,000 2 days

15,001 to 20,000 1 days

25,001 to 50,000 2 days

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

Population within 5 miles:

75,001 to 100,000 2 days

100,001 to 125,000 1 days

125,001 to 250,000 1 days

250,001 to 500,000 2 days

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

Car ownership within 5 miles:

0.6 to 1.0 3 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

6 days

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

LIST OF SITES relevant to selection parameters

1	DC-02-B-01	BUSINESS PARK	DORSET
	COMMERCIAL ROAD		
	POOLE		
	Suburban Area (PPS6 Out of Centre)		
	Built-Up Zone		
	Total Gross floor area:	1570 sqm	
	Survey date: THURSDAY	17/07/08	Survey Type: MANUAL
2	NF-02-B-02	BUSINESS PARK	NORFOLK
	WHITING ROAD		
	LONG JOHN'S HILL		
	NORWICH		
	Edge of Town		
	Retail Zone		
	Total Gross floor area:	7400 sqm	
	Survey date: THURSDAY	17/05/07	Survey Type: MANUAL
3	NO-02-B-02	BUSINESS PARK	NORTH LINCOLNSHIRE
	DONCASTER ROAD		
	SCUNTHORPE		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	1574 sqm	
	Survey date: THURSDAY	22/09/05	Survey Type: MANUAL
4	NT-02-B-01	BUSINESS PARK	NOTTINGHAMSHIRE
	PARK LANE		
	NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Gross floor area:	2321 sqm	
	Survey date: THURSDAY	17/05/07	Survey Type: MANUAL
5	WL-02-B-01	BUSINESS PK	WILTSHIRE
	HIGH STREET		
	COPED HALL		
	WOOTTON BASSETT		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	2600 sqm	
	Survey date: MONDAY	02/10/06	Survey Type: MANUAL
6	WO-02-B-01	BUSINESS PARK	WORCESTERSHIRE
	BURNT MEADOW ROAD		
	MOORS MOAT NTH IND. EST		
	REDDITCH		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3525 sqm	
	Survey date: TUESDAY	02/05/06	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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
HC-02-B-01	Parking Ratio not representative
HF-02-B-01	Parking Ratio not representative
LN-02-B-01	Parking Ratio not representative
SF-02-B-01	Parking Ratio not representative
SH-02-B-01	Parking Ratio not representative
SH-02-B-03	Parking Ratio not representative
WM-02-B-01	Parking Ratio not representative

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

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	3165	0.090	6	3165	0.032	6	3165	0.122
07:30 - 08:00	6	3165	0.542	6	3165	0.058	6	3165	0.600
08:00 - 08:30	6	3165	0.637	6	3165	0.105	6	3165	0.742
08:30 - 09:00	6	3165	1.432	6	3165	0.205	6	3165	1.637
09:00 - 09:30	6	3165	0.837	6	3165	0.153	6	3165	0.990
09:30 - 10:00	6	3165	0.358	6	3165	0.195	6	3165	0.553
10:00 - 10:30	6	3165	0.263	6	3165	0.263	6	3165	0.526
10:30 - 11:00	6	3165	0.184	6	3165	0.226	6	3165	0.410
11:00 - 11:30	6	3165	0.216	6	3165	0.274	6	3165	0.490
11:30 - 12:00	6	3165	0.221	6	3165	0.311	6	3165	0.532
12:00 - 12:30	6	3165	0.242	6	3165	0.553	6	3165	0.795
12:30 - 13:00	6	3165	0.321	6	3165	0.348	6	3165	0.669
13:00 - 13:30	6	3165	0.400	6	3165	0.353	6	3165	0.753
13:30 - 14:00	6	3165	0.395	6	3165	0.211	6	3165	0.606
14:00 - 14:30	6	3165	0.216	6	3165	0.253	6	3165	0.469
14:30 - 15:00	6	3165	0.242	6	3165	0.263	6	3165	0.505
15:00 - 15:30	6	3165	0.179	6	3165	0.300	6	3165	0.479
15:30 - 16:00	6	3165	0.211	6	3165	0.300	6	3165	0.511
16:00 - 16:30	6	3165	0.190	6	3165	0.427	6	3165	0.617
16:30 - 17:00	6	3165	0.153	6	3165	0.532	6	3165	0.685
17:00 - 17:30	6	3165	0.142	6	3165	0.816	6	3165	0.958
17:30 - 18:00	6	3165	0.105	6	3165	0.916	6	3165	1.021
18:00 - 18:30	6	3165	0.079	6	3165	0.353	6	3165	0.432
18:30 - 19:00	6	3165	0.037	6	3165	0.169	6	3165	0.206
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			7.692			7.616			15.308

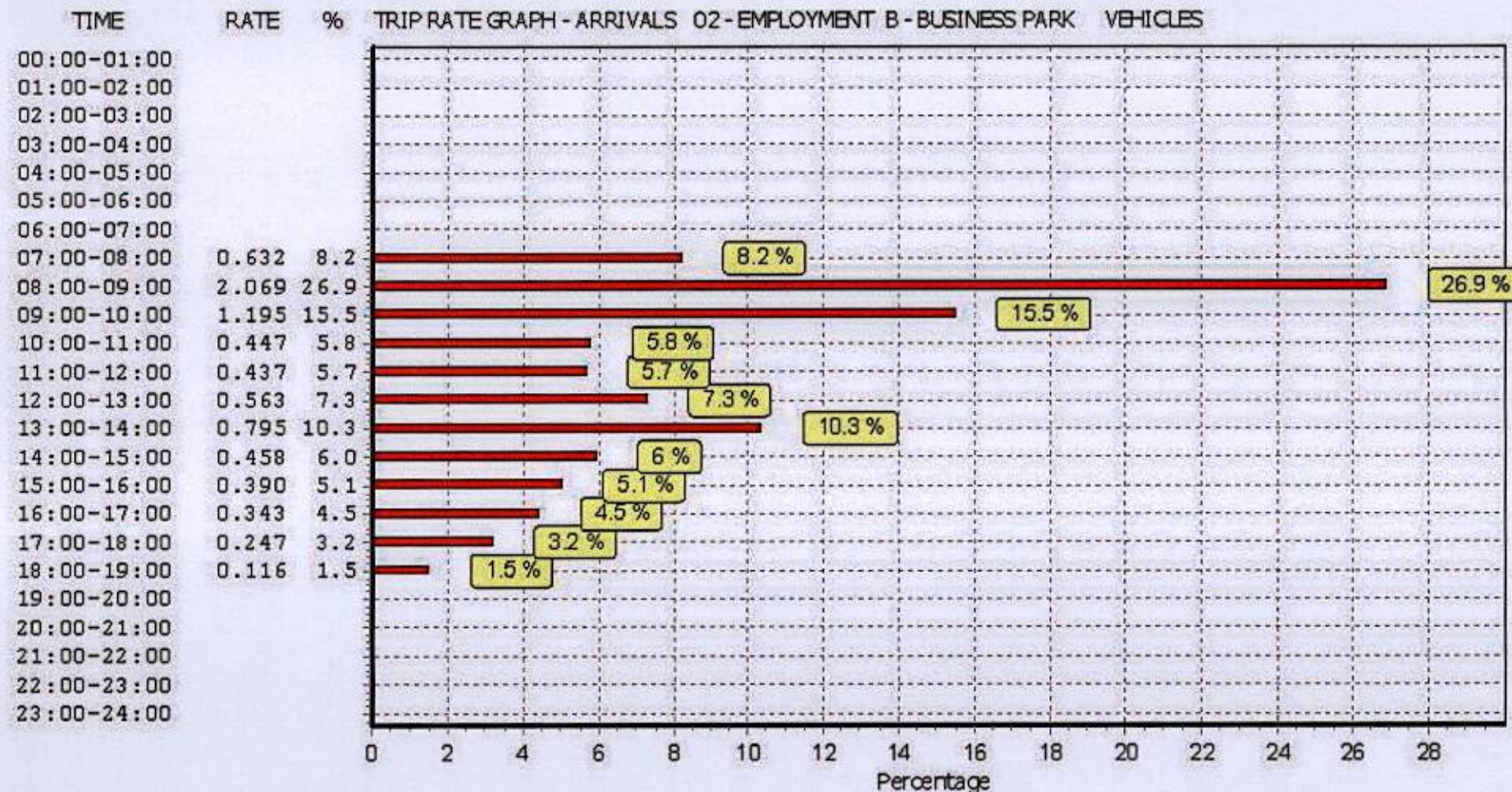
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

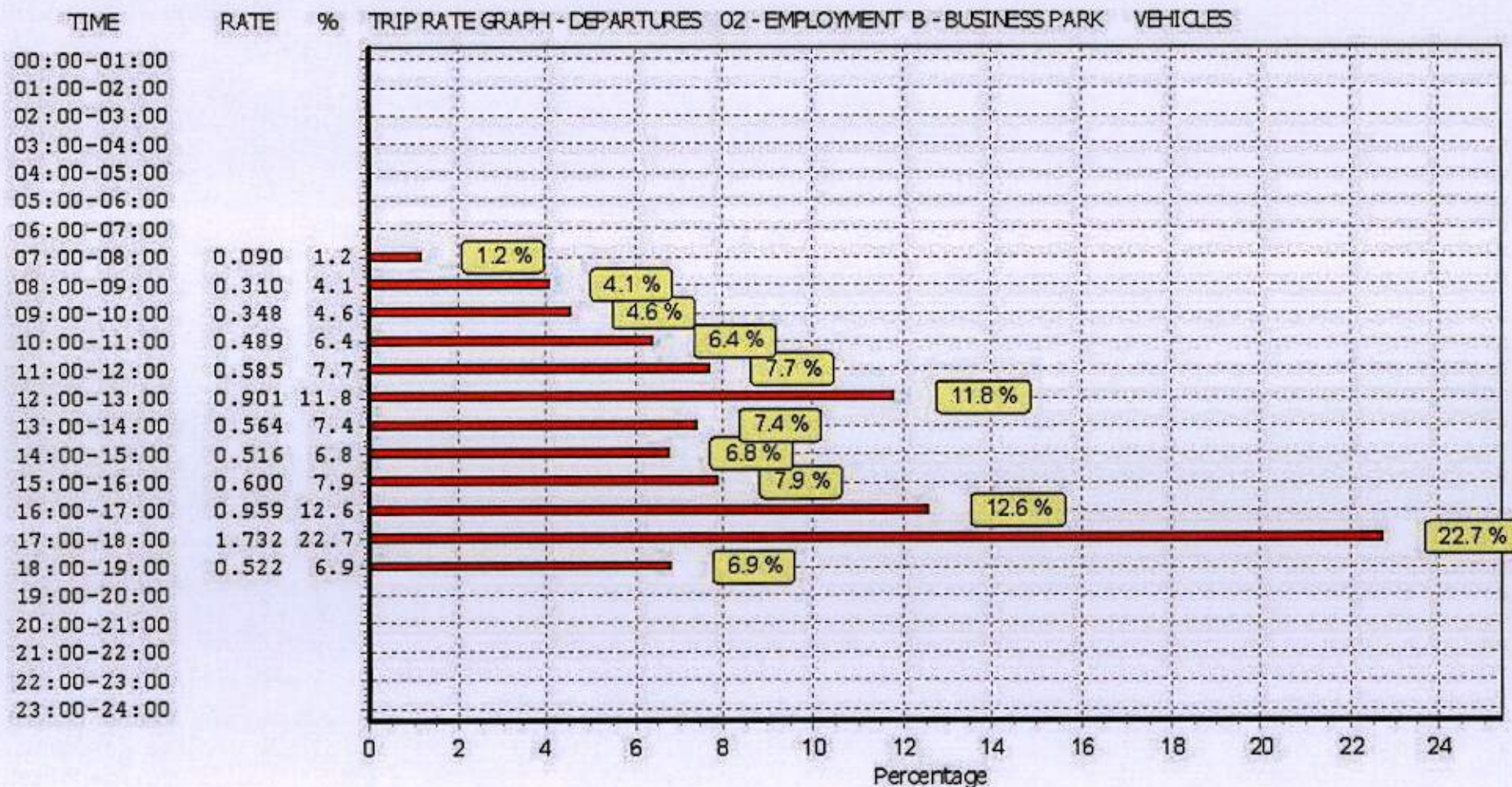
Parameter summary

Trip rate parameter range selected:	1570 - 7400 (units: sqm)
Survey date date range:	01/01/05 - 27/11/12
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

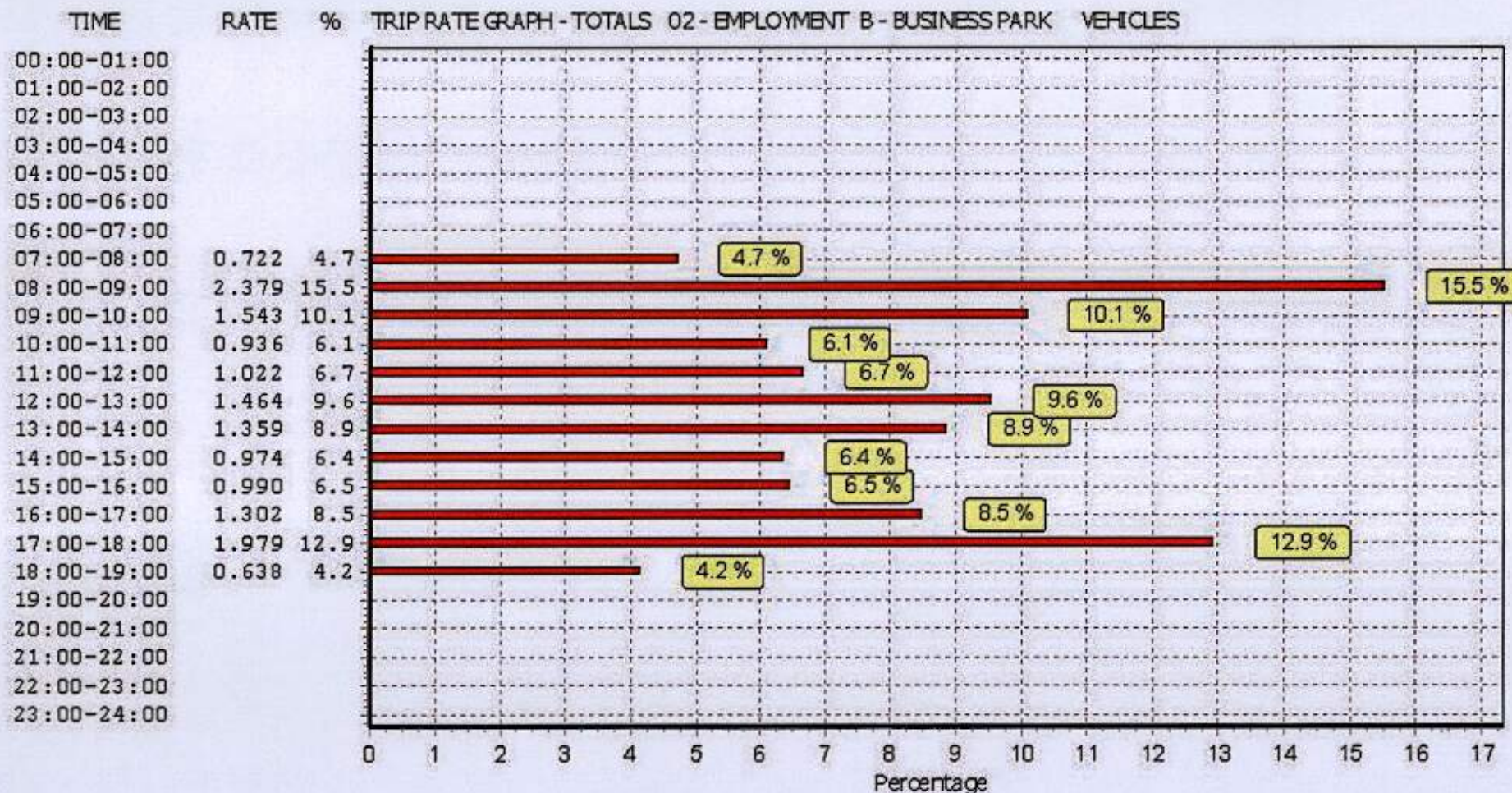
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
07:30 - 08:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
08:00 - 08:30	6	3165	0.005	6	3165	0.005	6	3165	0.010
08:30 - 09:00	6	3165	0.005	6	3165	0.005	6	3165	0.010
09:00 - 09:30	6	3165	0.011	6	3165	0.005	6	3165	0.016
09:30 - 10:00	6	3165	0.011	6	3165	0.016	6	3165	0.027
10:00 - 10:30	6	3165	0.005	6	3165	0.011	6	3165	0.016
10:30 - 11:00	6	3165	0.005	6	3165	0.000	6	3165	0.005
11:00 - 11:30	6	3165	0.016	6	3165	0.021	6	3165	0.037
11:30 - 12:00	6	3165	0.011	6	3165	0.000	6	3165	0.011
12:00 - 12:30	6	3165	0.005	6	3165	0.016	6	3165	0.021
12:30 - 13:00	6	3165	0.005	6	3165	0.005	6	3165	0.010
13:00 - 13:30	6	3165	0.011	6	3165	0.011	6	3165	0.022
13:30 - 14:00	6	3165	0.005	6	3165	0.005	6	3165	0.010
14:00 - 14:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
14:30 - 15:00	6	3165	0.016	6	3165	0.011	6	3165	0.027
15:00 - 15:30	6	3165	0.005	6	3165	0.005	6	3165	0.010
15:30 - 16:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
16:00 - 16:30	6	3165	0.011	6	3165	0.011	6	3165	0.022
16:30 - 17:00	6	3165	0.005	6	3165	0.005	6	3165	0.010
17:00 - 17:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
17:30 - 18:00	6	3165	0.005	6	3165	0.005	6	3165	0.010
18:00 - 18:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
18:30 - 19:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.137			0.137			0.274

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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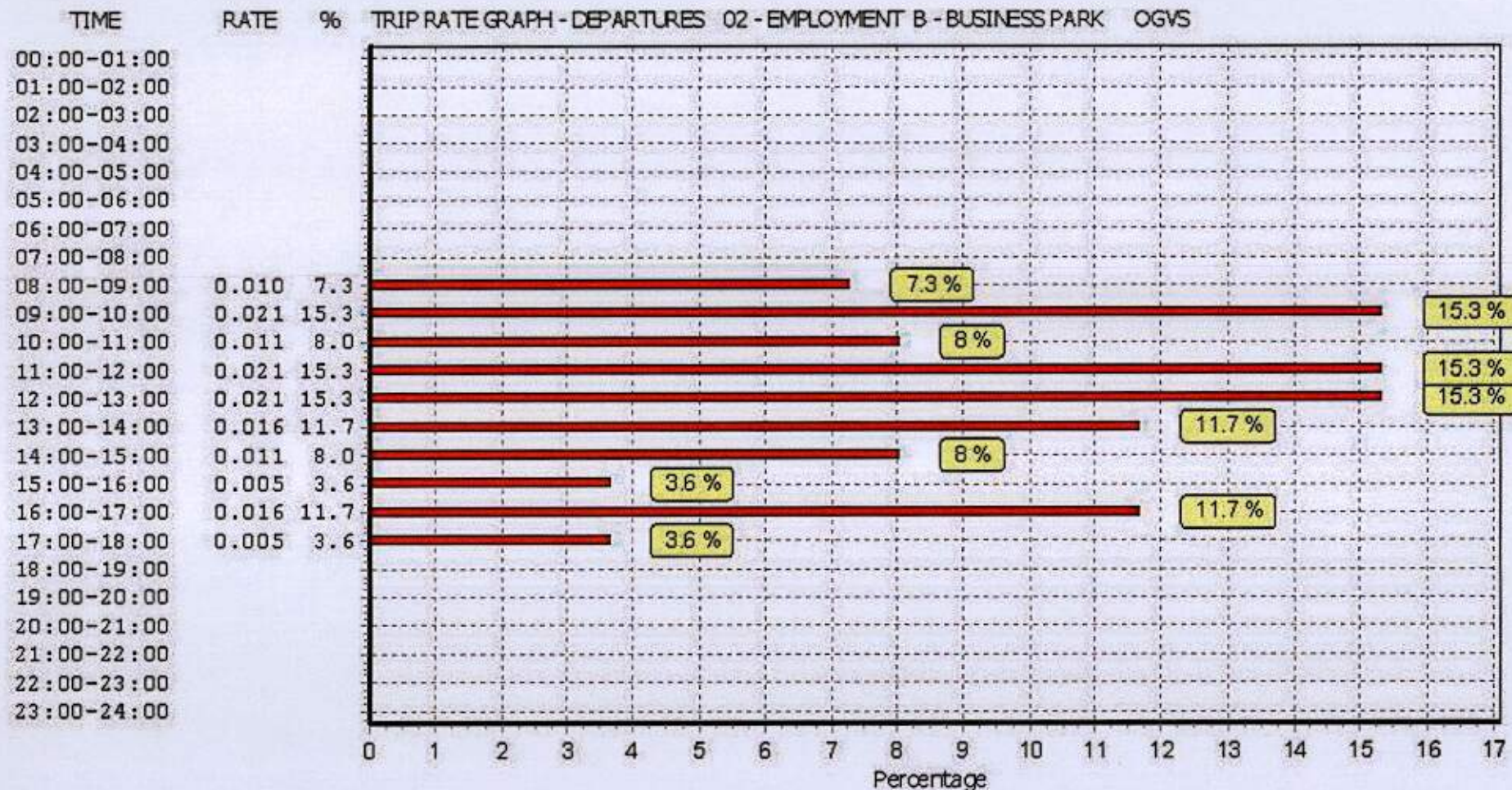
Parameter summary

Trip rate parameter range selected:	1570 - 7400 (units: sqm)
Survey date range:	01/01/05 - 27/11/12
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

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



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

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
07:30 - 08:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
08:00 - 08:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
08:30 - 09:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
09:00 - 09:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
09:30 - 10:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
10:00 - 10:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
10:30 - 11:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
11:00 - 11:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
11:30 - 12:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
12:00 - 12:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
12:30 - 13:00	6	3165	0.005	6	3165	0.005	6	3165	0.010
13:00 - 13:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
13:30 - 14:00	6	3165	0.005	6	3165	0.005	6	3165	0.010
14:00 - 14:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
14:30 - 15:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
15:00 - 15:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
15:30 - 16:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
16:00 - 16:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
16:30 - 17:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
17:00 - 17:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
17:30 - 18:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
18:00 - 18:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
18:30 - 19:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.010			0.010			0.020

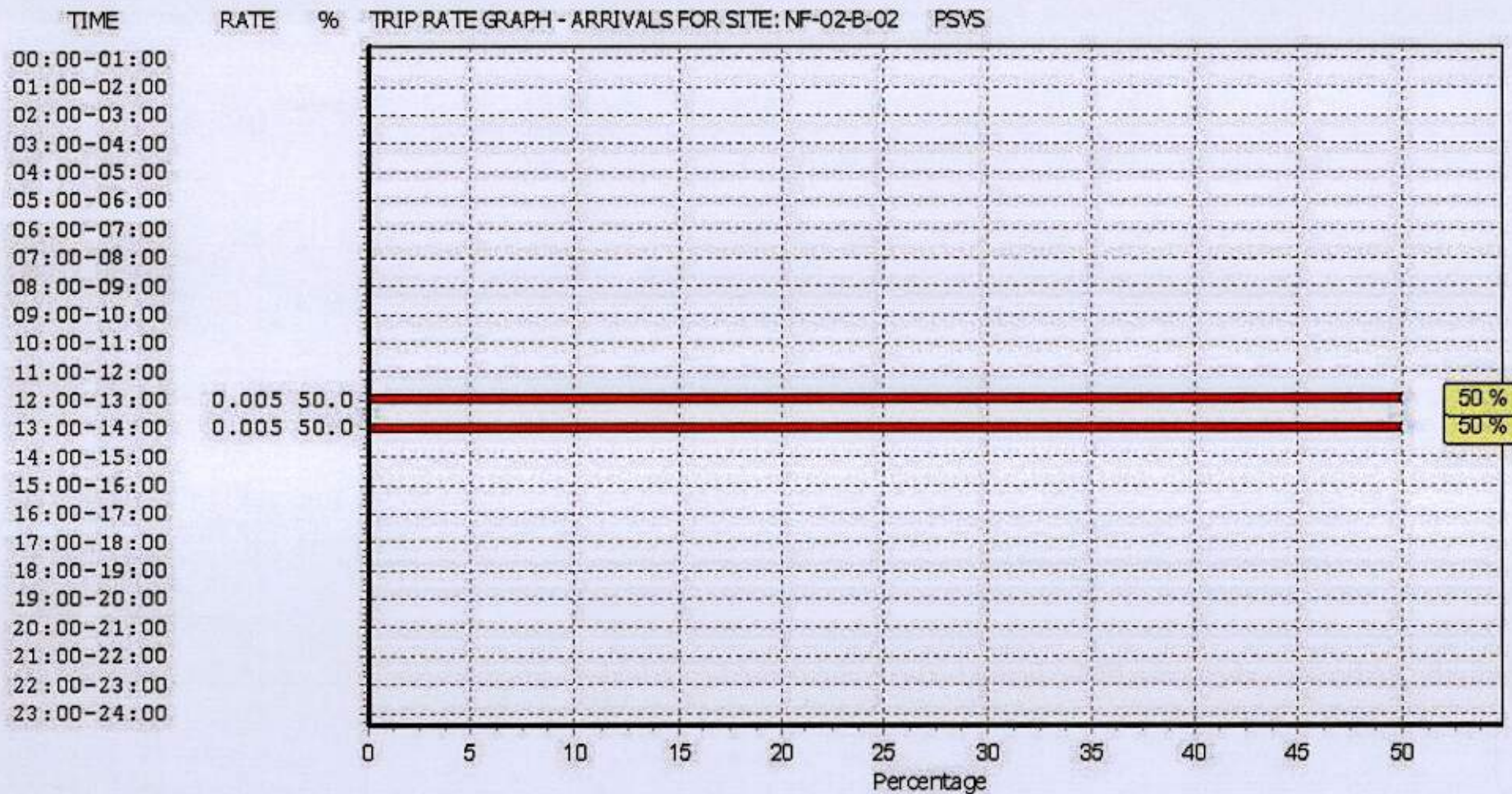
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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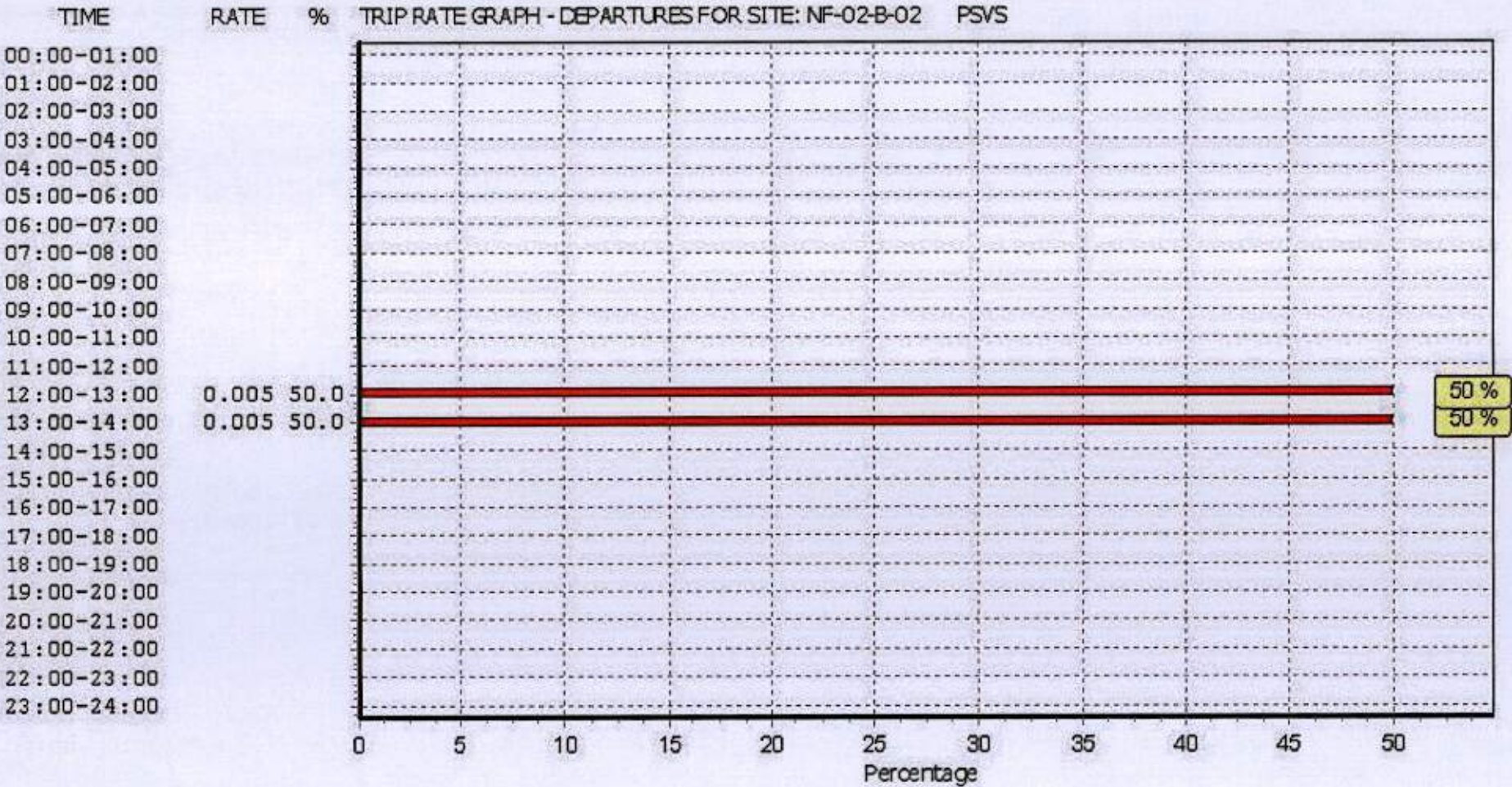
Parameter summary

Trip rate parameter range selected:	1570 - 7400 (units: sqm)
Survey date date range:	01/01/05 - 27/11/12
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

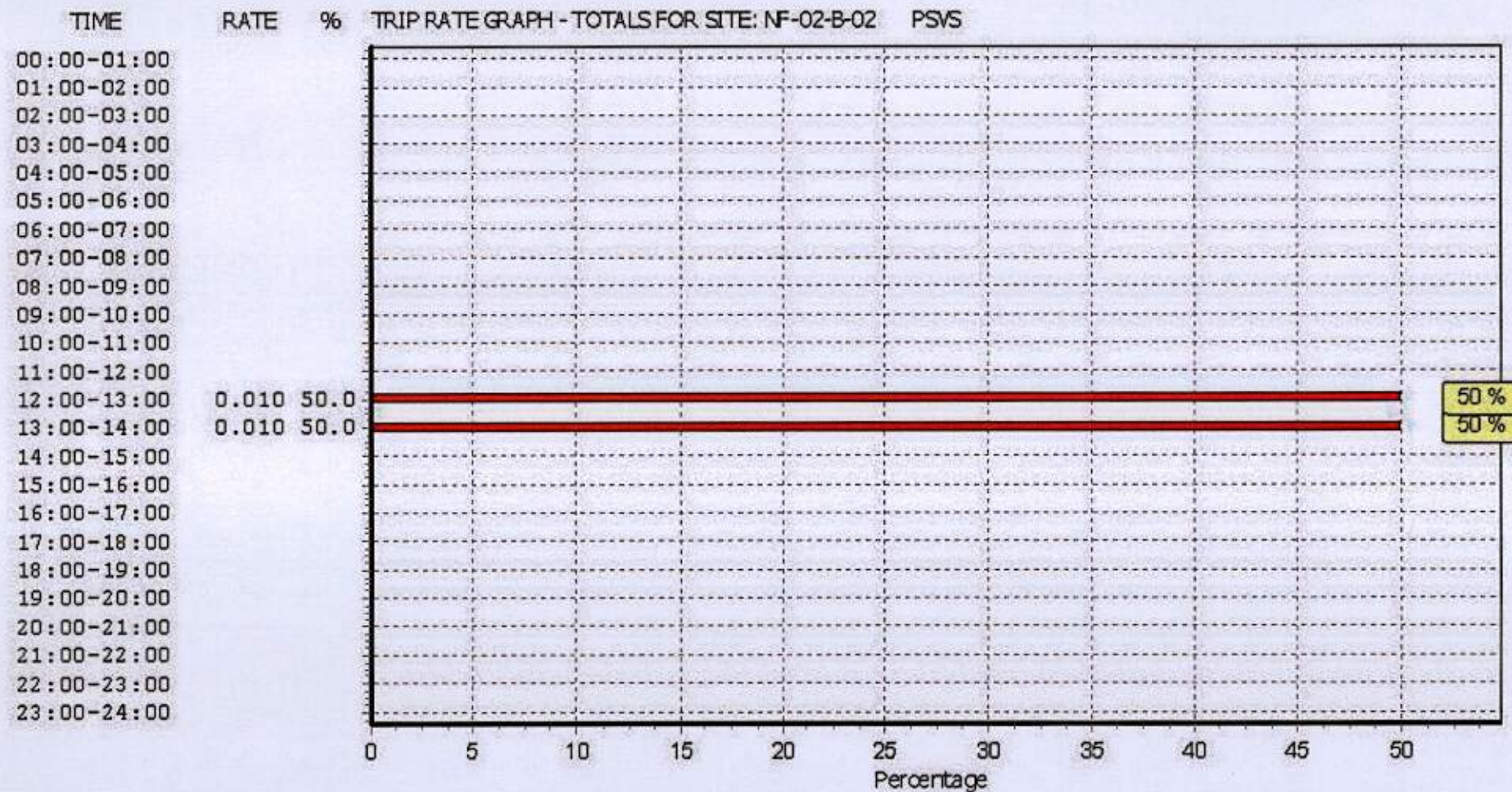
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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



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

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
07:30 - 08:00	6	3165	0.016	6	3165	0.005	6	3165	0.021
08:00 - 08:30	6	3165	0.011	6	3165	0.000	6	3165	0.011
08:30 - 09:00	6	3165	0.042	6	3165	0.000	6	3165	0.042
09:00 - 09:30	6	3165	0.016	6	3165	0.000	6	3165	0.016
09:30 - 10:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
10:00 - 10:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
10:30 - 11:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
11:00 - 11:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
11:30 - 12:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
12:00 - 12:30	6	3165	0.005	6	3165	0.005	6	3165	0.010
12:30 - 13:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
13:00 - 13:30	6	3165	0.005	6	3165	0.000	6	3165	0.005
13:30 - 14:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
14:00 - 14:30	6	3165	0.000	6	3165	0.005	6	3165	0.005
14:30 - 15:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
15:00 - 15:30	6	3165	0.000	6	3165	0.000	6	3165	0.000
15:30 - 16:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
16:00 - 16:30	6	3165	0.005	6	3165	0.000	6	3165	0.005
16:30 - 17:00	6	3165	0.005	6	3165	0.016	6	3165	0.021
17:00 - 17:30	6	3165	0.000	6	3165	0.021	6	3165	0.021
17:30 - 18:00	6	3165	0.000	6	3165	0.047	6	3165	0.047
18:00 - 18:30	6	3165	0.000	6	3165	0.005	6	3165	0.005
18:30 - 19:00	6	3165	0.000	6	3165	0.000	6	3165	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.105			0.104			0.209

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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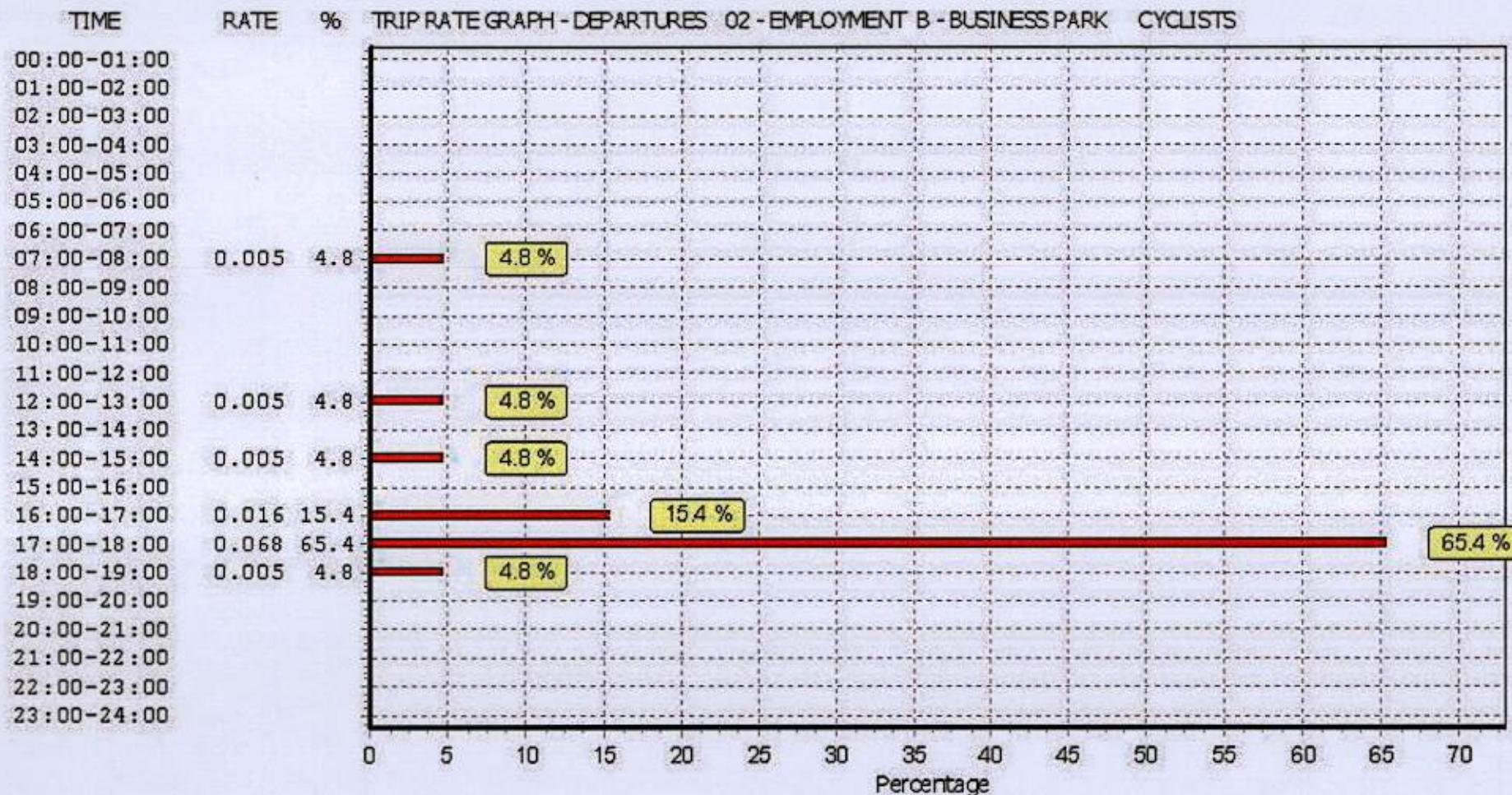
Parameter summary

Trip rate parameter range selected:	1570 - 7400 (units: sqm)
Survey date range:	01/01/05 - 27/11/12
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

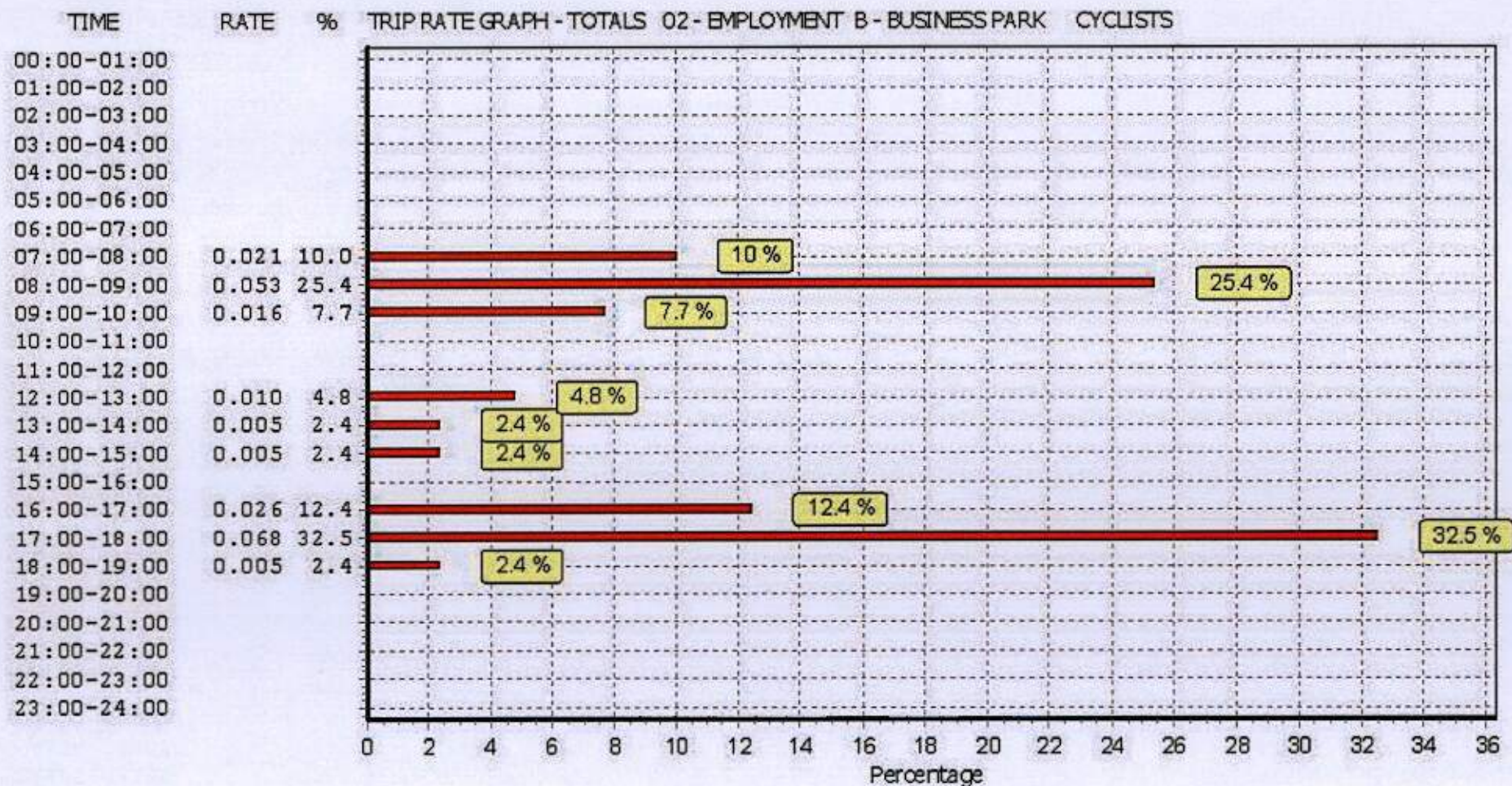
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This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period,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



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TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
 Category : G - GP SURGERIES

VEHICLESSelected regions and areas:

02	SOUTH EAST	
	BU BUCKINGHAMSHIRE	1 days
03	SOUTH WEST	
	CW CORNWALL	1 days
	GS GLOUCESTERSHIRE	1 days
	SM SOMERSET	1 days

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

Filtering Stage 2 selection:

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

Parameter: Gross floor area
 Actual Range: 350 to 1592 (units: sqm)
 Range Selected by User: 240 to 1592 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 06/07/12

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

Selected survey days:

Tuesday	2 days
Wednesday	1 days
Friday	1 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

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

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

Selected Location Sub Categories:

Residential Zone	3
No Sub Category	1

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

Filtering Stage 3 selection:Use Class:

D1	4 days
----	--------

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

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	1 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

1.1 to 1.5	4 days
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This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	3 days

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

Weekday GP Surgery Trip Rate Sites

Page 3

OFF-LINE VERSION Mayer Brown Ltd Oriental Road Woking

Licence No: 807401

LIST OF SITES relevant to selection parameters

1	BU-05-G-02	GP SURGERY	BUCKINGHAMSHIRE
	HINDHEAD KNOLL		
	WALNUT TREE		
	MILTON KEYNES		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	601 sqm	
	Survey date: TUESDAY	19/10/10	Survey Type: MANUAL
2	CW-05-G-01	GP SURGERY	CORNWALL
	CARLYON ROAD		
	ST AUSTELL		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Gross floor area:	350 sqm	
	Survey date: WEDNESDAY	19/09/07	Survey Type: MANUAL
3	GS-05-G-01	GP SURGERY	GLOUCESTERSHIRE
	ABBOTSWOOD ROAD		
	BROCKWORTH		
	GLOUCESTER		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	475 sqm	
	Survey date: TUESDAY	27/04/10	Survey Type: MANUAL
4	SM-05-G-01	GP SURGERY	SOMERSET
	MANTLE STREET		
	WELLINGTON		
	NEAR TAUNTON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	1592 sqm	
	Survey date: FRIDAY	06/07/12	Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BU-05-G-01	No Parking spaces

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	755	1.458	4	755	0.199	4	755	1.657
08:00 - 09:00	4	755	5.633	4	755	3.015	4	755	8.648
09:00 - 10:00	4	755	5.799	4	755	5.732	4	755	11.531
10:00 - 11:00	4	755	5.898	4	755	6.130	4	755	12.028
11:00 - 12:00	4	755	5.268	4	755	5.302	4	755	10.570
12:00 - 13:00	4	755	4.473	4	755	5.103	4	755	9.576
13:00 - 14:00	4	755	2.982	4	755	2.783	4	755	5.765
14:00 - 15:00	4	755	3.645	4	755	3.810	4	755	7.455
15:00 - 16:00	4	755	4.672	4	755	4.274	4	755	8.946
16:00 - 17:00	4	755	4.573	4	755	5.136	4	755	9.709
17:00 - 18:00	4	755	3.512	4	755	4.838	4	755	8.350
18:00 - 19:00	4	755	0.464	4	755	1.955	4	755	2.419
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			48.377			48.277			96.654

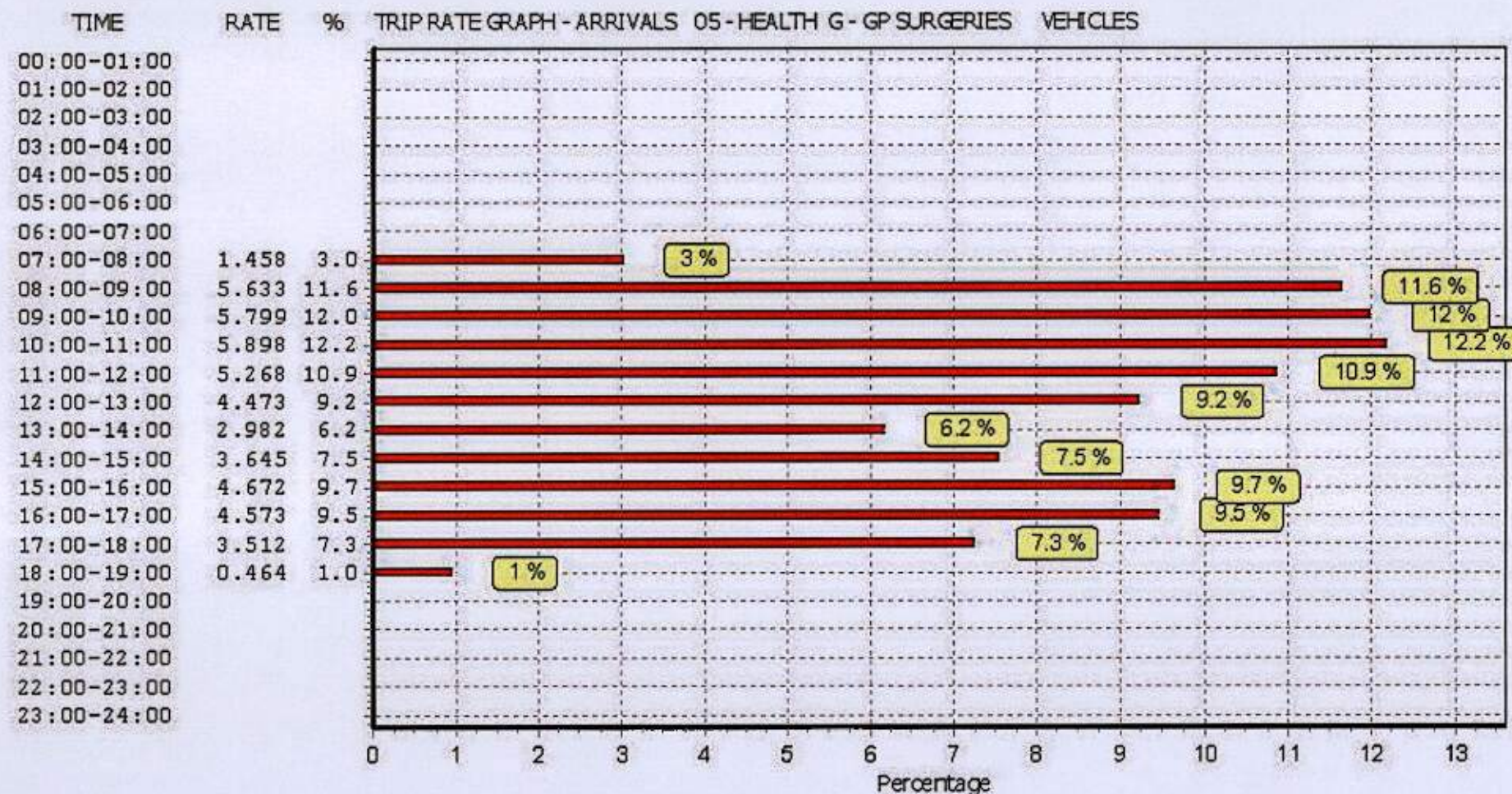
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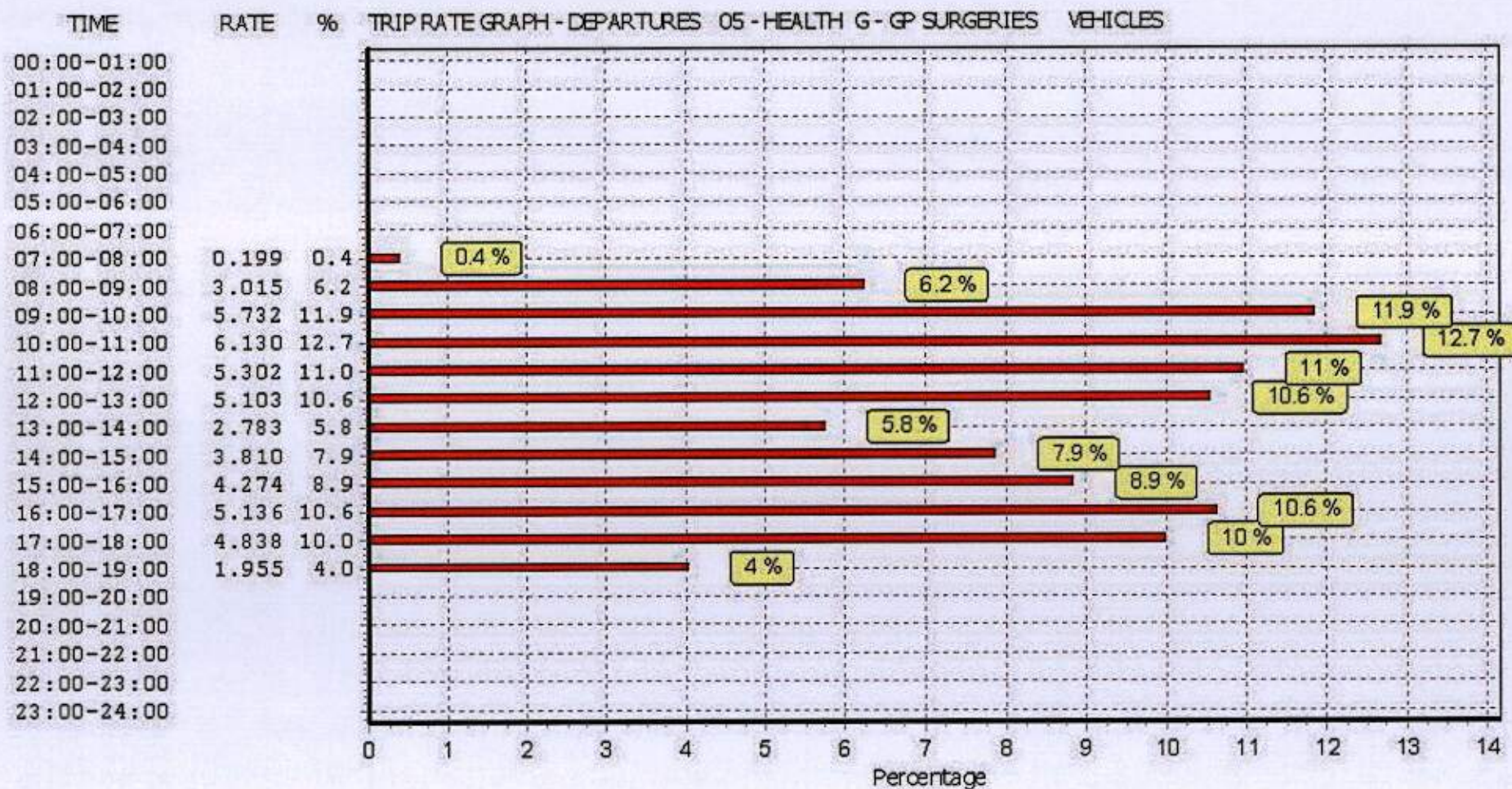
Parameter summary

Trip rate parameter range selected: 350 - 1592 (units: sqm)
 Survey date range: 01/01/05 - 06/07/12
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 1

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 05 - HEALTH/G - GP SURGERIES

TAXIS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	755	0.000	4	755	0.000	4	755	0.000
08:00 - 09:00	4	755	0.033	4	755	0.033	4	755	0.066
09:00 - 10:00	4	755	0.033	4	755	0.033	4	755	0.066
10:00 - 11:00	4	755	0.099	4	755	0.033	4	755	0.132
11:00 - 12:00	4	755	0.199	4	755	0.166	4	755	0.365
12:00 - 13:00	4	755	0.033	4	755	0.133	4	755	0.166
13:00 - 14:00	4	755	0.199	4	755	0.199	4	755	0.398
14:00 - 15:00	4	755	0.000	4	755	0.000	4	755	0.000
15:00 - 16:00	4	755	0.033	4	755	0.033	4	755	0.066
16:00 - 17:00	4	755	0.033	4	755	0.033	4	755	0.066
17:00 - 18:00	4	755	0.000	4	755	0.000	4	755	0.000
18:00 - 19:00	4	755	0.000	4	755	0.000	4	755	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.662			0.663			1.325

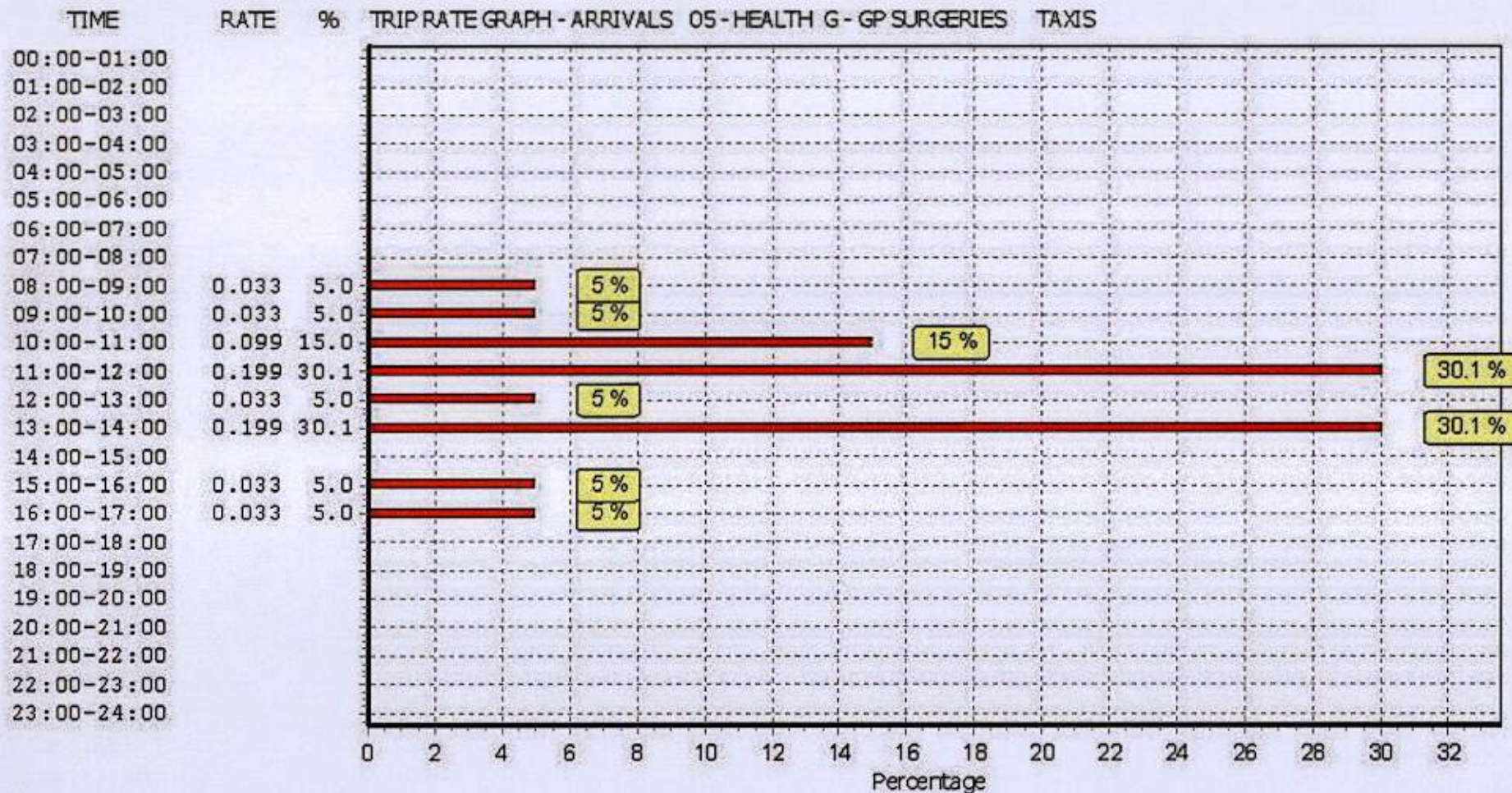
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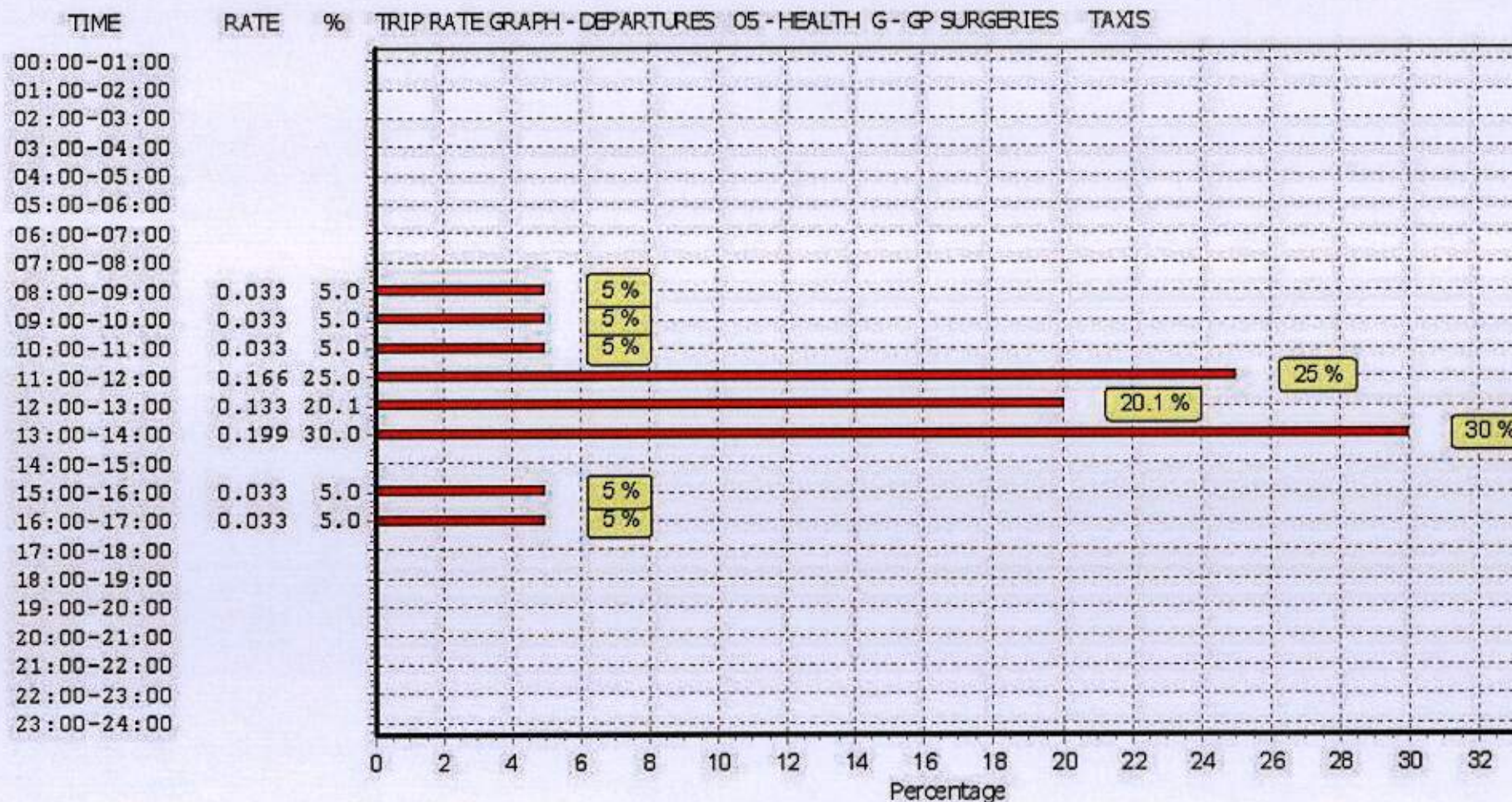
Parameter summary

Trip rate parameter range selected: 350 - 1592 (units: sqm)
 Survey date range: 01/01/05 - 06/07/12
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 1

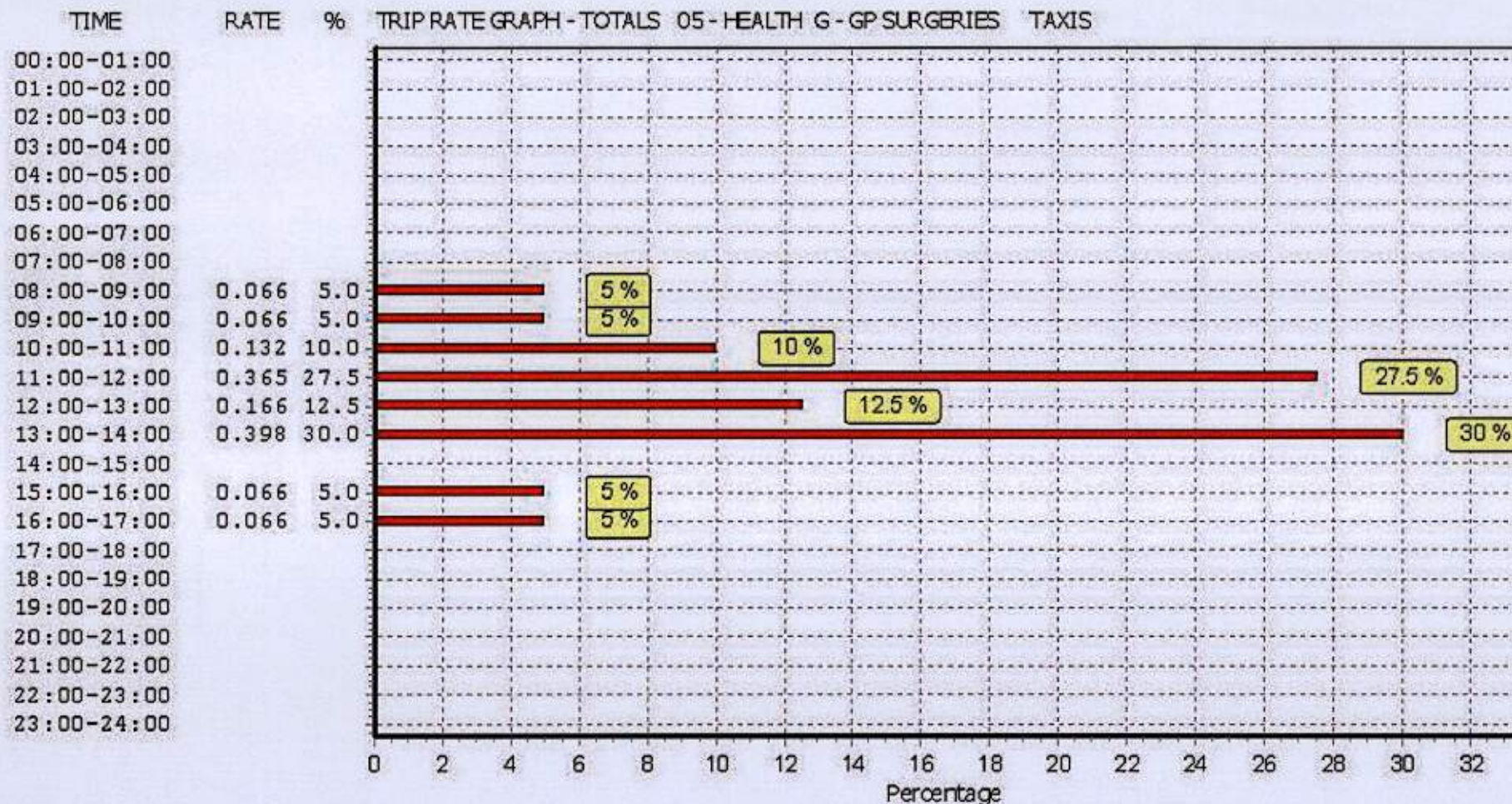
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TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

OGVS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	755	0.000	4	755	0.000	4	755	0.000
08:00 - 09:00	4	755	0.000	4	755	0.000	4	755	0.000
09:00 - 10:00	4	755	0.000	4	755	0.000	4	755	0.000
10:00 - 11:00	4	755	0.000	4	755	0.000	4	755	0.000
11:00 - 12:00	4	755	0.000	4	755	0.000	4	755	0.000
12:00 - 13:00	4	755	0.000	4	755	0.000	4	755	0.000
13:00 - 14:00	4	755	0.000	4	755	0.000	4	755	0.000
14:00 - 15:00	4	755	0.000	4	755	0.000	4	755	0.000
15:00 - 16:00	4	755	0.000	4	755	0.000	4	755	0.000
16:00 - 17:00	4	755	0.000	4	755	0.000	4	755	0.000
17:00 - 18:00	4	755	0.000	4	755	0.000	4	755	0.000
18:00 - 19:00	4	755	0.000	4	755	0.000	4	755	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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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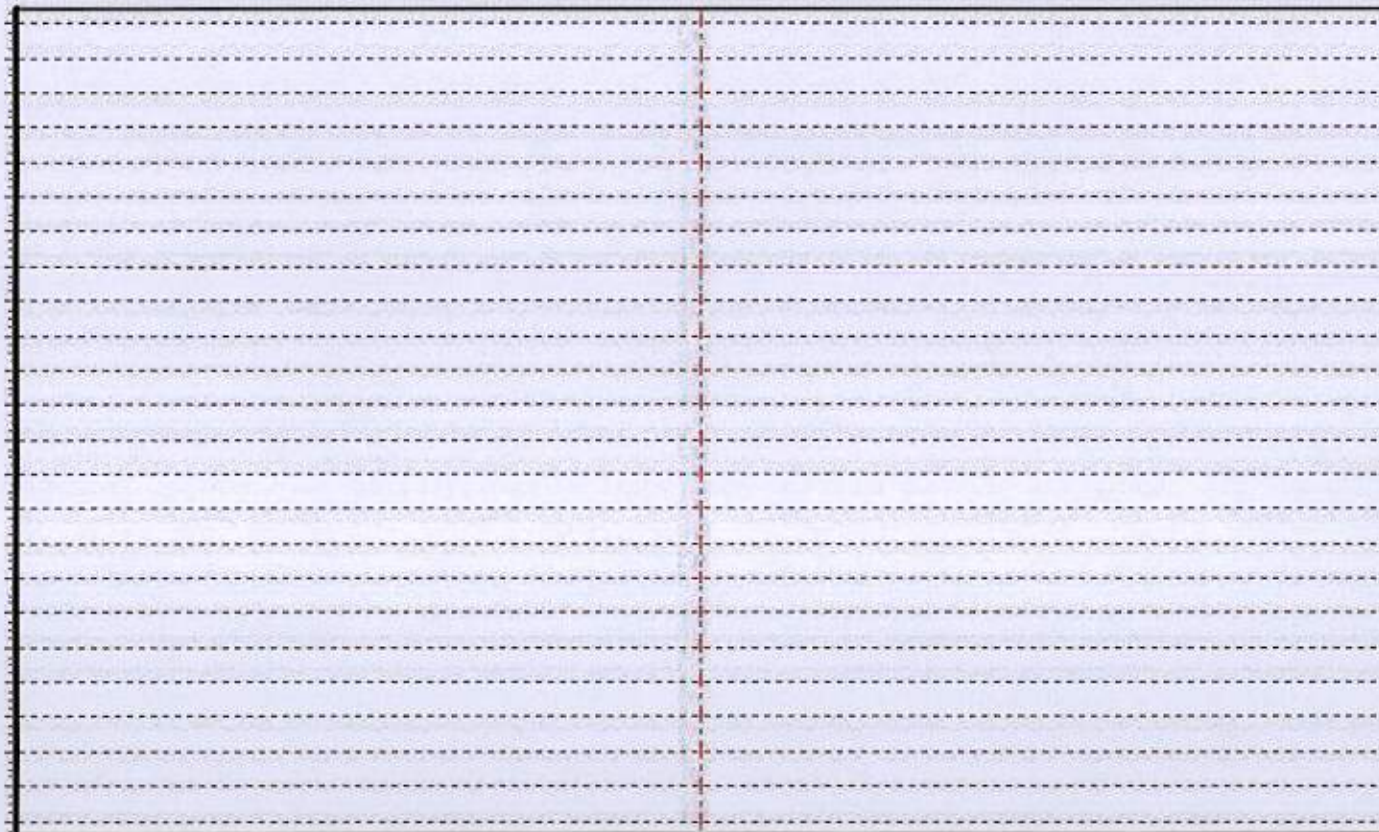
Parameter summary

Trip rate parameter range selected: 350 - 1592 (units: sqm)
 Survey date range: 01/01/05 - 06/07/12
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 1

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.

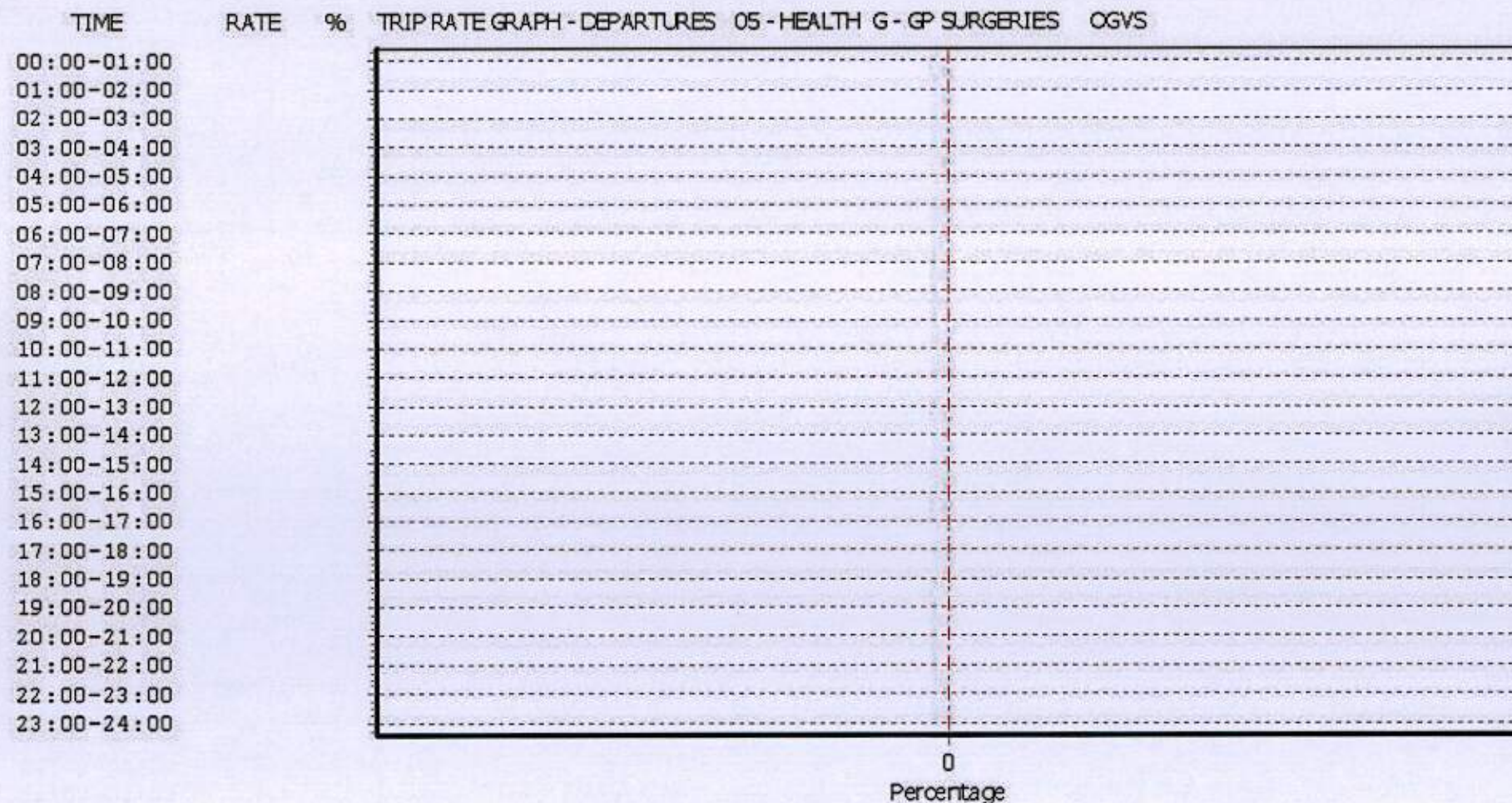
TIME RATE % TRIP RATE GRAPH - ARRIVALS 05-HEALTH G - GP SURGERIES OGVS

00:00-01:00
01:00-02:00
02:00-03:00
03:00-04:00
04:00-05:00
05:00-06:00
06:00-07:00
07:00-08:00
08:00-09:00
09:00-10:00
10:00-11:00
11:00-12:00
12:00-13:00
13:00-14:00
14:00-15:00
15:00-16:00
16:00-17:00
17:00-18:00
18:00-19:00
19:00-20:00
20:00-21:00
21:00-22:00
22:00-23:00
23:00-24:00



0
Percentage

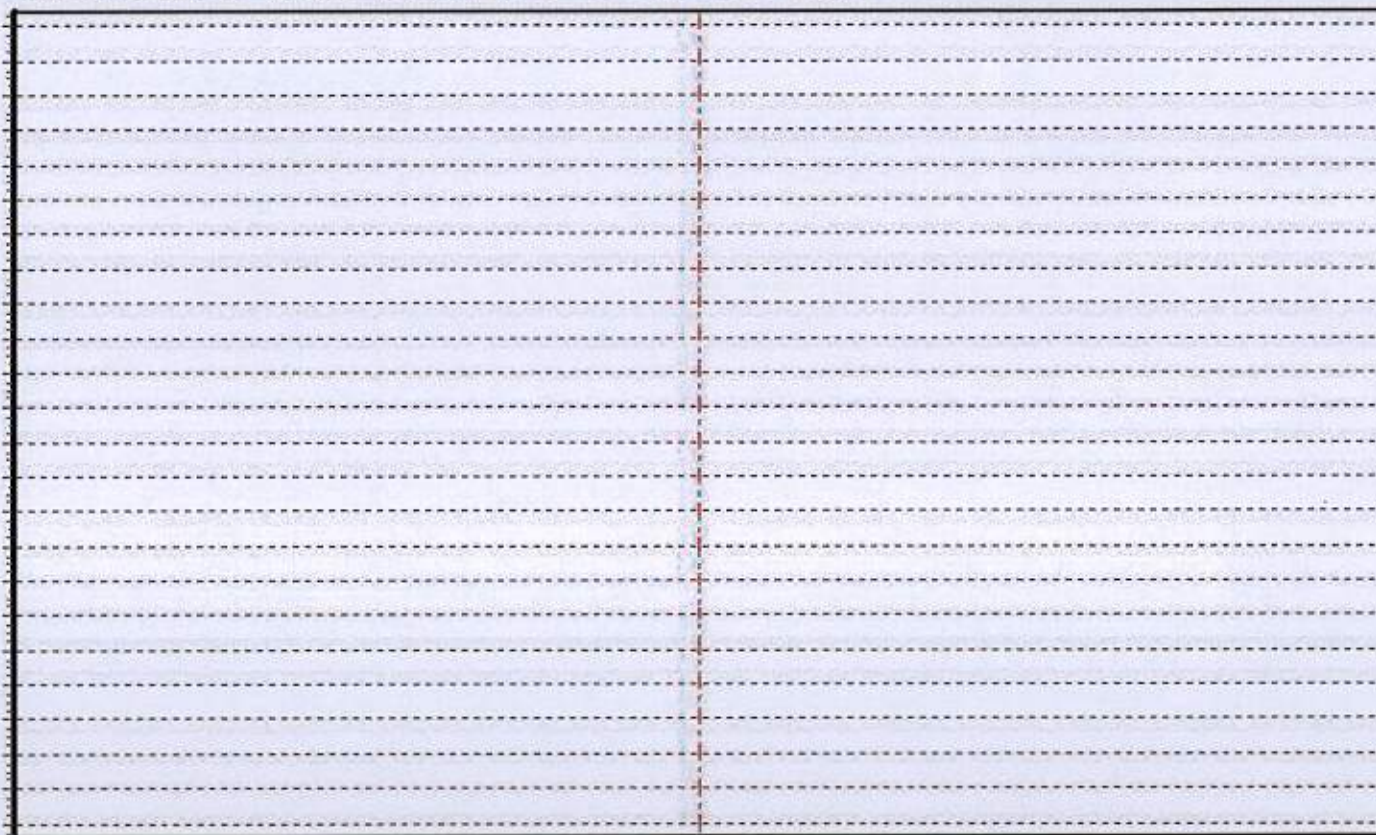
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TIME RATE % TRIP RATE GRAPH - TOTALS 05 - HEALTH G - GP SURGERIES OGVS

00:00-01:00
01:00-02:00
02:00-03:00
03:00-04:00
04:00-05:00
05:00-06:00
06:00-07:00
07:00-08:00
08:00-09:00
09:00-10:00
10:00-11:00
11:00-12:00
12:00-13:00
13:00-14:00
14:00-15:00
15:00-16:00
16:00-17:00
17:00-18:00
18:00-19:00
19:00-20:00
20:00-21:00
21:00-22:00
22:00-23:00
23:00-24:00



0
Percentage

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 05 - HEALTH/G - GP SURGERIES

PSVS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	755	0.000	4	755	0.000	4	755	0.000
08:00 - 09:00	4	755	0.000	4	755	0.000	4	755	0.000
09:00 - 10:00	4	755	0.000	4	755	0.000	4	755	0.000
10:00 - 11:00	4	755	0.000	4	755	0.000	4	755	0.000
11:00 - 12:00	4	755	0.000	4	755	0.000	4	755	0.000
12:00 - 13:00	4	755	0.000	4	755	0.000	4	755	0.000
13:00 - 14:00	4	755	0.000	4	755	0.000	4	755	0.000
14:00 - 15:00	4	755	0.000	4	755	0.000	4	755	0.000
15:00 - 16:00	4	755	0.033	4	755	0.000	4	755	0.033
16:00 - 17:00	4	755	0.000	4	755	0.033	4	755	0.033
17:00 - 18:00	4	755	0.000	4	755	0.000	4	755	0.000
18:00 - 19:00	4	755	0.000	4	755	0.000	4	755	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.033			0.033			0.066

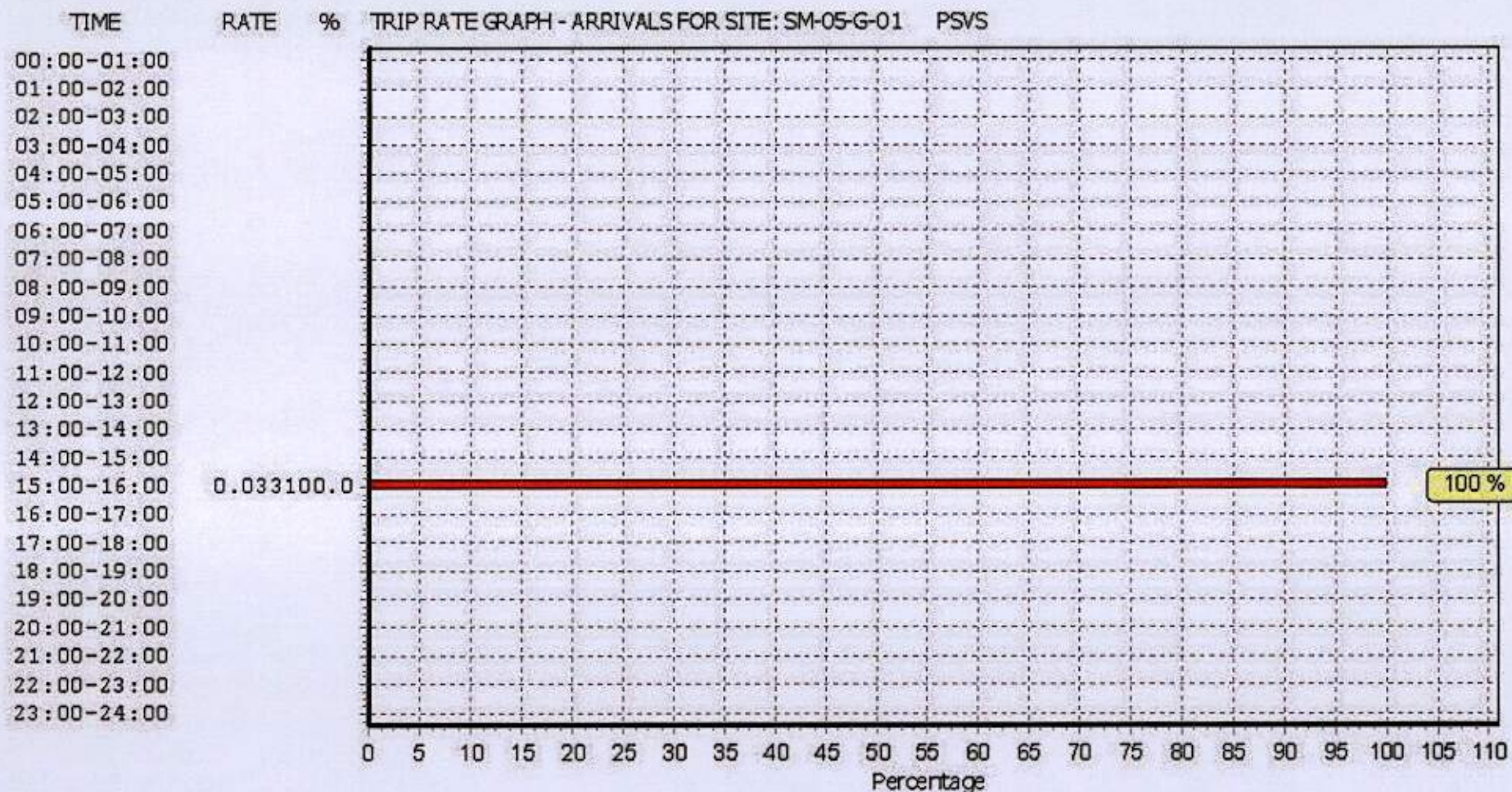
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

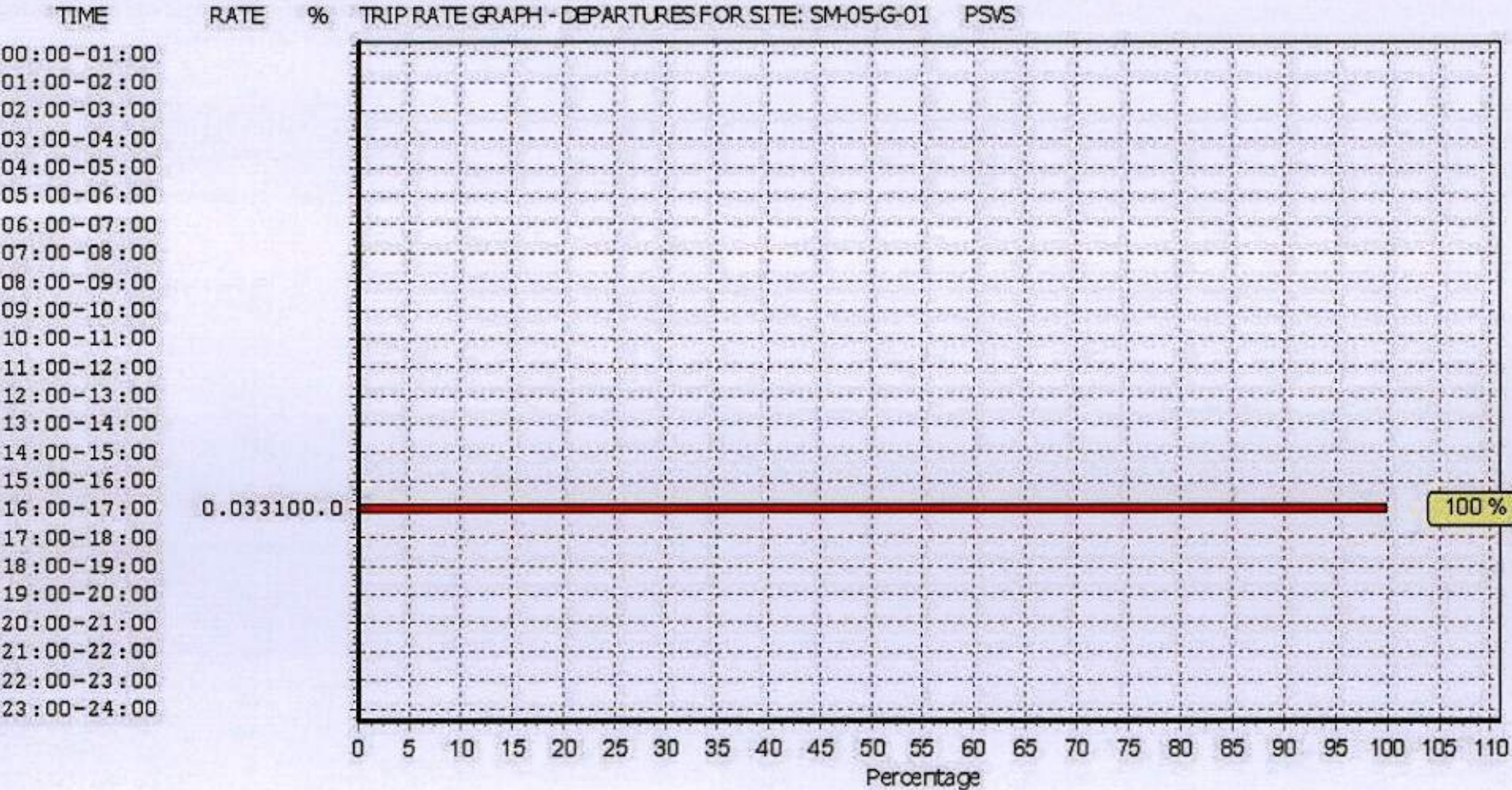
Parameter summary

Trip rate parameter range selected:	350 - 1592 (units: sqm)
Survey date range:	01/01/05 - 06/07/12
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

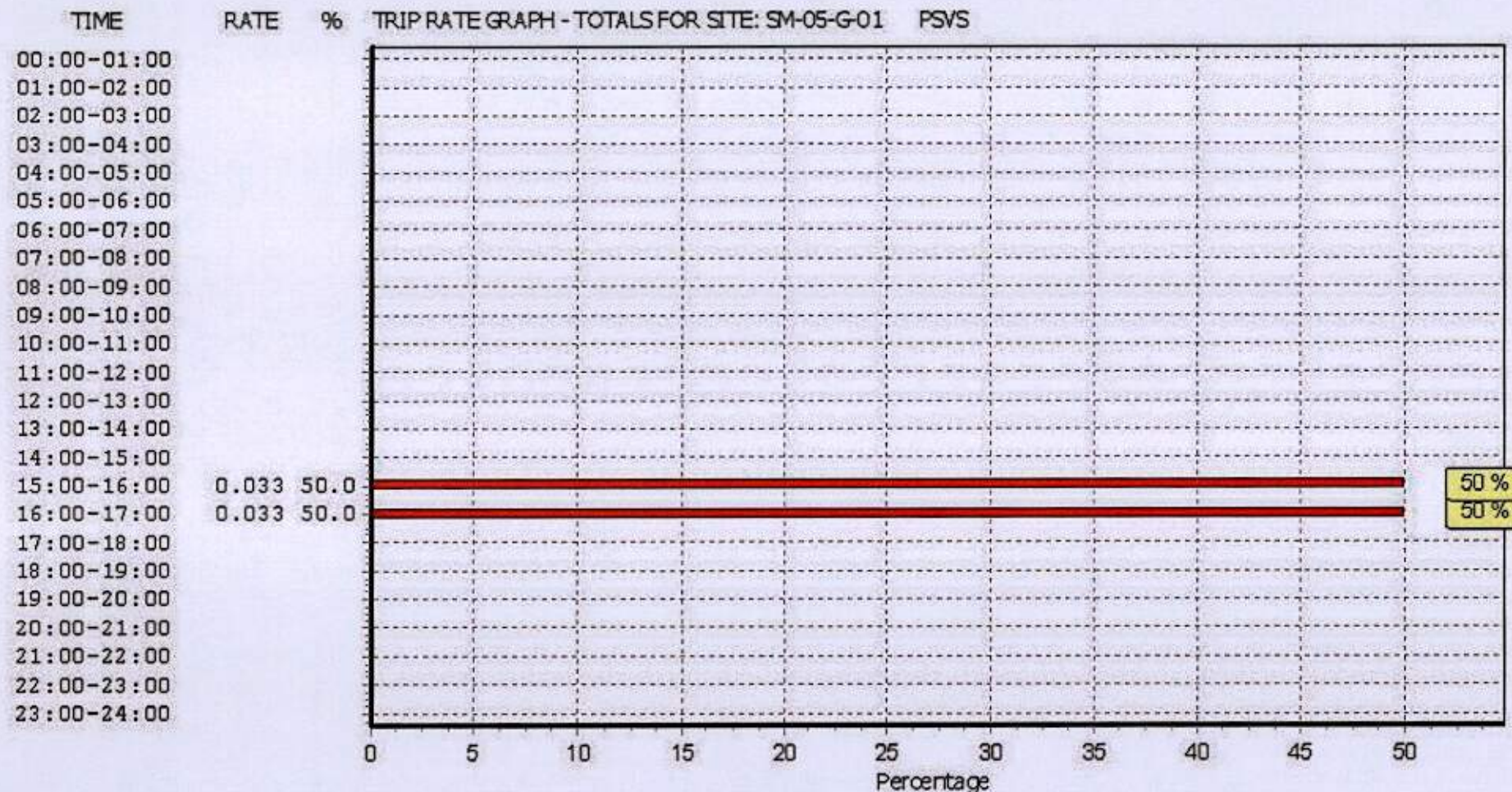
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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



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



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 05 - HEALTH/G - GP SURGERIES

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	755	0.000	4	755	0.000	4	755	0.000
08:00 - 09:00	4	755	0.099	4	755	0.000	4	755	0.099
09:00 - 10:00	4	755	0.099	4	755	0.133	4	755	0.232
10:00 - 11:00	4	755	0.000	4	755	0.000	4	755	0.000
11:00 - 12:00	4	755	0.033	4	755	0.033	4	755	0.066
12:00 - 13:00	4	755	0.000	4	755	0.000	4	755	0.000
13:00 - 14:00	4	755	0.000	4	755	0.033	4	755	0.033
14:00 - 15:00	4	755	0.033	4	755	0.033	4	755	0.066
15:00 - 16:00	4	755	0.033	4	755	0.033	4	755	0.066
16:00 - 17:00	4	755	0.033	4	755	0.033	4	755	0.066
17:00 - 18:00	4	755	0.033	4	755	0.099	4	755	0.132
18:00 - 19:00	4	755	0.000	4	755	0.000	4	755	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.363			0.397			0.760

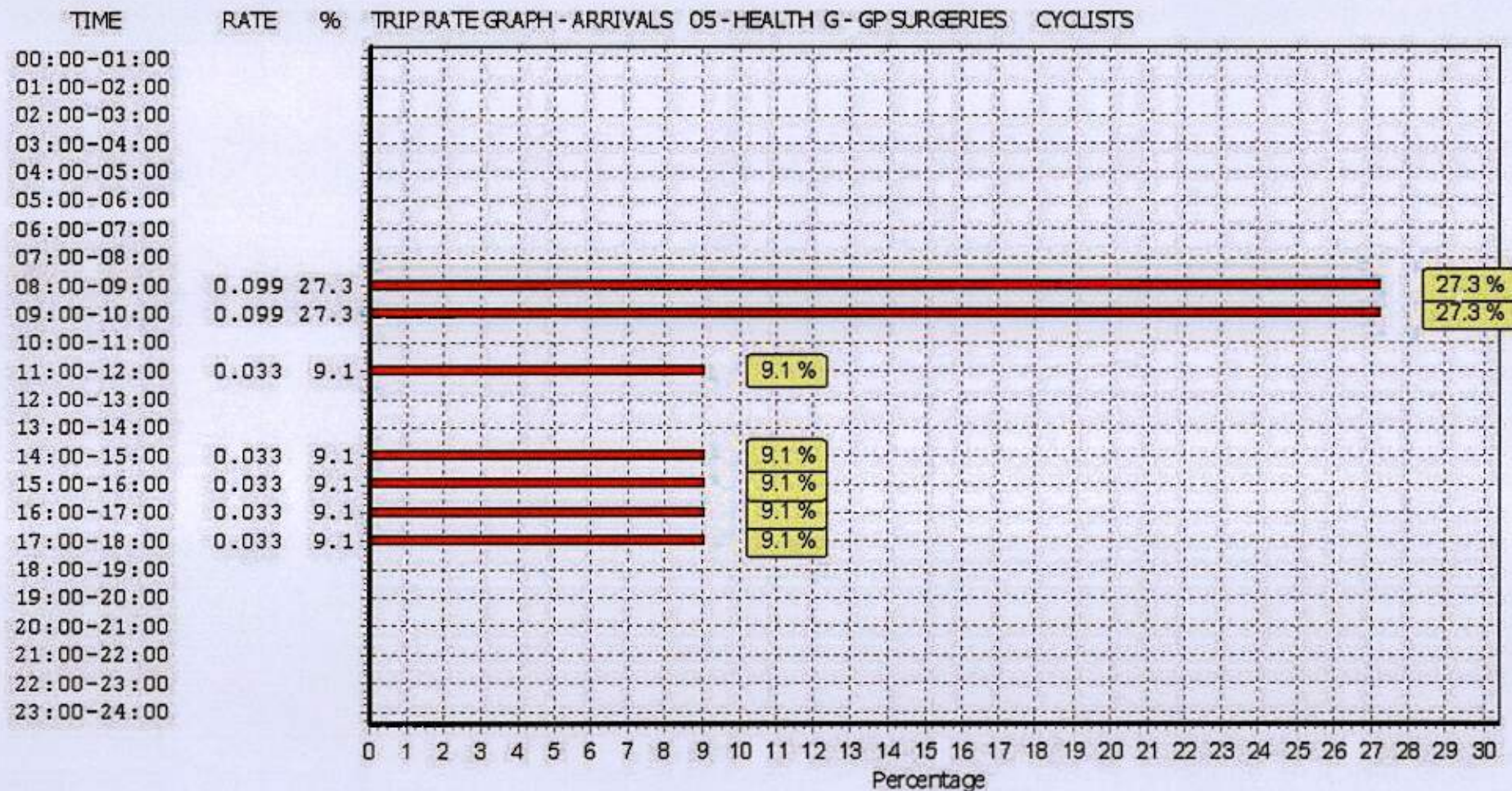
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

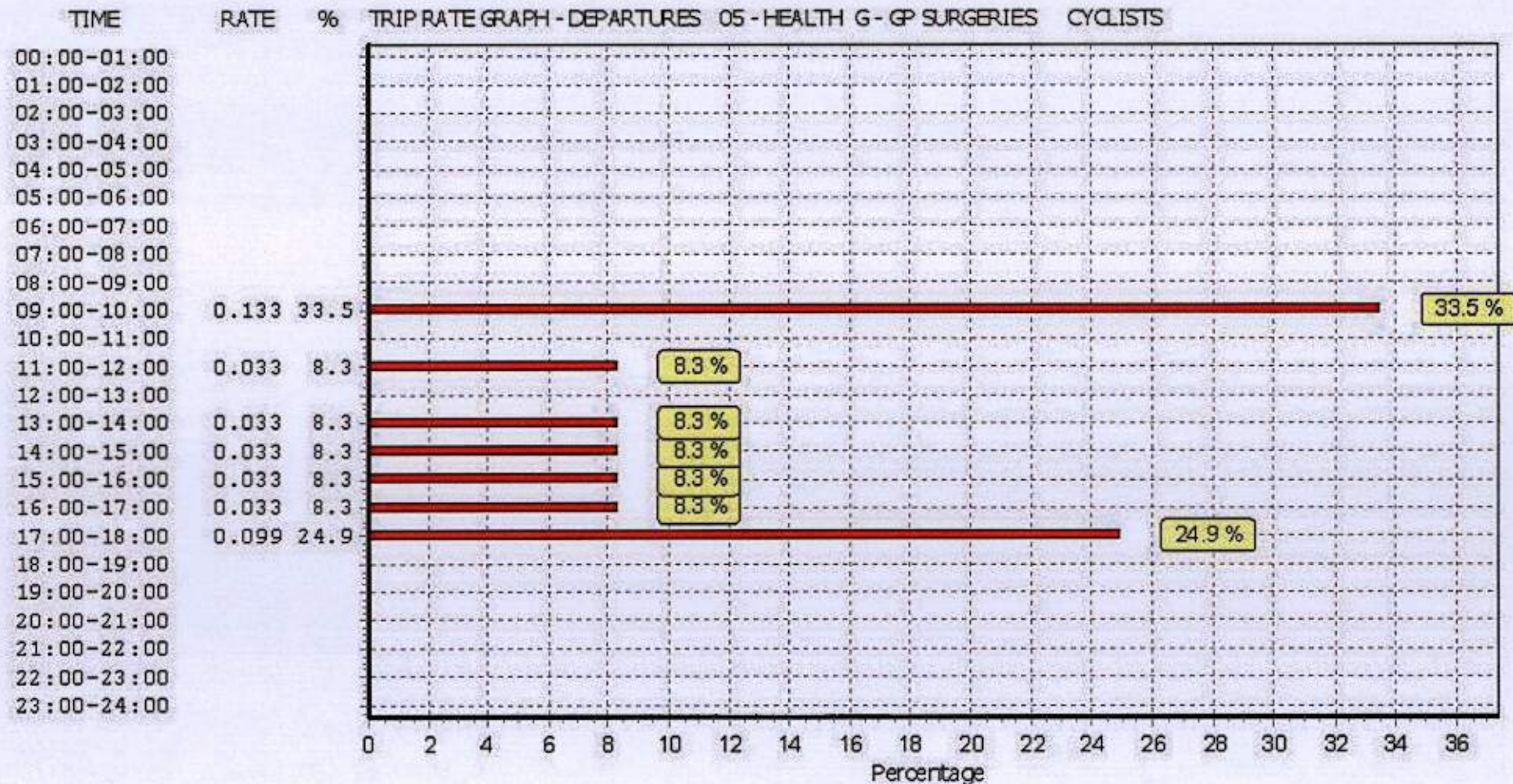
Parameter summary

Trip rate parameter range selected: 350 - 1592 (units: sqm)
 Survey date range: 01/01/05 - 06/07/12
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 1

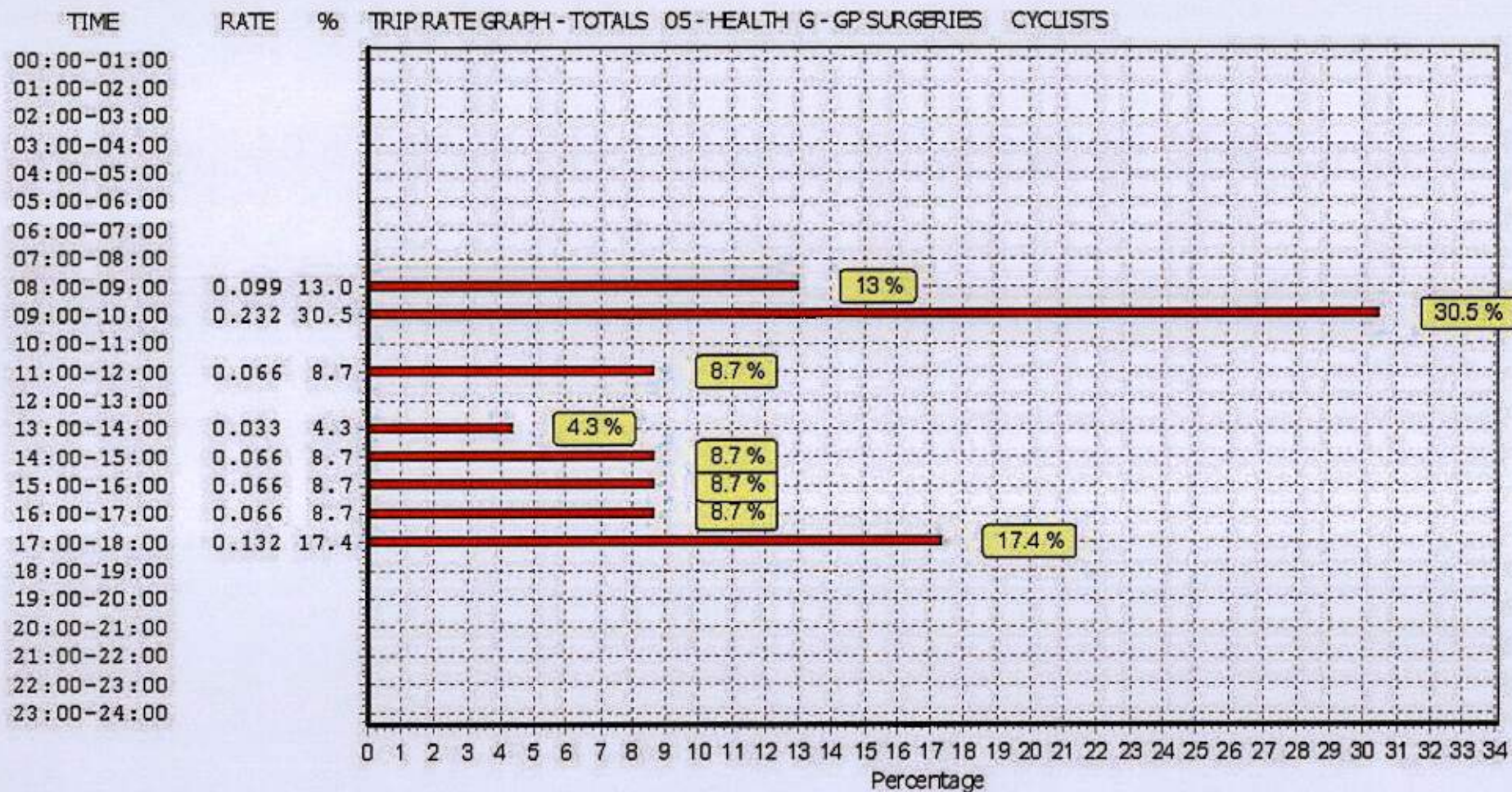
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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



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

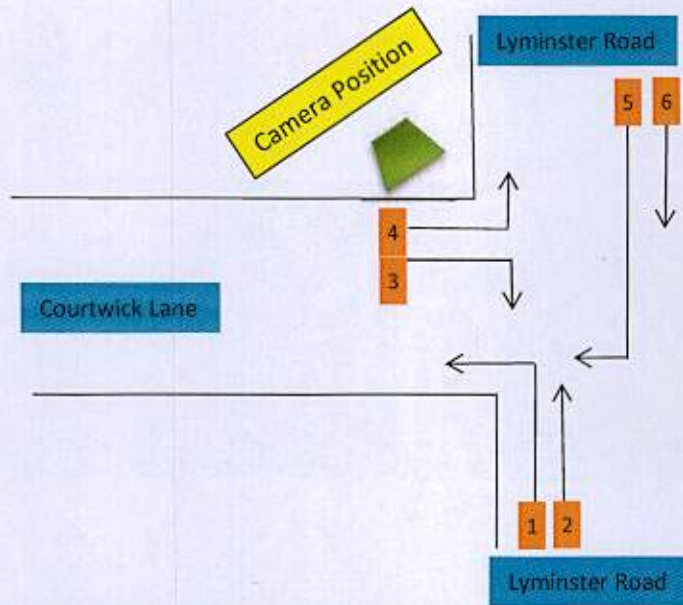


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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

APPENDIX B: January 2014 Traffic Survey Data

Classified Vehicle Video Survey

Site: A284 Lyminster Road and Courtwick Lane
Location: Littlehampton
Date: Friday 31st January 2014
Time: 0730 - 1200 and 1500 - 1900
Weather: Showers PM



Classified Vehicle Video Survey

Site: A284 Lyminster Road and Courtwick Lane
Location: Littlehampton
Date: Friday 31st January 2014
Time: 0730 - 1200 and 1500 - 1900
Weather: Showers PM

Vehicles were only recorded stopping in the yellow box area 4 times during this survey period



Classified Vehicle Video Survey

Site: A284 Lyminster Road and Courtwick Lane
Location: Littlehampton
Date: Friday 31st January 2014
Time: 0730 - 1200 and 1500 - 1900
Weather: Showers PM

1	P/C	M/C	Cars/Taxis	LGV	MGV	HGV	Bus/Coach	Total
07:30	0	0	7	2	0	1	0	10
07:45	0	0	14	3	0	0	1	18
Total	0	0	21	5	0	1	1	28
08:00	0	0	7	2	0	0	0	9
08:15	0	0	10	1	0	0	0	11
08:30	0	0	9	2	0	0	0	11
08:45	0	0	13	0	0	0	0	13
Total	0	0	39	5	0	0	0	44
09:00	0	0	12	4	0	0	0	16
09:15	0	0	6	2	0	0	0	8
09:30	0	0	1	4	1	1	0	7
09:45	0	0	5	0	0	0	0	5
Total	0	0	24	10	1	1	0	36
10:00	0	0	7	1	0	0	0	8
10:15	0	0	8	0	1	0	0	9
10:30	0	0	5	3	0	0	0	8
10:45	0	0	8	1	0	1	0	10
Total	0	0	28	5	1	1	0	35
11:00	0	0	7	1	1	0	0	9
11:15	0	0	8	2	1	0	0	11
11:30	0	0	6	2	0	0	0	8
11:45	0	0	11	2	0	0	0	13
Total	0	0	32	7	2	0	0	41
15:00	0	0	10	2	1	0	0	13
15:15	0	0	18	1	0	0	0	19
15:30	0	0	15	2	0	0	0	17
15:45	0	0	22	2	0	0	0	24
Total	0	0	65	7	1	0	0	73
16:00	0	1	20	3	0	1	0	25
16:15	1	0	12	2	0	0	1	16
16:30	0	0	19	1	0	0	0	20
16:45	0	0	18	1	0	0	0	19
Total	1	1	69	7	0	1	1	80
17:00	0	0	14	2	1	0	1	18
17:15	0	0	22	1	1	0	0	24
17:30	0	0	19	2	0	0	0	21
17:45	0	0	18	0	0	0	0	18
Total	0	0	73	5	2	0	1	81
18:00	0	0	12	1	0	0	0	13
18:15	0	0	20	0	0	0	0	20
18:30	0	0	12	0	0	0	0	12
18:45	0	0	16	0	0	0	0	16
Total	0	0	60	1	0	0	0	61
Day Total	1	1	411	52	7	4	3	479

Classified Vehicle Video Survey

Site: A284 Lyminster Road and Courtwick Lane
Location: Littlehampton
Date: Friday 31st January 2014
Time: 0730 - 1200 and 1500 - 1900
Weather: Showers PM

2	P/C	M/C	Cars/Taxis	LGV	MGV	HGV	Bus/Coach	Total
07:30	1	1	38	18	2	3	1	64
07:45	1	0	63	18	5	5	3	95
Total	2	1	101	36	7	8	4	159
08:00	0	1	63	20	6	9	1	100
08:15	0	1	62	26	1	4	0	94
08:30	0	1	60	11	2	4	1	79
08:45	1	0	72	28	8	6	1	116
Total	1	3	257	85	17	23	3	389
09:00	1	0	73	25	4	5	1	109
09:15	0	0	49	24	3	4	0	80
09:30	1	1	67	13	3	5	1	91
09:45	1	0	57	19	4	2	0	83
Total	3	1	246	81	14	16	2	363
10:00	0	0	56	11	4	4	0	75
10:15	0	0	76	16	4	7	1	104
10:30	0	0	56	16	3	4	0	79
10:45	1	0	69	13	4	6	1	94
Total	1	0	257	56	15	21	2	352
11:00	1	0	69	13	4	4	0	91
11:15	0	0	71	18	3	8	1	101
11:30	1	0	63	18	4	4	1	91
11:45	1	0	71	13	5	2	1	93
Total	3	0	274	62	16	18	3	376
15:00	0	1	73	29	0	4	0	107
15:15	0	1	89	28	1	1	1	121
15:30	3	0	91	16	4	3	0	117
15:45	0	0	82	14	4	0	3	103
Total	3	2	335	87	9	8	4	448
16:00	1	0	92	11	1	0	2	107
16:15	0	0	90	15	3	0	2	110
16:30	0	0	85	14	2	2	1	104
16:45	0	0	72	9	1	1	0	83
Total	1	0	339	49	7	3	5	404
17:00	0	0	79	9	4	1	0	93
17:15	0	0	75	10	3	0	1	89
17:30	1	0	62	9	0	1	0	73
17:45	0	0	65	13	0	1	1	80
Total	1	0	281	41	7	3	2	335
18:00	0	0	70	7	0	0	0	77
18:15	0	0	80	9	0	0	2	91
18:30	0	0	76	6	1	0	0	83
18:45	1	0	84	13	1	0	1	100
Total	1	0	310	35	2	0	3	351
Day Total	16	7	2400	532	94	100	28	3177

Classified Vehicle Video Survey

Site: A284 Lyminster Road and Courtwick Lane
Location: Littlehampton
Date: Friday 31st January 2014
Time: 0730 - 1200 and 1500 - 1900
Weather: Showers PM

3	P/C	M/C	Cars/Taxis	LGV	MGV	HGV	Bus/Coach	Total
07:30	0	0	13	0	0	0	0	13
07:45	0	0	10	4	0	1	1	16
Total	0	0	23	4	0	1	1	29
08:00	0	0	15	2	0	0	1	18
08:15	0	0	11	2	0	1	0	14
08:30	0	0	17	0	1	0	0	18
08:45	0	0	13	1	0	0	0	14
Total	0	0	56	5	1	1	1	64
09:00	0	0	10	5	0	0	0	15
09:15	0	0	6	0	0	1	0	7
09:30	0	0	12	1	0	0	0	13
09:45	1	0	10	1	0	0	0	12
Total	1	0	38	7	0	1	0	47
10:00	0	0	8	1	1	0	0	10
10:15	0	0	10	1	0	0	0	11
10:30	0	0	4	0	0	0	0	4
10:45	0	0	11	3	1	0	0	15
Total	0	0	33	5	2	0	0	40
11:00	0	0	8	1	0	0	0	9
11:15	0	0	6	2	0	0	0	8
11:30	0	0	7	2	0	0	0	9
11:45	0	0	12	2	0	0	0	14
Total	0	0	33	7	0	0	0	40
15:00	0	0	12	3	0	0	0	15
15:15	0	0	11	2	0	0	0	13
15:30	0	0	6	0	0	0	1	7
15:45	0	0	14	2	0	0	0	16
Total	0	0	43	7	0	0	1	51
16:00	0	0	14	7	1	0	0	22
16:15	0	0	8	2	0	0	1	11
16:30	0	0	12	0	0	0	0	12
16:45	0	0	10	0	0	1	0	11
Total	0	0	44	9	1	1	1	56
17:00	0	0	17	1	0	0	0	18
17:15	0	0	14	1	0	0	0	15
17:30	0	0	18	2	0	0	0	20
17:45	0	0	15	1	0	0	0	16
Total	0	0	64	5	0	0	0	69
18:00	0	0	17	0	0	0	0	17
18:15	0	0	6	2	0	0	0	8
18:30	0	0	7	1	0	0	0	8
18:45	0	0	9	2	0	0	0	11
Total	0	0	39	5	0	0	0	44
Day Total	1	0	373	54	4	4	4	440

Classified Vehicle Video Survey

Site: A284 Lyminster Road and Courtwick Lane
Location: Littlehampton
Date: Friday 31st January 2014
Time: 0730 - 1200 and 1500 - 1900
Weather: Showers PM

4	P/C	M/C	Cars/Taxis	LGV	MGV	HGV	Bus/Coach	Total
07:30	0	0	6	1	0	0	0	7
07:45	0	0	4	0	0	0	0	4
Total	0	0	10	1	0	0	0	11
08:00	0	0	6	5	0	1	0	12
08:15	0	0	5	1	0	0	0	6
08:30	0	0	4	0	0	0	0	4
08:45	0	0	4	2	0	0	0	6
Total	0	0	19	8	0	1	0	28
09:00	0	0	2	1	0	0	0	3
09:15	0	0	3	0	0	0	0	3
09:30	1	0	2	2	0	0	0	5
09:45	0	0	1	0	0	0	0	1
Total	1	0	8	3	0	0	0	12
10:00	0	0	1	0	1	0	0	2
10:15	0	0	3	2	0	0	0	5
10:30	0	0	3	1	0	0	0	4
10:45	0	0	3	2	0	0	0	5
Total	0	0	10	5	1	0	0	16
11:00	0	0	3	1	0	1	0	5
11:15	0	0	5	2	0	0	0	7
11:30	0	0	1	2	0	0	0	3
11:45	0	0	0	3	0	0	0	3
Total	0	0	9	8	0	1	0	18
15:00	1	0	3	3	0	0	0	7
15:15	0	0	7	2	0	0	0	9
15:30	0	0	5	1	0	2	0	8
15:45	0	0	5	1	0	0	0	6
Total	1	0	20	7	0	2	0	30
16:00	0	0	11	0	0	0	0	11
16:15	0	0	4	2	0	0	0	6
16:30	0	0	7	1	0	0	0	8
16:45	0	0	6	0	0	1	0	7
Total	0	0	28	3	0	1	0	32
17:00	0	0	10	2	0	0	0	12
17:15	0	0	10	1	0	0	0	11
17:30	0	0	3	0	0	0	0	3
17:45	0	0	7	1	0	1	0	9
Total	0	0	30	4	0	1	0	35
18:00	0	0	3	0	0	0	0	3
18:15	0	0	2	0	0	0	0	2
18:30	0	0	5	0	0	0	0	5
18:45	1	0	4	0	0	0	0	5
Total	1	0	14	0	0	0	0	15
Day Total	3	0	148	39	1	6	0	197

Classified Vehicle Video Survey

Site: A284 Lyminster Road and Courtwick Lane
Location: Littlehampton
Date: Friday 31st January 2014
Time: 0730 - 1200 and 1500 - 1900
Weather: Showers PM

5	P/C	M/C	Cars/Taxis	LGV	MGV	HGV	Bus/Coach	Total
07:30	1	0	2	0	0	0	0	3
07:45	0	0	4	2	0	0	0	6
Total	1	0	6	2	0	0	0	9
08:00	0	0	6	4	0	0	1	11
08:15	0	0	6	0	1	0	0	7
08:30	0	0	8	0	0	0	0	8
08:45	0	0	2	2	0	0	0	4
Total	0	0	22	6	1	0	1	30
09:00	0	0	4	0	0	0	1	5
09:15	0	0	3	0	0	0	0	3
09:30	0	0	1	1	0	0	0	2
09:45	0	0	1	0	1	0	0	2
Total	0	0	9	1	1	0	1	12
10:00	0	0	0	0	0	0	0	0
10:15	0	0	1	1	0	0	0	2
10:30	0	0	2	1	0	0	0	3
10:45	0	0	1	0	0	1	0	2
Total	0	0	4	2	0	1	0	7
11:00	0	0	2	3	0	0	0	5
11:15	0	0	1	0	0	0	0	1
11:30	0	0	2	1	0	0	0	3
11:45	0	0	2	1	0	0	0	3
Total	0	0	7	5	0	0	0	12
15:00	0	0	4	1	0	0	0	5
15:15	0	0	5	1	0	0	1	7
15:30	0	0	4	0	0	0	0	4
15:45	0	0	2	3	0	1	0	6
Total	0	0	15	5	0	1	1	22
16:00	0	0	2	2	0	0	0	4
16:15	0	0	3	0	0	0	0	3
16:30	0	0	4	0	0	0	0	4
16:45	0	0	2	1	0	0	0	3
Total	0	0	11	3	0	0	0	14
17:00	0	0	4	0	0	0	0	4
17:15	0	0	5	1	0	1	0	7
17:30	0	0	3	0	0	0	0	3
17:45	0	0	5	1	0	0	0	6
Total	0	0	17	2	0	1	0	20
18:00	0	0	5	1	0	0	0	6
18:15	0	0	7	0	0	0	0	7
18:30	0	0	8	1	0	0	0	9
18:45	0	0	6	0	0	0	0	6
Total	0	0	26	2	0	0	0	28
Day Total	1	0	117	28	2	3	3	154

Classified Vehicle Video Survey

Site: A284 Lyminster Road and Courtwick Lane
Location: Littlehampton
Date: Friday 31st January 2014
Time: 0730 - 1200 and 1500 - 1900
Weather: Showers PM

6	P/C	M/C	Cars/Taxis	LGV	MGV	HGV	Bus/Coach	Total
07:30	0	0	70	21	0	6	2	99
07:45	1	0	92	22	4	6	1	126
Total	1	0	162	43	4	12	3	225
08:00	1	0	87	17	5	6	1	117
08:15	0	0	90	21	5	8	3	127
08:30	1	0	89	14	6	8	1	119
08:45	1	0	103	16	2	5	0	127
Total	3	0	369	68	18	27	5	490
09:00	1	0	93	13	5	1	1	114
09:15	1	0	71	18	3	8	2	103
09:30	1	0	81	13	10	3	1	109
09:45	0	0	64	19	5	5	2	95
Total	3	0	309	63	23	17	6	421
10:00	0	0	71	17	4	2	0	94
10:15	0	0	101	16	8	4	2	131
10:30	0	0	84	17	6	5	0	112
10:45	1	0	63	20	4	8	1	97
Total	1	0	319	70	22	19	3	434
11:00	0	0	89	23	5	5	0	122
11:15	2	1	78	12	3	3	1	100
11:30	0	0	84	22	4	9	0	119
11:45	0	0	87	17	4	7	1	116
Total	2	1	338	74	16	24	2	457
15:00	0	0	84	22	4	2	0	112
15:15	1	0	119	23	2	3	4	152
15:30	0	0	129	28	3	2	1	163
15:45	0	0	85	14	3	1	2	105
Total	1	0	417	87	12	8	7	532
16:00	1	0	129	24	4	2	1	161
16:15	1	0	104	19	0	1	2	127
16:30	0	1	104	19	2	2	1	129
16:45	0	0	122	17	5	3	1	148
Total	2	1	459	79	11	8	5	565
17:00	1	0	91	11	0	2	1	106
17:15	0	0	127	15	0	0	3	145
17:30	0	0	101	10	0	1	0	112
17:45	1	0	116	9	0	1	1	128
Total	2	0	435	45	0	4	5	491
18:00	0	0	84	6	0	0	0	90
18:15	0	1	123	8	0	2	1	135
18:30	2	0	108	5	0	1	0	116
18:45	0	0	93	3	0	0	1	97
Total	2	1	408	22	0	3	2	438
Day Total	17	3	3216	551	106	122	38	4053

APPENDIX C: PICADY Results

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010) (Patch 15 Apr 2011)

ADAPTED FROM PICADY/3 WHICH IS CROWN COPYRIGHT
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TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF HIS/HER RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-

"H:_Planning 1\Current Jobs\WCSLittlehampton\Modelling and TRICS\PICADY\
A284 Lyminster Road - Courtwick Lane 14-03-24.vpi"
(drive-on-the-left) at 15:20:26 on Monday, 24 March 2014

RUN INFORMATION

RUN TITLE : A284 Lyminster Road / Courtwick Lane Junction
LOCATION : Wick, Littlehampton
DATE : 24/03/14
CLIENT : Arun Medical Group
ENUMERATOR : gstrongitharm [MBWPC078]
JOB NUMBER : WCSLittlehampton.1
STATUS : On-going
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)
I
I
I
I
I
I
MINOR ROAD (ARM B)

ARM A IS A284 Lyminster Road (South)
ARM B IS Courtwick Lane
ARM C IS A284 Lyminster Road (North)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I	(W) 9.20 M.	I
I	CENTRAL RESERVE WIDTH	I	(WCR) 0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	(WC-B) 3.50 M.	I
I	- VISIBILITY	I	(VC-B) 110.00 M.	I
I	- BLOCKS TRAFFIC (SPACES)	I	NO (0)	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 25.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 15.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) -	I
I	- LANE 2 WIDTH	I	(WB-A) -	I
I	WIDTH AT 0 M FROM JUNCTION	I	9.00 M.	I
I	WIDTH AT 5 M FROM JUNCTION	I	3.60 M.	I
I	WIDTH AT 10 M FROM JUNCTION	I	2.80 M.	I
I	WIDTH AT 15 M FROM JUNCTION	I	2.80 M.	I
I	WIDTH AT 20 M FROM JUNCTION	I	2.80 M.	I
I	- LENGTH OF FLARED SECTION	I	1 VEHS	I

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	0.00	0.00	0.00	0.00		I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM	C-B	I
I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	727.89	0.24	0.24			I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2014 Existing AM Peak Hour

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	I	NUMBER OF MINUTES FROM START WHEN			I	RATE OF FLOW (VEH/MIN)			I				
		I	I	I		I	I	I					
ARM	FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER							
	TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK							
I ARM	A I	15.00	I	45.00	I	75.00	I	5.41	I	8.12	I	5.41	I
I ARM	B I	15.00	I	45.00	I	75.00	I	1.15	I	1.72	I	1.15	I
I ARM	C I	15.00	I	45.00	I	75.00	I	6.50	I	9.75	I	6.50	I

Demand set: 2014 Existing AM Peak Hour

I		I	TURNING PROPORTIONS				I						
I		I	TURNING COUNTS				I						
I		I	(PERCENTAGE OF H.V.S)				I						
I		I					I						
I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
I	07.45 - 09.15	I		I		I		I		I		I	
I		I	ARM	A	I	0.000	I	0.102	I	0.898	I		I
I		I		I	I	0.0	I	44.0	I	389.0	I		I
I		I		I	I	(0.0)	I	(0.0)	I	(11.1)	I		I
I		I		I	I		I		I		I		I
I		I	ARM	B	I	0.696	I	0.000	I	0.304	I		I
I		I		I	I	64.0	I	0.0	I	28.0	I		I
I		I		I	I	(4.7)	I	(0.0)	I	(3.6)	I		I
I		I		I	I		I		I		I		I
I		I	ARM	C	I	0.942	I	0.058	I	0.000	I		I
I		I		I	I	490.0	I	30.0	I	0.0	I		I
I		I		I	I	(10.2)	I	(6.7)	I	(0.0)	I		I
I		I		I	I		I		I		I		I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Existing AM Peak Hour
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.35	9.60	0.037		0.00	0.04	0.5		0.11
B-A	0.80	6.13	0.131		0.00	0.15	2.1		0.19
C-A	6.15								
C-B	0.38	10.01	0.038		0.00	0.04	0.6		0.10
A-B	0.55								
A-C	4.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.42	9.25	0.045		0.04	0.05	0.7		0.11
B-A	0.96	5.73	0.167		0.15	0.20	2.9		0.21
C-A	7.34								
C-B	0.45	9.75	0.046		0.04	0.05	0.7		0.11
A-B	0.66								
A-C	5.83								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.51	8.73	0.059		0.05	0.06	0.9		0.12
B-A	1.17	5.18	0.227		0.20	0.29	4.1		0.25
C-A	8.99								
C-B	0.55	9.38	0.059		0.05	0.06	0.9		0.11
A-B	0.81								
A-C	7.14								

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.30-08.45										I
I	B-C	0.51	8.73	0.059		0.06	0.06	0.9		0.12	I
I	B-A	1.17	5.18	0.227		0.29	0.29	4.3		0.25	I
I	C-A	8.99									I
I	C-B	0.55	9.38	0.059		0.06	0.06	0.9		0.11	I
I	A-B	0.81									I
I	A-C	7.14									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.45-09.00										I
I	B-C	0.42	9.25	0.045		0.06	0.05	0.7		0.11	I
I	B-A	0.96	5.73	0.167		0.29	0.20	3.2		0.21	I
I	C-A	7.34									I
I	C-B	0.45	9.75	0.046		0.06	0.05	0.7		0.11	I
I	A-B	0.66									I
I	A-C	5.83									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	09.00-09.15										I
I	B-C	0.35	9.59	0.037		0.05	0.04	0.6		0.11	I
I	B-A	0.80	6.13	0.131		0.20	0.15	2.4		0.19	I
I	C-A	6.15									I
I	C-B	0.38	10.01	0.038		0.05	0.04	0.6		0.10	I
I	A-B	0.55									I
I	A-C	4.88									I

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.1
08.45	0.1
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.3
08.45	0.3
09.00	0.2
09.15	0.2

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.1
08.45	0.1
09.00	0.0
09.15	0.0

 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I
I	I	I	I	I	* DELAY *	I	* DELAY *	I
I	I	I	I	I	I	I	I	I
I	I	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
I	B-C	I	38.5	I 25.7	I 4.4	I 0.11	I 4.4	I 0.11
I	B-A	I	88.1	I 58.7	I 19.0	I 0.22	I 19.0	I 0.22
I	C-A	I	674.4	I 449.6	I	I	I	I
I	C-B	I	41.3	I 27.5	I 4.5	I 0.11	I 4.5	I 0.11
I	A-B	I	60.6	I 40.4	I	I	I	I
I	A-C	I	535.4	I 357.0	I	I	I	I
I	ALL	I	1438.4	I 958.9	I 27.9	I 0.02	I 27.9	I 0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

 SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	I	I	I	I	I	I
I	0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM
I	I	I	I	I	I	I	I	I
I	0.00		0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	I	I	I	I	I	I
I	727.89		0.24		0.24	I

(NB These values do not allow for any site specific corrections)

 TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE (%)	I
I	I	I	I	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2014 Existing PM Peak Hour

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

		NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
ARM		FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER
		TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK
		I	I	I	I	I	I
I	ARM A	15.00	I 45.00	I 75.00	I 5.20	I 7.80	I 5.20
I	ARM B	15.00	I 45.00	I 75.00	I 1.30	I 1.95	I 1.30
I	ARM C	15.00	I 45.00	I 75.00	I 6.39	I 9.58	I 6.39

Demand set: 2014 Existing PM Peak Hour

		TURNING PROPORTIONS					
		TURNING COUNTS					
		(PERCENTAGE OF H.V.S)					
TIME	FROM/TO	ARM	A	ARM	B	ARM	C
16.45 - 18.15							
	ARM A		0.000		0.195		0.805
			0.0		81.0		335.0
			(0.0)		(3.7)		(3.6)
	ARM B		0.663		0.000		0.337
			69.0		0.0		35.0
			(0.0)		(0.0)		(2.9)
	ARM C		0.961		0.039		0.000
			491.0		20.0		0.0
			(1.8)		(5.0)		(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Existing PM Peak Hour
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.44	9.86	0.045		0.00	0.05	0.7		0.11
B-A	0.87	6.70	0.129		0.00	0.15	2.1		0.17
C-A	6.16								
C-B	0.25	10.30	0.024		0.00	0.02	0.4		0.10
A-B	1.02								
A-C	4.20								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.52	9.55	0.055		0.05	0.06	0.8		0.11
B-A	1.03	6.34	0.163		0.15	0.19	2.8		0.19
C-A	7.36								
C-B	0.30	10.06	0.030		0.02	0.03	0.4		0.10
A-B	1.21								
A-C	5.02								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.64	9.10	0.071		0.06	0.08	1.1		0.12
B-A	1.27	5.84	0.217		0.19	0.27	3.9		0.22
C-A	9.01								
C-B	0.37	9.72	0.038		0.03	0.04	0.6		0.11
A-B	1.49								
A-C	6.15								

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
I	17.30-17.45									
I	B-C	0.64	9.09	0.071		0.08	0.08	1.1		0.12
I	B-A	1.27	5.84	0.217		0.27	0.27	4.1		0.22
I	C-A	9.01								
I	C-B	0.37	9.72	0.038		0.04	0.04	0.6		0.11
I	A-B	1.49								
I	A-C	6.15								

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
I	17.45-18.00									
I	B-C	0.52	9.55	0.055		0.08	0.06	0.9		0.11
I	B-A	1.03	6.34	0.163		0.27	0.20	3.1		0.19
I	C-A	7.36								
I	C-B	0.30	10.06	0.030		0.04	0.03	0.5		0.10
I	A-B	1.21								
I	A-C	5.02								

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
I	18.00-18.15									
I	B-C	0.44	9.85	0.045		0.06	0.05	0.7		0.11
I	B-A	0.87	6.70	0.129		0.20	0.15	2.3		0.17
I	C-A	6.16								
I	C-B	0.25	10.30	0.024		0.03	0.03	0.4		0.10
I	A-B	1.02								
I	A-C	4.20								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.2

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I
I	I	I	I	I	* DELAY *	I	* DELAY *	I
I	I	I	I	I	I	I	I	I
I	I	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
I	B-C	I	48.2	I 32.1	I 5.4	I 0.11	I 5.4	I 0.11
I	B-A	I	95.0	I 63.3	I 18.3	I 0.19	I 18.3	I 0.19
I	C-A	I	675.8	I 450.6	I	I	I	I
I	C-B	I	27.5	I 18.4	I 2.8	I 0.10	I 2.8	I 0.10
I	A-B	I	111.5	I 74.3	I	I	I	I
I	A-C	I	461.1	I 307.4	I	I	I	I
I	ALL	I	1419.1	I 946.1	I 26.5	I 0.02	I 26.5	I 0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM C-B
I	0.00		0.00		0.00		0.00	0.00

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	727.89		0.24		0.24	I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2014 Existing AM Peak Hour + GP + Remainder of Enterprise Hub

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	I	NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)			I					
		I	I	I	I	I	I						
ARM	FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER							
I	I	TO RISE	IS REACHED	I FALLING	I	OF PEAK	I	PEAK					
I	I	I	I	I	I	I	I	I					
I ARM A	I	15.00	I	45.00	I	75.00	I	6.20	I	9.30	I	6.20	I
I ARM B	I	15.00	I	45.00	I	75.00	I	1.61	I	2.42	I	1.61	I
I ARM C	I	15.00	I	45.00	I	75.00	I	7.04	I	10.56	I	7.04	I

Demand set: 2014 Existing AM Peak Hour + GP + Remainder of Enterprise Hub

I	I	TURNING PROPORTIONS						I		
I	I	TURNING COUNTS						I		
I	I	(PERCENTAGE OF H.V.S)						I		
I	I	-----						I		
I	TIME	I FROM/TO	I ARM	A	I ARM	B	I ARM	C	I	
I	-----									I
I	07.45 - 09.15	I	I	I	I	I	I	I	I	
I		I ARM	A	I	0.000	I	0.216	I	0.784	I
I		I		I	0.0	I	107.0	I	389.0	I
I		I		I	(0.0)	I	(0.0)	I	(11.1)	I
I		I		I	I	I	I	I	I	I
I		I ARM	B	I	0.698	I	0.000	I	0.302	I
I		I		I	90.0	I	0.0	I	39.0	I
I		I		I	(3.4)	I	(0.0)	I	(2.6)	I
I		I		I	I	I	I	I	I	I
I		I ARM	C	I	0.870	I	0.130	I	0.000	I
I		I		I	490.0	I	73.0	I	0.0	I
I		I		I	(10.2)	I	(2.8)	I	(0.0)	I
I		I		I	I	I	I	I	I	I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Existing AM Peak Hour + GP + Remainder of Enterprise Hub
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.49	9.45	0.052		0.00	0.05	0.8		0.11
B-A	1.13	5.99	0.188		0.00	0.23	3.2		0.20
C-A	6.15								
C-B	0.92	10.20	0.090		0.00	0.10	1.4		0.11
A-B	1.34								
A-C	4.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.58	9.00	0.065		0.05	0.07	1.0		0.12
B-A	1.35	5.55	0.243		0.23	0.31	4.5		0.24
C-A	7.34								
C-B	1.09	9.89	0.111		0.10	0.12	1.8		0.11
A-B	1.60								
A-C	5.83								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.72	8.27	0.087		0.07	0.09	1.4		0.13
B-A	1.65	4.93	0.335		0.31	0.49	7.0		0.30
C-A	8.99								
C-B	1.34	9.46	0.142		0.12	0.16	2.4		0.12
A-B	1.96								
A-C	7.14								

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.30-08.45										I
I	B-C	0.72	8.26	0.087		0.09	0.09	1.4		0.13	I
I	B-A	1.65	4.93	0.335		0.49	0.50	7.4		0.30	I
I	C-A	8.99									I
I	C-B	1.34	9.46	0.142		0.16	0.16	2.5		0.12	I
I	A-B	1.96									I
I	A-C	7.14									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.45-09.00										I
I	B-C	0.58	8.98	0.065		0.09	0.07	1.1		0.12	I
I	B-A	1.35	5.54	0.243		0.50	0.33	5.2		0.24	I
I	C-A	7.34									I
I	C-B	1.09	9.89	0.111		0.16	0.13	1.9		0.11	I
I	A-B	1.60									I
I	A-C	5.83									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	09.00-09.15										I
I	B-C	0.49	9.43	0.052		0.07	0.06	0.8		0.11	I
I	B-A	1.13	5.99	0.189		0.33	0.24	3.7		0.21	I
I	C-A	6.15									I
I	C-B	0.92	10.20	0.090		0.13	0.10	1.5		0.11	I
I	A-B	1.34									I
I	A-C	4.88									I

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.5
08.45	0.5
09.00	0.3
09.15	0.2

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.2
08.45	0.2
09.00	0.1
09.15	0.1

 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I	
I	I	I	I	I	* DELAY *	I	* DELAY *	I	
I	I	I	I	I	I	I	I	I	
I	I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	I	
I	B-C	I	53.7	I	35.8	I	6.5	I	0.12
I	B-A	I	123.9	I	82.6	I	31.0	I	0.25
I	C-A	I	674.4	I	449.6	I	I	I	I
I	C-B	I	100.5	I	67.0	I	11.5	I	0.11
I	A-B	I	147.3	I	98.2	I	I	I	I
I	A-C	I	535.4	I	357.0	I	I	I	I
I	ALL	I	1635.2	I	1090.1	I	49.0	I	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

 SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept	For Slope	For Opposing	Slope	For Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM A-B	I	I
I	0.00		0.00	0.00		I

* Due to the presence of a flare, data is not available

I	Intercept	For Slope	For Opposing	Slope	For Opposing	Slope	For Opposing	Slope	For Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM A-B	STREAM C-A	STREAM C-B	I	I	I	I
I	0.00		0.00	0.00	0.00	0.00				I

* Due to the presence of a flare, data is not available

I	Intercept	For Slope	For Opposing	Slope	For Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM A-B	I	I
I	727.89		0.24	0.24		I

(NB These values do not allow for any site specific corrections)

 TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: 2014 Existing PM Peak Hour + GP + Remainder of Enterprise Hub

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	I	NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)			I	
		I	I	I	I	I	I		
ARM		FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER		
		TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK		
I	I	I	I	I	I	I	I	I	
I ARM	A I	15.00	I	45.00	I	75.00	I	5.61	I
I ARM	B I	15.00	I	45.00	I	75.00	I	2.42	I
I ARM	C I	15.00	I	45.00	I	75.00	I	6.49	I

Demand set: 2014 Existing PM Peak Hour + GP + Remainder of Enterprise Hub

I		I	TURNING PROPORTIONS						I				
I		I	TURNING COUNTS						I				
I		I	(PERCENTAGE OF H.V.S)						I				
I		I							I				
I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
I	16.45 - 18.15	I		I			I			I			I
I		I	ARM	A	I	0.000	I	0.254	I	0.746	I		I
I		I			I	0.0	I	114.0	I	335.0	I		I
I		I			I	(0.0)	I	(2.6)	I	(3.6)	I		I
I		I			I		I		I		I		I
I		I	ARM	B	I	0.665	I	0.000	I	0.335	I		I
I		I			I	129.0	I	0.0	I	65.0	I		I
I		I			I	(0.0)	I	(0.0)	I	(1.6)	I		I
I		I			I		I		I		I		I
I		I	ARM	C	I	0.946	I	0.054	I	0.000	I		I
I		I			I	491.0	I	28.0	I	0.0	I		I
I		I			I	(1.8)	I	(3.6)	I	(0.0)	I		I
I		I			I		I		I		I		I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
 THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Existing PM Peak Hour + GP + Remainder of Enterprise Hub
 AND FOR TIME PERIOD 2

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	16.45-17.00										I
I	B-C	0.82	9.55	0.085		0.00	0.09	1.3		0.11	I
I	B-A	1.62	6.63	0.244		0.00	0.32	4.5		0.20	I
I	C-A	6.16									I
I	C-B	0.35	10.35	0.034		0.00	0.03	0.5		0.10	I
I	A-B	1.43									I
I	A-C	4.20									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-C	0.97	9.06	0.108		0.09	0.12	1.8		0.12	I
I	B-A	1.93	6.25	0.309		0.32	0.44	6.3		0.23	I
I	C-A	7.36									I
I	C-B	0.42	10.08	0.042		0.03	0.04	0.6		0.10	I
I	A-B	1.71									I
I	A-C	5.02									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-C	1.19	8.22	0.145		0.12	0.17	2.5		0.14	I
I	B-A	2.37	5.71	0.414		0.44	0.69	9.7		0.30	I
I	C-A	9.01									I
I	C-B	0.51	9.71	0.053		0.04	0.06	0.8		0.11	I
I	A-B	2.09									I
I	A-C	6.15									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-C	1.19	8.20	0.145		0.17	0.17	2.5		0.14	I
I	B-A	2.37	5.71	0.414		0.69	0.70	10.4		0.30	I
I	C-A	9.01									I
I	C-B	0.51	9.71	0.053		0.06	0.06	0.8		0.11	I
I	A-B	2.09									I
I	A-C	6.15									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.45-18.00										I
I	B-C	0.97	9.04	0.108		0.17	0.12	1.9		0.12	I
I	B-A	1.93	6.25	0.309		0.70	0.46	7.2		0.23	I
I	C-A	7.36									I
I	C-B	0.42	10.08	0.042		0.06	0.04	0.7		0.10	I
I	A-B	1.71									I
I	A-C	5.02									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	18.00-18.15										I
I	B-C	0.82	9.54	0.086		0.12	0.09	1.4		0.11	I
I	B-A	1.62	6.63	0.244		0.46	0.33	5.1		0.20	I
I	C-A	6.16									I
I	C-B	0.35	10.35	0.034		0.04	0.04	0.5		0.10	I
I	A-B	1.43									I
I	A-C	4.20									I

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I
I		I		I	* DELAY *	I	* DELAY *	I
I		I		I		I		I
I		I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
I	B-C	I	89.5	I 59.6	I 11.4	I 0.13	I 11.4	I 0.13
I	B-A	I	177.6	I 118.4	I 43.3	I 0.24	I 43.3	I 0.24
I	C-A	I	675.8	I 450.6	I	I	I	I
I	C-B	I	38.5	I 25.7	I 4.0	I 0.10	I 4.0	I 0.10
I	A-B	I	156.9	I 104.6	I	I	I	I
I	A-C	I	461.1	I 307.4	I	I	I	I
I	ALL	I	1599.4	I 1066.3	I 58.7	I 0.04	I 58.7	I 0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

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