



**www.coraiht.com**

**Hutton Bank**

**Ripon**

**Transport Assessment**

**Final Report for:**

**Primetalent Ltd.**

**June 2019**

Cora IHT Ltd  
Adamson House  
Towers Business Park  
Wilmslow Road  
Manchester  
M20 2YY

Email: [manchester@coraiht.com](mailto:manchester@coraiht.com)

Cora IHT Registered in England No 10321930

Infrastructure Highways Transport

---

## Document Control

**Document:** Transport Assessment  
**Client:** Primetalent Ltd.  
**Project Number:** 16-1094  
**Document Number:** T001  
**Status:** Final  
**Issue:** 3

**Prepared:** TC  
**Checked:** JW  
**Date:** 28<sup>th</sup> June 2019

<b>Issue Number:</b>	<b>Date:</b>	<b>Revision Details:</b>
1	3 <sup>rd</sup> September 2018	1 <sup>st</sup> Issue
2	19 <sup>th</sup> October 2018	Final
3	28 <sup>th</sup> June 2019	Updated to include industrial units
4		

---

## CONTENTS

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>3</b>
1.1	Introduction .....	3
1.2	Scope .....	4
<b>2.0</b>	<b>SITE DESCRIPTION AND EXISTING CONDITIONS .....</b>	<b>5</b>
2.1	Site Description .....	5
2.2	Accident Analysis .....	6
2.3	Existing Traffic Conditions .....	7
<b>3.0</b>	<b>DEVELOPMENT PROPOSALS.....</b>	<b>8</b>
3.1	Proposed Development .....	8
<b>4.0</b>	<b>TRANSPORT POLICY AND SUSTAINABLE ACCESSIBILITY .....</b>	<b>10</b>
4.1	Preamble.....	10
4.2	North Yorkshire Council Local Transport Plan .....	10
4.3	Revised National Planning Policy Framework [NPPF] .....	10
4.4	Access by Bus .....	11
4.5	Access on Foot .....	12
4.6	Access by Cycle .....	13
4.7	Conclusions .....	13
<b>5.0</b>	<b>TRAFFIC IMPACT .....</b>	<b>14</b>
5.1	Introduction .....	14
5.2	Development Trips.....	14
5.3	Future Traffic Flows .....	15
5.4	Committed Developments.....	15
5.5	Distribution and Assignment of Traffic .....	15
5.6	Assessment of Additional Development Traffic .....	15
<b>6.0</b>	<b>SUMMARY AND CONCLUSION .....</b>	<b>16</b>
6.1	Summary .....	16
6.2	Conclusion .....	16

## TRAFFIC FIGURES

## APPENDICES

### APPENDIX A – PROPOSED SITE ACCESS

### APPENDIX B – PROPOSED SITE LAYOUT

### APPENDIX C – TRICS DATA

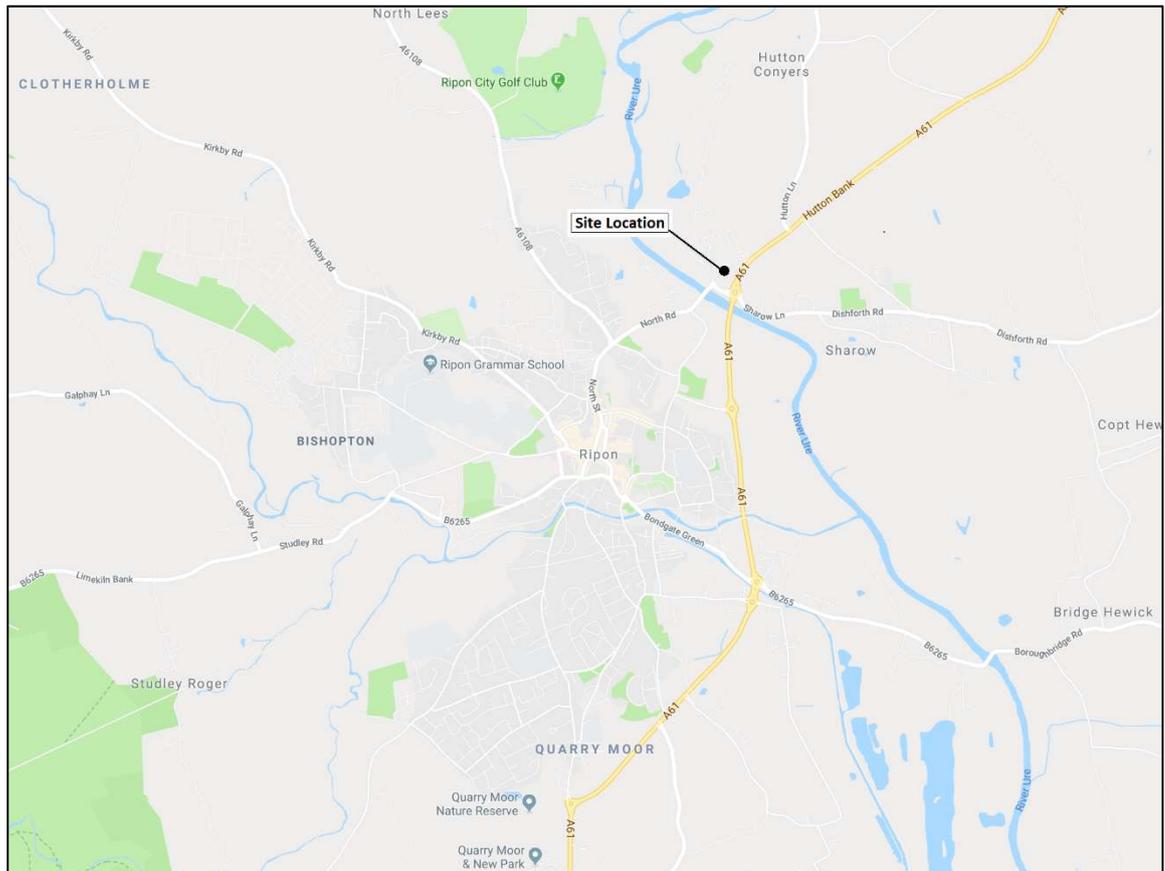
## 1.0 INTRODUCTION

### 1.1 Introduction

1.1.1 Cora IHT have been instructed by Primetalent Ltd. to prepare a Transport Assessment [TA] to support proposals for a residential development for up to 37 dwellings with 6 light industrial units on land located off Hutton Bank, Ripon.

1.1.2 **Figure 1.1** illustrates the site location.

**Figure 1.1: Site Location**



1.1.3 This TA has been prepared in accordance with National Planning Policy Framework and Planning Policy Guidance: Travel Plans, Transport Assessments and Statements in Decision-Taking. It sets out the transport matters relating to the development site and provides details of the development proposals, including an assessment of the predicted traffic flows, the corresponding impact on the surrounding highway network and matters associated with accessibility and connectivity.

## **1.2 Scope**

### 1.2.1 Following this brief introduction:

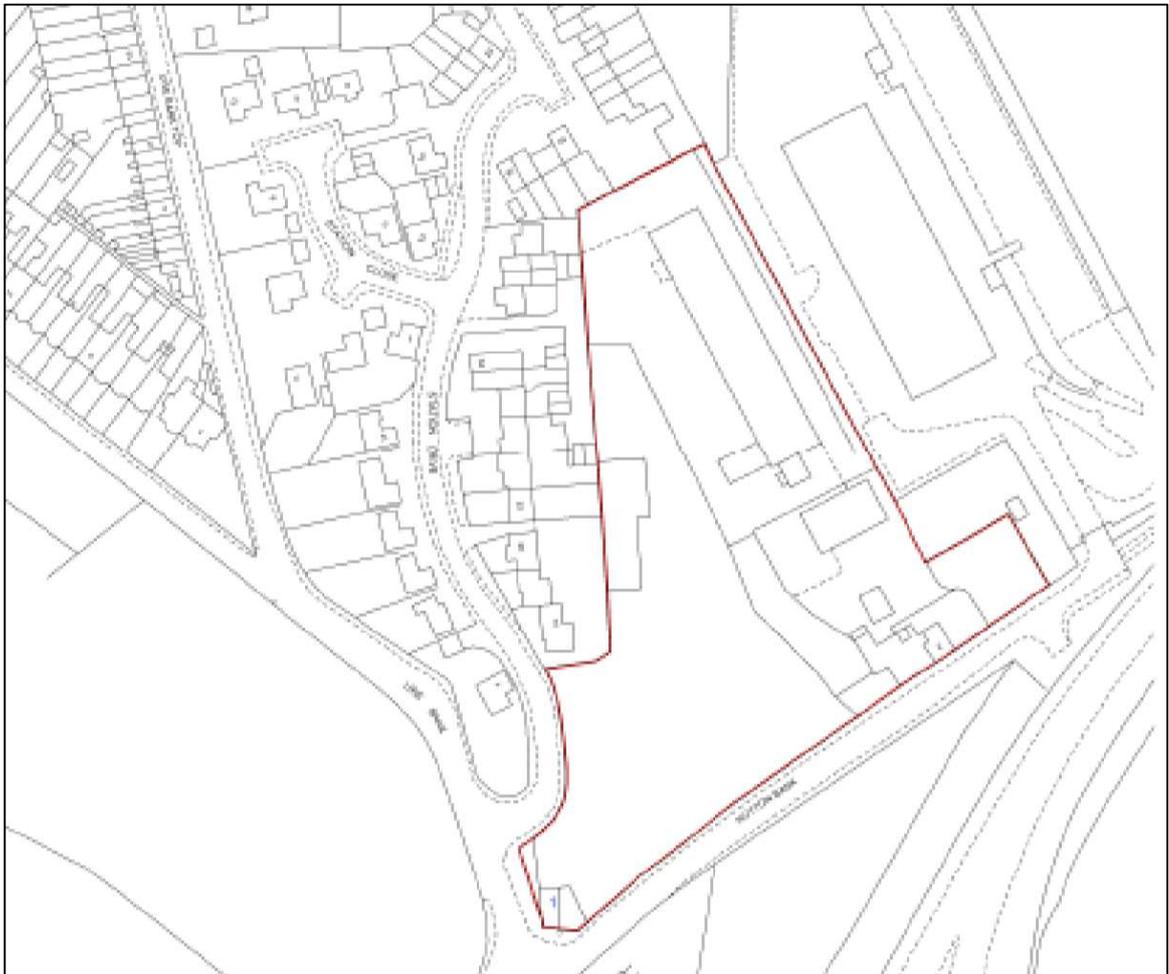
- Section 2 describes the site location and provides a review of the existing highway network;
- Section 3 then describes the development proposals;
- Section 4 considers the transport planning policy issues with an assessment of the accessibility of the site by non-car modes;
- Section 5 provides an assessment of the traffic impact associated with the proposed development; and
- The summary and conclusion are set out in Section 6.

## 2.0 SITE DESCRIPTION AND EXISTING CONDITIONS

### 2.1 Site Description

- 2.1.1 The site is located approximately 0.8 km to the north east of Ripon City Centre, just off the Ripon bypass (A61). Existing access to the site is gained off Hutton Bank which forms the southern boundary of the site. To the east of the site is a Land Rover dealership whilst to the west the site is border by residential properties along Station Drive.
- 2.1.2 The site extends to some 1.49 hectares and has previously been used for a range of commercial/industrial uses and provides several standalone premises, which are currently vacant. The buildings on the site comprise approximately 1,052 m<sup>2</sup> of floorspace. The extant use is for general industrial storage and warehousing.
- 2.1.3 **Figures 2.1** shows the red line boundary plan.

**Figure 2.1: Red Line Boundary Plan**

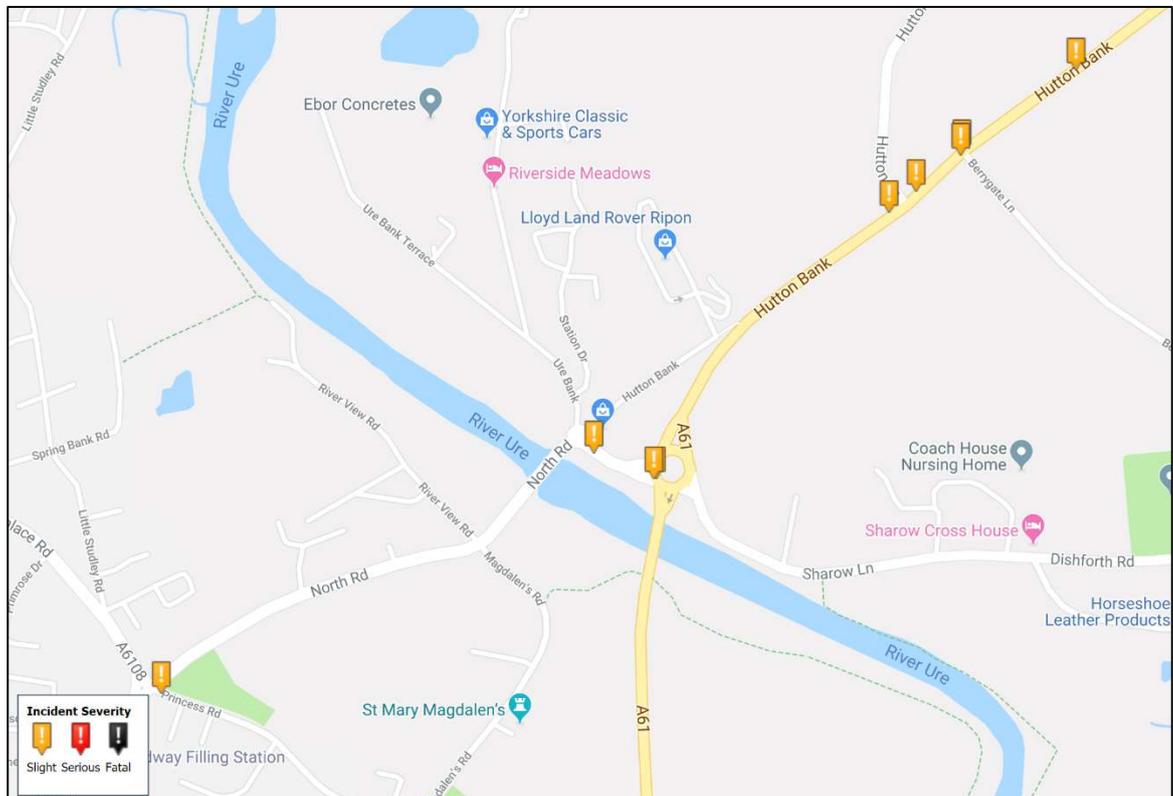


- 2.1.4 To the southwest of the site access, Hutton Bank forms a mini-roundabout junction with Sharow Lane A6018 / Ure Bank / North Road.
- 2.1.5 A61 Ripon Bypass can be access from the site via a roundabout junction with Sharow Lane to the southeast. The A61 provides access to Thirsk routing northeast and to Leeds via Harrogate routing south. North Road provides direct access to Ripon city centre.

## 2.2 Accident Analysis

2.2.1 Accident data has been obtained from the Crashmap website (<http://www.crashmap.co.uk>) for the period of 2013-2017. **Figure 2.2** shows an extract of the accident plot.

**Figure 2.2: Crashmap Accident Plan**



2.2.2 As shown in the plan above, there has been no accidents along the frontage of the site within the last 5 years with 1 slight accident at the North Road / A6108 mini-roundabout junction and 1 slight accident at the A61 / Sharow lane A6108 roundabout junction.

2.2.3 It is concluded that the recorded accident data within the vicinity of the site does not indicate any existing highway safety patterns or problems, therefore, further detailed analysis is not required.

---

### **2.3 Existing Traffic Conditions**

- 2.3.1 Turning counts have been extracted from the TA contained in the following planning application for the site:

**17/05273/OUTMAJ:** *Outline application with all matters reserved for the construction of a new petrol filling station comprising demolition of existing buildings including new forecourt building with ancillary convenience store and ATM, 6 petrol pump islands and associated canopy and new A1/A3 drive thru unit.*

- 2.3.2 The traffic survey was carried out on Thursday 16th November 2017 at the mini-roundabout junction of Hutton Bank/Sharow Lane/North Road/Ure Bank.

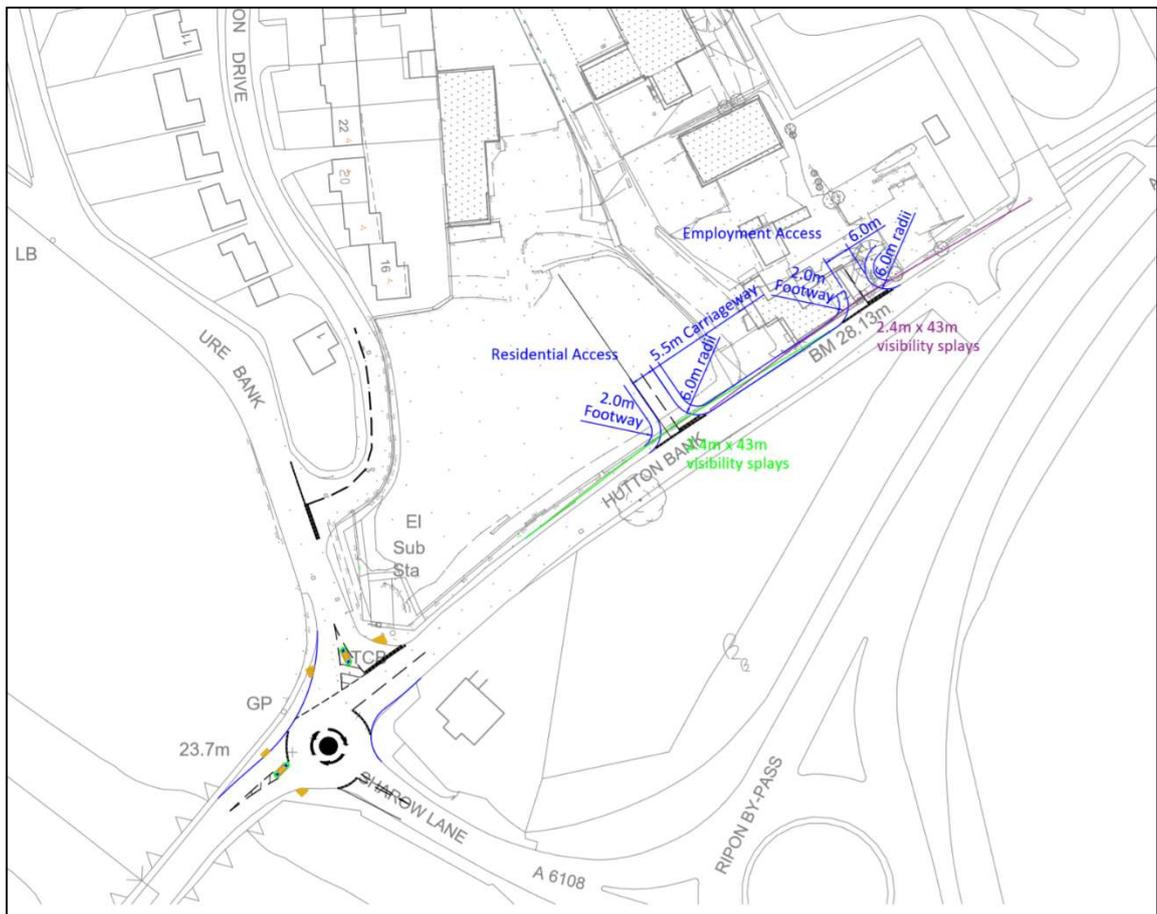
- 2.3.3 A traffic impact assessment has been carried out for the weekday morning (0800-0900) and evening peak (1700-1800) hours. **Traffic Figures 1** and **2** show the surveyed traffic flows in total vehicles and heavies, whilst **Traffic Figures 3** and **4** presents the flows in terms of Passenger Car Units [PCUs].

### 3.0 DEVELOPMENT PROPOSALS

#### 3.1 Proposed Development

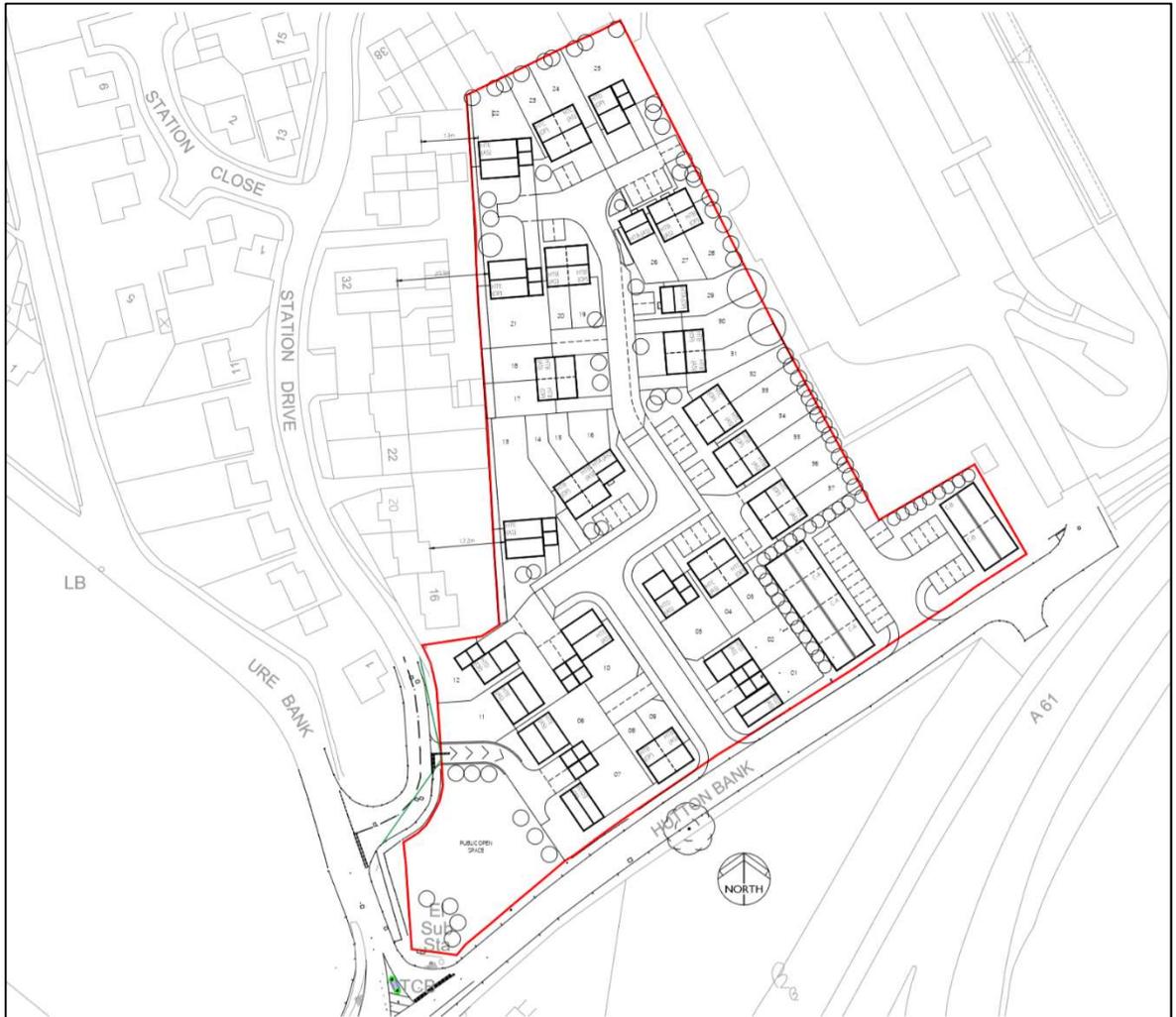
- 3.1.1 The development proposals are for up to 37 dwellings with 6 light industrial units to the market with approximately 863 sq. m. (9,300 sq. ft) of floorspace within the B1c Use Class.
- 3.1.2 Separate residential and employment accesses to the site are proposed off Hutton Bank which will provide 2m footways and visibility splays of 2.4m x 43m at both accesses. There is also a driveway access off Station Drive which serves two dwellings.
- 3.1.3 As part of the proposals, the North Road / Sharow Lane A6018 / Hutton Bank mini-roundabout junction is to be improved to enhance pedestrian crossing facilities.
- 3.1.4 **Figure 3.1** shows the proposed access arrangement. **Appendix A** provides the full drawing.

**Figure 3.1: Proposed Access Arrangement**



3.1.5 **Figure 3.2** provides the site layout. **Appendix B** provides the full drawing.

**Figure 3.2: Proposed Site Layout**



---

## 4.0 TRANSPORT POLICY AND SUSTAINABLE ACCESSIBILITY

### 4.1 *Preamble*

4.1.1 In order to assess the proposals and develop a transportation access strategy for the planned development, it is necessary to review both local and national transport related planning guidance.

4.1.2 The following sections outline the relevant guidance in respect of the proposed development.

### 4.2 *North Yorkshire Council Local Transport Plan*

4.2.1 The North Yorkshire Council's third Local Transport Plan [LTP3] takes over from LTP 2 and is made up of a long-term transport strategy with a vision for transport within the borough. The long-term vision for North Yorkshire's transport system over the course of LTP 3 is:

*'North Yorkshire – a place of equal opportunity where all can develop their full potential, participate in a flourishing economy, live and thrive in secure communities, see their high quality environment and cultural assets maintained and enhanced, and receive effective support when they need it.'*

4.2.2 This will be achieved through fulfilling a number of objectives for transport in the county of North Yorkshire:

- Supporting flourishing local economies by delivering reliable and efficient transport networks and systems (local economies);
- Reducing the impact of transport on the natural and built environment, and tackling climate change (environment and climate change);
- Improving transport safety and securing and promoting healthier travel (safety and healthier travel);
- Promoting greater equality of opportunity for all by improving people's access to all necessary services (access to services); and
- Ensuring transport helps improve quality of life for all (quality of life).

4.2.3 The council goes on to make a commitment to manage, maintain and improve transport networks and services in support of these objectives.

### 4.3 *Revised National Planning Policy Framework [NPPF]*

4.3.1 The Government published its revision of the National Planning Policy Framework (NPPF) yesterday (24 July 2018).

4.3.2 Chapter 9 is a direct replacement of the previous Chapter 4 under the same heading "Promoting sustainable transport".

4.3.3 Paragraph 103b reflects the housing White Paper proposal that authorities should be expected to identify additional development opportunities arising from strategic infrastructure investment.

4.3.4 Paragraph 106 incorporates the Written Ministerial Statement of 25 March 2015 on parking standards.

4.3.5 Paragraph 106 introduces the notion that maximum parking standards should only be set where there is a clear and compelling justification (implying that maximum parking standards should not be applied as a matter of course). The paragraph has been clarified further following the draft NPPF by now also stating that maximum parking standards should also only be set to optimise

*“the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of this Framework)”.*

4.3.6 Paragraph 107 is new in the revised NPPF highlighting the

*“importance of providing adequate overnight lorry parking facilities, taking into account any local shortages”.*

4.3.7 The policy requiring the assessment of transport impact of proposals (previously paragraph 32 now at paragraphs 108-110) now put emphasis on highway safety as well as capacity and congestion. The highest priority is given to the sustainable modes of transport, such as pedestrians and cyclists, followed by access to high quality public transport.

4.3.8 Further revisions relating to transport appears in chapter 11 that covers “Making effective use of land”. In paragraph 123 it is made clear that minimum density standards are expected to be used in town and city centres around transport hubs as well as in other areas well served by public transport. Paragraph 123a states:

*“These standards should seek a significant uplift in the average density of residential development within these areas “*

#### **4.4 Access by Bus**

4.4.1 The ability to readily access wider major destinations by bus provides a key advantage in providing a real alternative to car travel (e.g. for journeys to work and consumer trips) and, as such, promotes the aim of reducing car travel.

4.4.2 The nearest bus stops are located on approximately 200 metres south of the site. The services include 23, 70, 136, 150 and 170 **Table 4.1** summarises the main bus services accessible from the site.

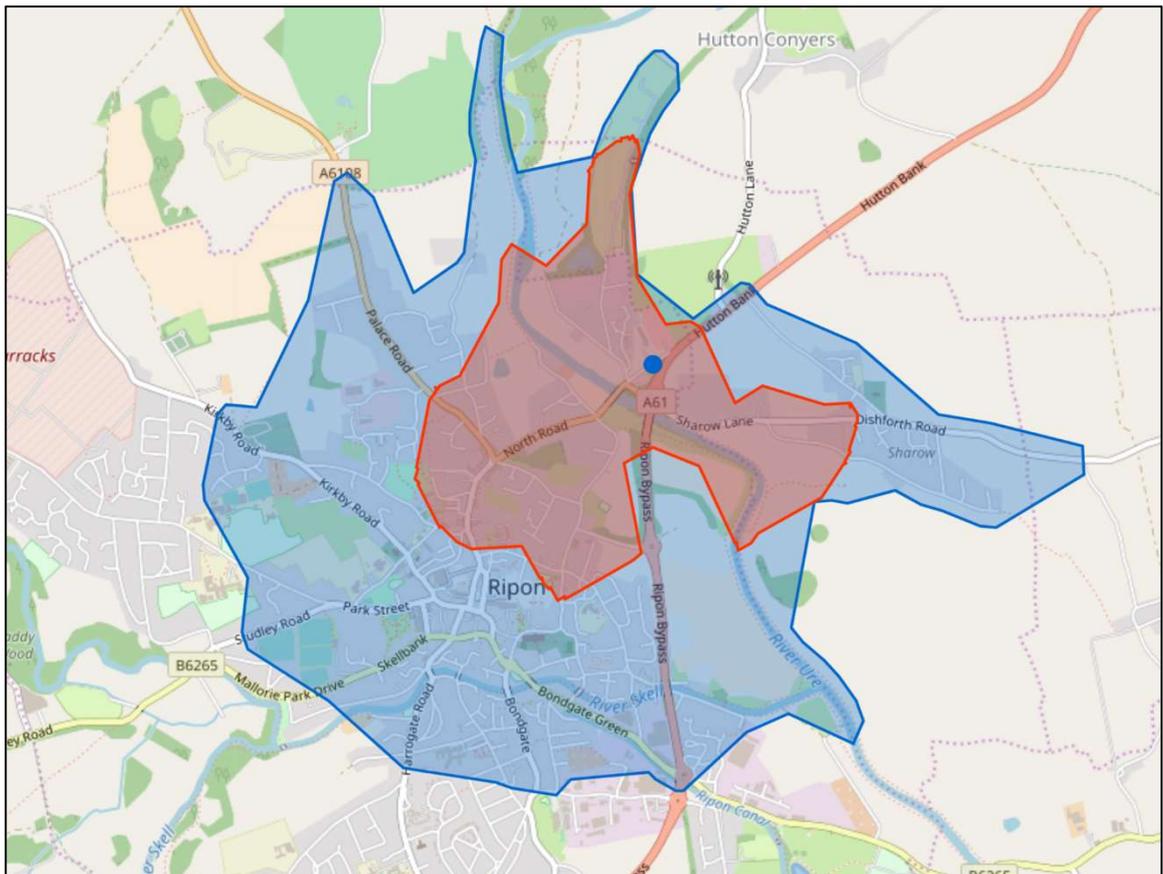
**Table 4.1: Bus Summary**

Service Number	Route	Bus Frequency		
		Weekday	Sat	Sun
70	Ripon – Thirsk – Northallerton	Every 2 hours	-	-
136	Ripon – Melmerby	4 per day (AM and PM)	-	-

#### 4.5 Access on Foot

- 4.5.1 Walking is the most important mode of travel at a local level and offers the greatest potential to replace short car journeys. The IHT Guidelines for Providing Journeys on Foot (IHT 2000) suggests that the acceptable walking distance to town centres is given as a range, from a desirable 200m to a preferred maximum of 2,000m.
- 4.5.2 In terms of commuting journeys by foot, the desirable distance is 500m, the acceptable distance is 1,000m and the preferred maximum is 2,000m. However, the distance that people are prepared to walk depends upon many factors; there are obvious physical factors such as age, health and disabilities, along with factors concerning the quality of the route and the environment.
- 4.5.3 There are footways on the site side of Hutton Bank which then link to the North Road / Sharow Lane A6018 / Hutton Bank mini-roundabout junction which provides a safe and convenient walking environment.
- 4.5.4 As part of the proposals, the North Road / Sharow Lane A6018 / Hutton Bank mini-roundabout junction is to be improved to enhance pedestrian crossing facilities.
- 4.5.5 **Figure 4.1** presents the 1km / 2km isochrones from the site, which illustrates the areas which lie within a reasonable walking distance which includes Ripon city centre.

**Figure 4.1: 1km / 2km Isochrone**

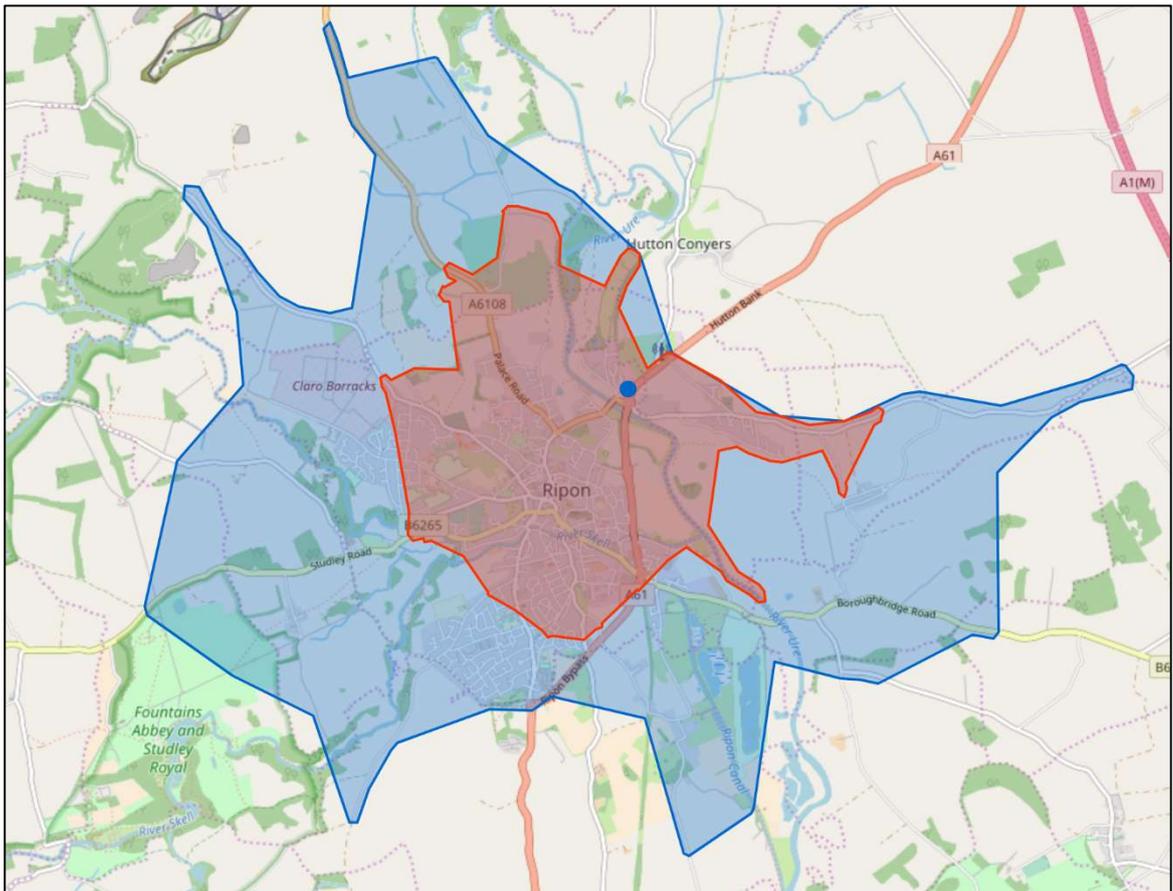


- 4.5.6 As can be seen from **Figure 4.1**, the majority of Ripon is accessible within 2km of the site.

#### 4.6 Access by Cycle

- 4.6.1 It is widely recognised that cycling can act as a substitute for short car journeys, particularly those up to 5km in length. The general topography of the area is reasonably flat, which should assist in encouraging travel by cycle.
- 4.6.2 A segregated cycle / footway is provided passing under the A61 Ripon Bypass on the which provides connection with Sharow Village.
- 4.6.3 **Figure 4.2** presents the 2.5km / 5km isochrones from the site, which illustrates the areas which lie within a reasonable cycling distance.

**Figure 4.2: 2.5km / 5km Isochrone**



#### 4.7 Conclusions

- 4.7.1 In summary, the proposed development site is located in an accessible location within Ripon, and is well located to make use of the existing public transport links and pedestrian / cycle routes.

## 5.0 TRAFFIC IMPACT

### 5.1 Introduction

5.1.1 This section of the report considers the traffic impact of the proposed development on the local highway network. The primary aim is to provide an assessment of the development traffic which will be generated by the proposed residential development, and the impact it will have on the local highway network.

### 5.2 Development Trips

5.2.1 To identify the trip generation associated with the proposed development, the TRICS database has been utilised. **Table 5.1** summarises the trip rates and generations associated with the proposed use at the site. The TRICS outputs are provided in **Appendix C**.

**Table 5.1: Proposed Trip Rates and Generation Using TRICS**

43 Dwellings	Morning Peak (08:00-09:00)			Evening Peak (17:00-18:00)		
	Arr	Dep	Total	Arr	Dep	Total
<b>Resi Trip Rates</b>	0.149	0.39	0.539	0.341	0.16	0.501
<b>Proposed Resi Trips</b>	6	14	20	13	6	19
<b>Industrial Trip Rates</b>	0.682	0.096	0.778	0.053	0.532	0.585
<b>Proposed Industrial Trips</b>	6	1	7	0	5	5

5.2.2 **Table 5.2** summarises the trip rates and generations associated with the existing extant industrial use, if it was at full occupancy and proposed industrial use. The TRICS outputs are provided in **Appendix C**.

**Table 5.2: Existing Industrial Trip Rates and Generation Using TRICS**

	Morning Peak (08:00-09:00)			Evening Peak (17:00-18:00)		
	Arr	Dep	Total	Arr	Dep	Total
<b>Trip Rates</b>	0.682	0.096	0.778	0.053	0.532	0.585
<b>Existing Trips</b>	7	1	8	1	6	6

5.2.3 **Table 5.3** shows the increases in trips for the proposed development when assessed against the existing industrial use.

**Table 5.3: Trip Comparison**

	Morning Peak (08:00-09:00)			Evening Peak (17:00-18:00)		
	Arr	Dep	Total	Arr	Dep	Total
<b>Existing Industrial Trips</b>	7	1	8	1	6	6
<b>Proposed Total Trips</b>	12	15	27	13	11	24
<b>Difference</b>	4	14	18	13	5	17

5.2.4 **Table 5.3** shows that there would only be a maximum increase of 18 trips to the site in the AM peak period.

### 5.3 Future Traffic Flows

5.3.1 As agreed with the highway authority an assessment has been made for future traffic conditions. The TEMpro 7.2 database, in conjunction with the AF15 NTM dataset has been applied to the surveyed traffic flows in order to ascertain future traffic flows with the following parameters:

- Ripon (Harrogate 004) area definition;
- Trip end by time period for car drivers; and
- NTM, all road types.

5.3.2 **Table 5.4** summarises the derived growth factors. The years of assessment are 2018 and 2023 (i.e. application year + 5 years).

5.3.3 **Traffic Figures 5 & 6 (2018)** and **7 & 8 (2023)** therefore show the Growthed Traffic flows for the assessed morning and evening peak periods respectively.

**Table 5.4: TEMpro 7.2 / NTM Growth Factors**

AM Peak	PM Peak	AM Peak	PM Peak
2017 to 2018	2017 to 2018	2017 to 2023	2017 to 2023
1.0136	1.0128	1.0874	1.0831

### 5.4 Committed Developments

5.4.1 It is considered that the traffic growth factor applied to this Transport Assessment would be sufficient to take account of any additional traffic associated with the committed developments in the area.

### 5.5 Distribution and Assignment of Traffic

5.5.1 The proposed distribution of the development traffic has been calculated based on the existing traffic flows at the mini-roundabout with 100% routing from the site to the mini-roundabout.

5.5.2 The percentage distributions adopted are provided in **Traffic Figures 9 & 10**.

5.5.3 The proposed development traffic is provided in **Traffic Figures 11 & 12**. Note in order to provide a robust assessment the existing site traffic has not been offset against the proposed residential traffic.

### 5.6 Assessment of Additional Development Traffic

5.6.1 **Traffic Figures 13 - 16** provide the 2018 / 2023 With Development Traffic Flows.

5.6.2 As can be seen from **Traffic Figures 11 & 12**, the additional traffic that would be generated by the proposed development would not be significant. The development traffic impact at the is 2.5% at the North Road / Sharow Lane A6018 / Hutton Bank mini-roundabout junction during both the AM and PM peaks, therefore the impact on the highway network would be minimal when compared against the existing low background traffic.

5.6.3 The traffic flows along Hutton Bank and at the site accesses are very low, therefore, capacity assessments are not required.

---

## **6.0 SUMMARY AND CONCLUSION**

### **6.1 Summary**

- 6.1.1 Cora IHT have been instructed by Primetalent Ltd. to prepare a Transport Assessment [TA] to support proposals for a residential and industrial development on land located off Hutton Bank, Ripon.
- 6.1.2 The development proposals are for up to 37 dwellings with 6 light industrial units to the market with approximately 863 sq. m. (9300 sq. ft) of floorspace within the B1c Use Class.
- 6.1.3 Separate residential and employment accesses to the site are proposed off Hutton Bank which will provide 2m footways and visibility splays of 2.4m x 43m at both accesses. There is also a driveway access off Station Drive which serves two dwellings.
- 6.1.4 As part of the proposals, the North Road / Sharow Lane A6018 / Hutton Bank mini-roundabout junction is to be improved to enhance pedestrian crossing facilities.
- 6.1.5 The proposed development site is located in an accessible location within Ripon and is well located to make use of the existing public transport links and pedestrian / cycle routes. The recorded accident data within the vicinity of the site does not indicate any existing highway safety patterns or problems.
- 6.1.6 The trip analysis shows that there would only be a maximum increase of 18 trips to the site in the AM peak period.
- 6.1.7 The development traffic impact at the is 2.5% at the North Road / Sharow Lane A6018 / Hutton Bank mini-roundabout junction during both the AM and PM peaks, therefore the impact on the highway network would be minimal when compared against the existing low background traffic.
- 6.1.8 The additional traffic that would be generated by the proposed development would not be significant, therefore the impact on the highway network would be minimal.

### **6.2 Conclusion**

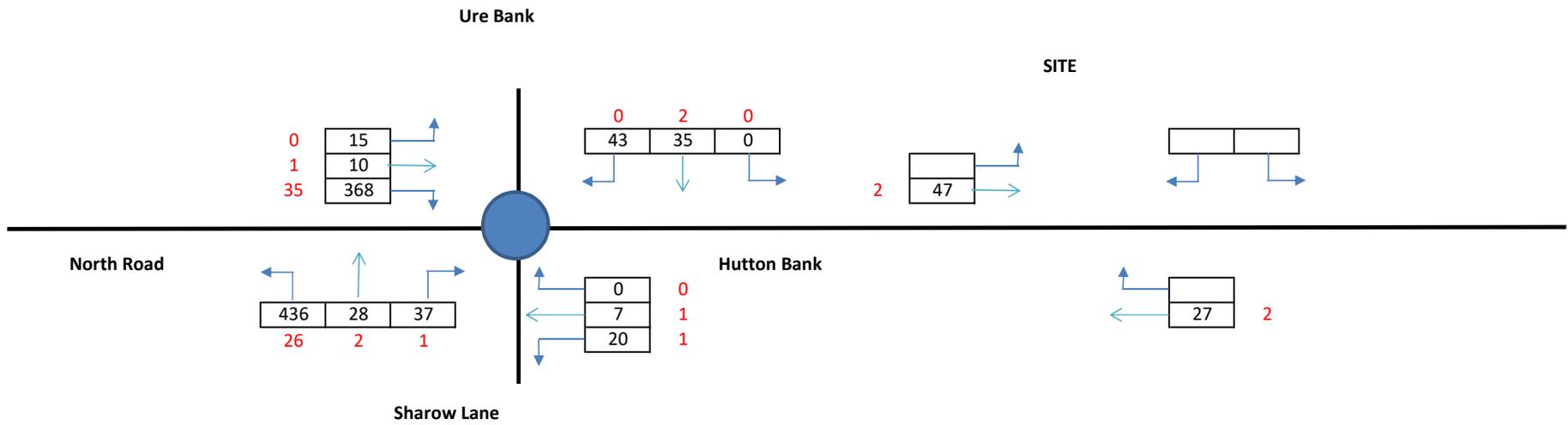
- 6.2.1 It is concluded that the development proposals are acceptable in highways and transportation terms. There are no highways or transportation related reasons upon which a refusal of the planning application for the proposals would be justified.



## TRAFFIC FIGURES

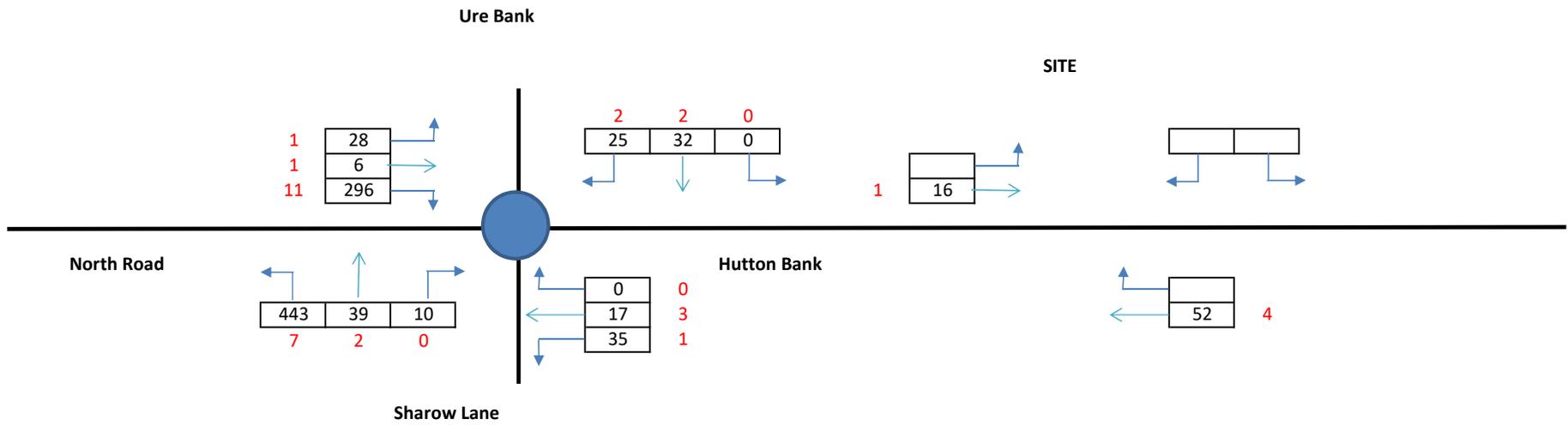
**Figure 1: 2017 Surveyed Traffic**  
**AM Peak: 0800-0900**

Notes    123 Total Vehicles  
           123 Heavies



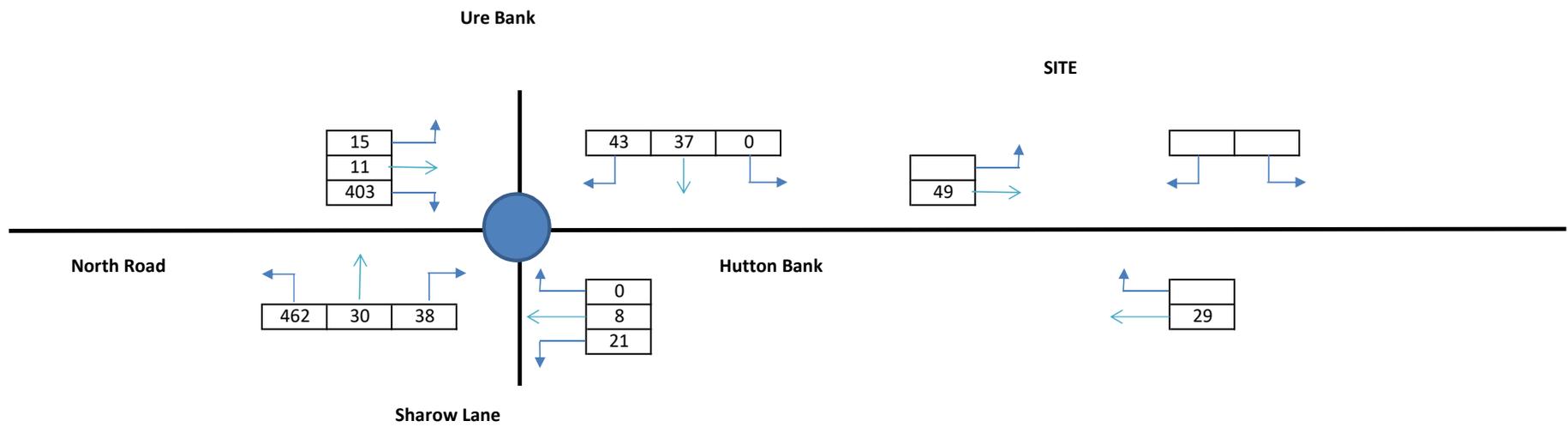
**Figure 2: 2017 Surveyed Traffic  
PM Peak: 1700-1800**

Notes 123 Total Vehicles  
123 Heavies



**Figure 3: 2017 Surveyed Traffic**  
**AM Peak: 0800-0900**

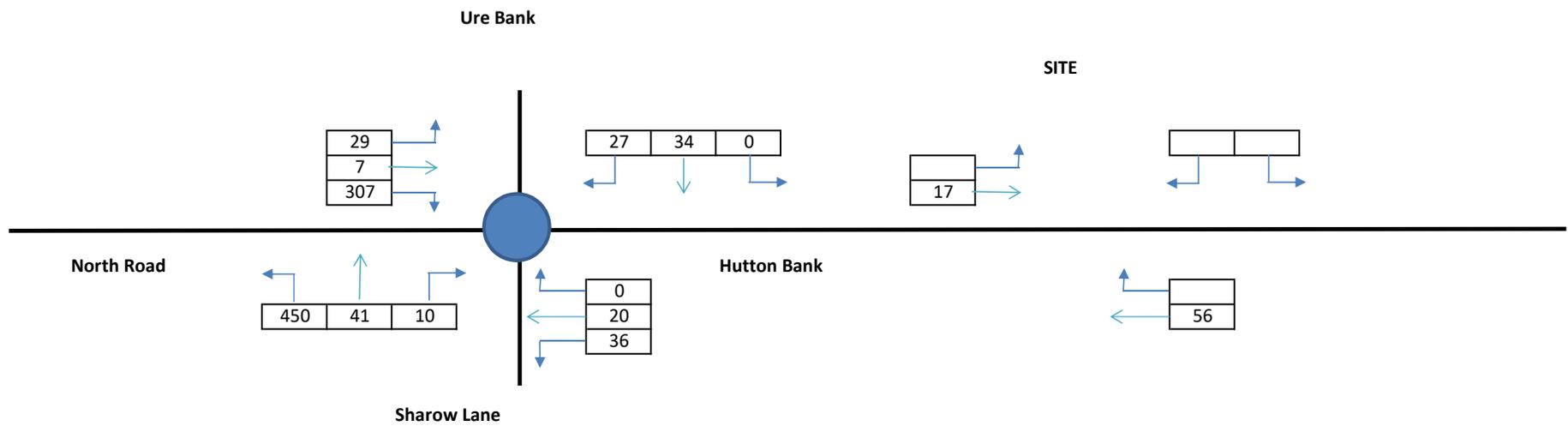
Notes 123 PCUs



1068

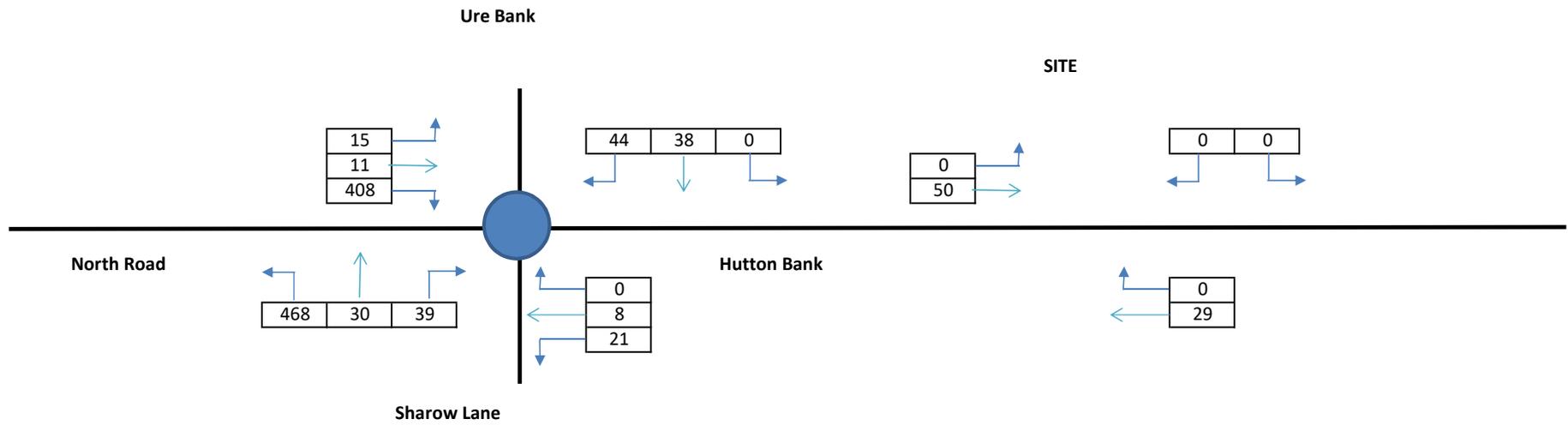
**Figure 4: 2017 Surveyed Traffic  
PM Peak: 1700-1800**

Notes 123 PCUs



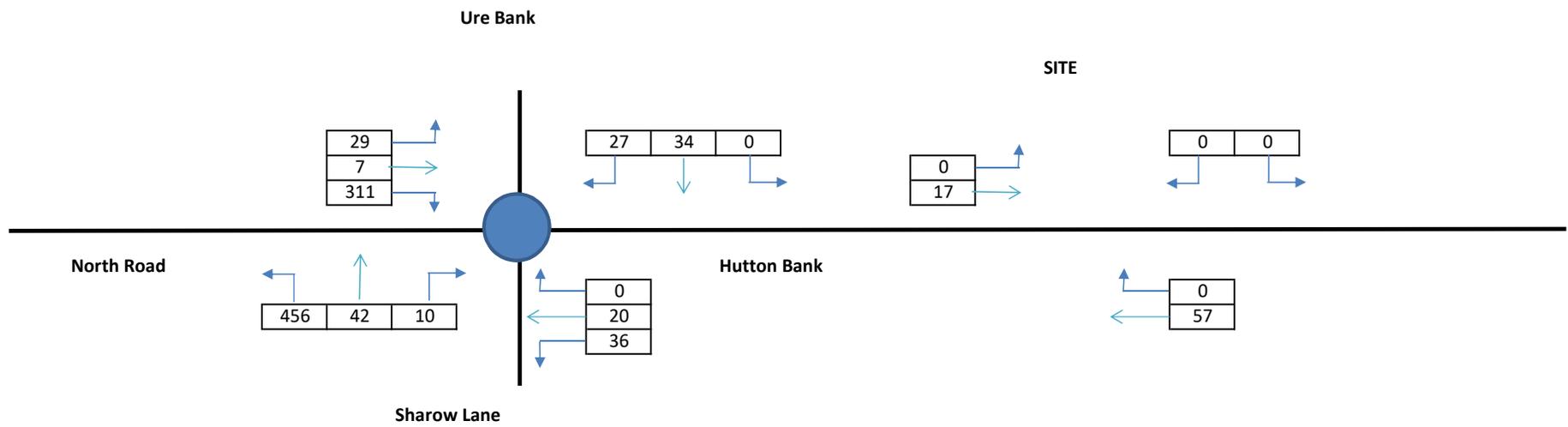
**Figure 5: 2018 Surveyed Traffic**  
**AM Peak: 0800-0900**

Notes 123 PCUs  
 1.014 Growth Factor



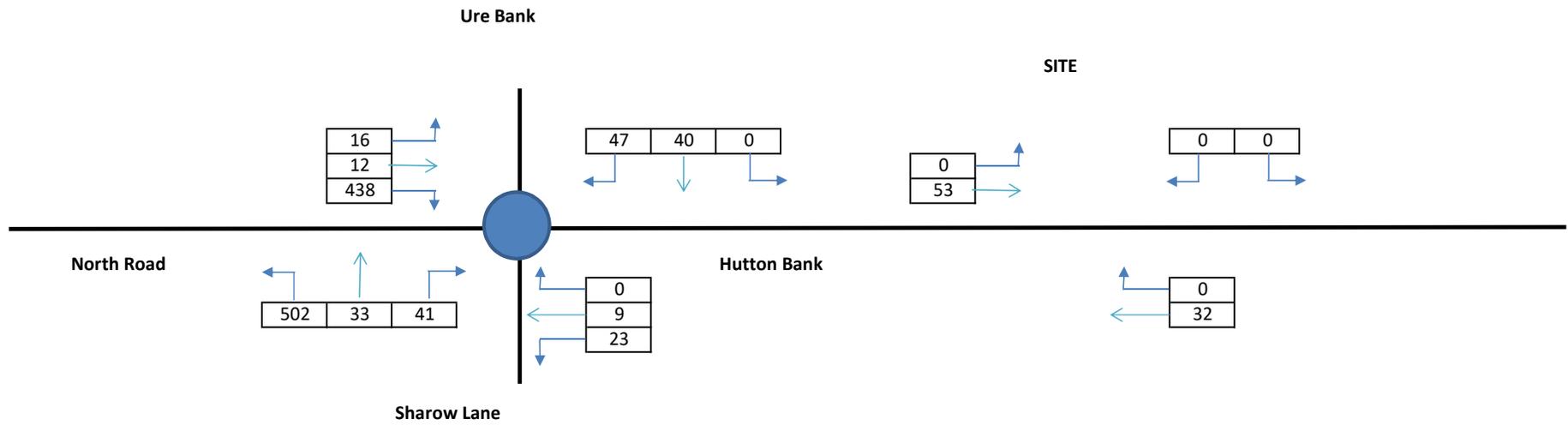
**Figure 6: 2018 Growthed Traffic  
PM Peak: 1700-1800**

Notes 123 PCUs  
1.013 Growth Factor



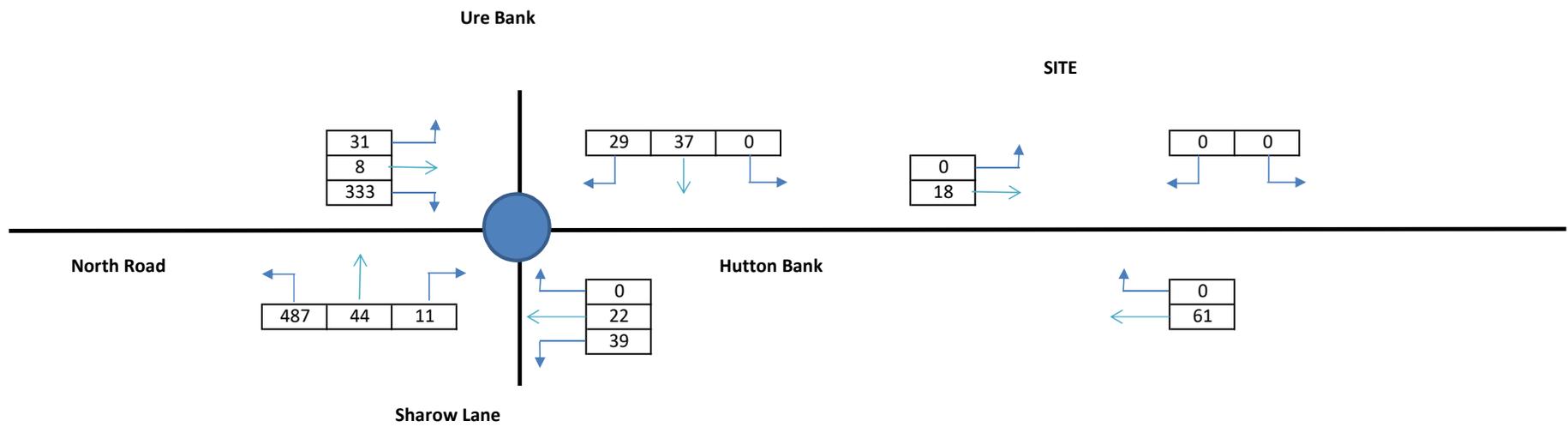
**Figure 7: 2018 Growthed Traffic**  
**AM Peak: 0800-0900**

Notes 123 PCUs  
 1.087 Growth Factor



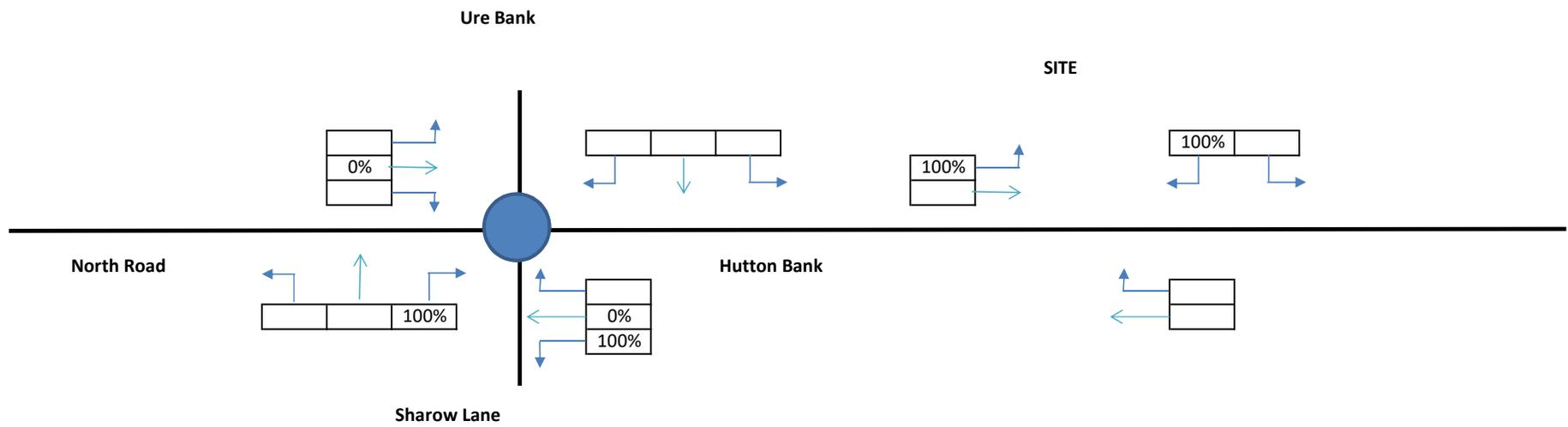
**Figure 8: 2023 Growthed Traffic**  
**PM Peak: 1700-1800**

Notes 123 PCUs  
 1.083 Growth Factor



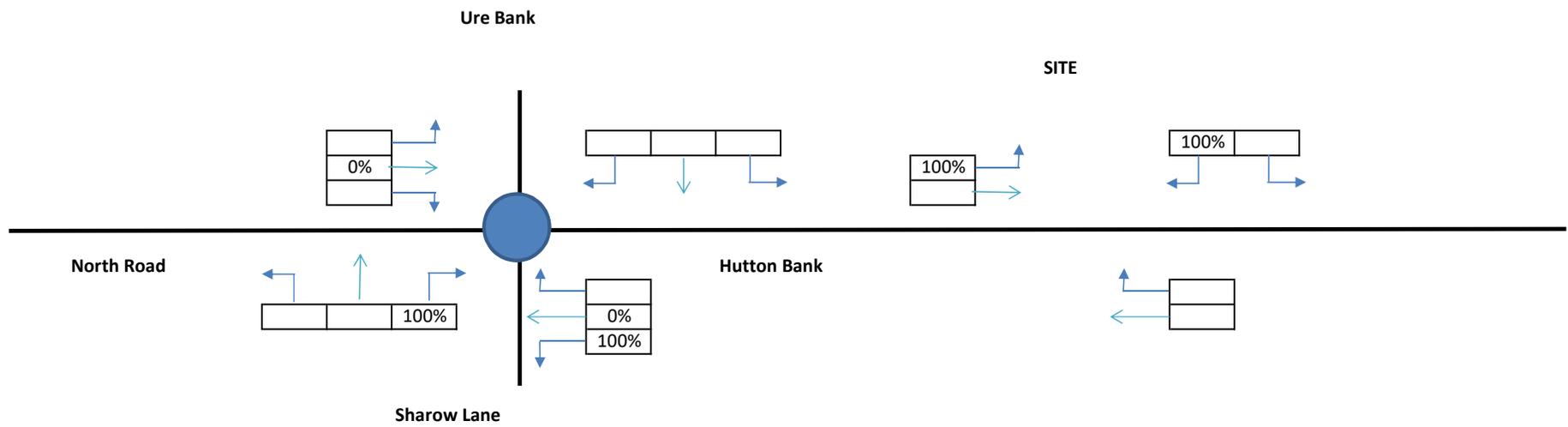
**Figure 9: Distribution**  
**AM Peak: 0800-0900**

Notes 123 PCUs



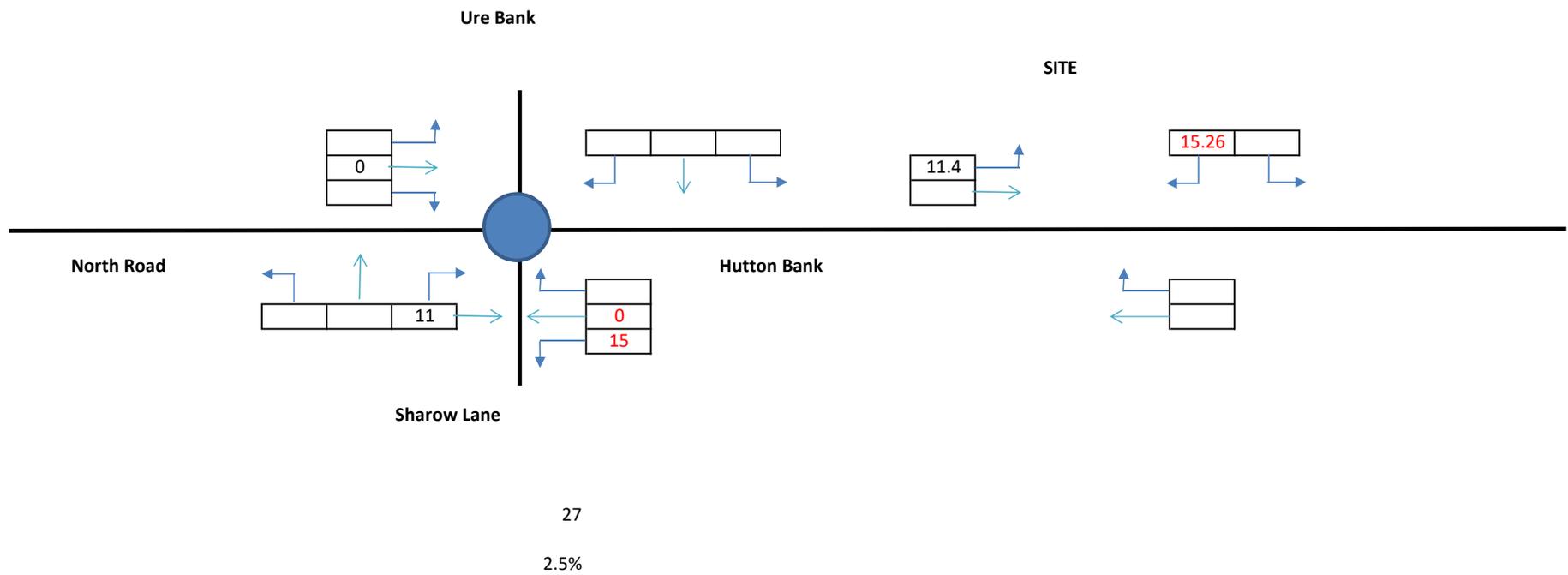
**Figure 10: Distribution**  
**PM Peak: 1700-1800**

Notes 123 PCUs



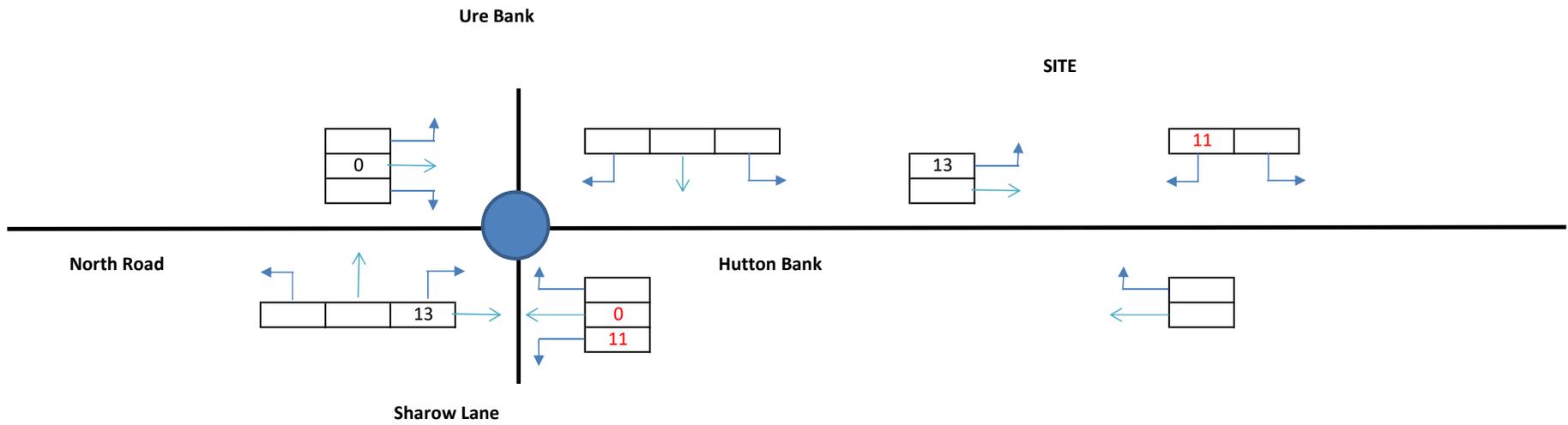
**Figure 11: Development Traffic Generation**  
**AM Peak: 0800-0900**

Notes 123 PCUs  
 11.4 ARR  
 15.26 DEP



**Figure 12: Development Traffic Generation**  
**PM Peak: 1700-1800**

Notes    123 PCUs  
           13 ARR  
           11 DEP

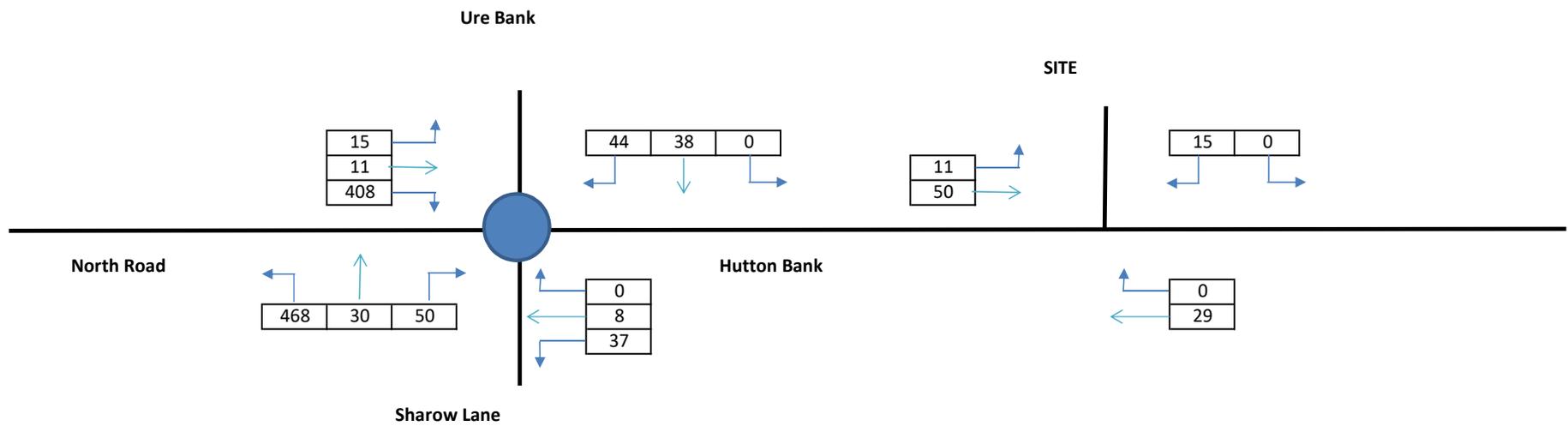


24

2.5%

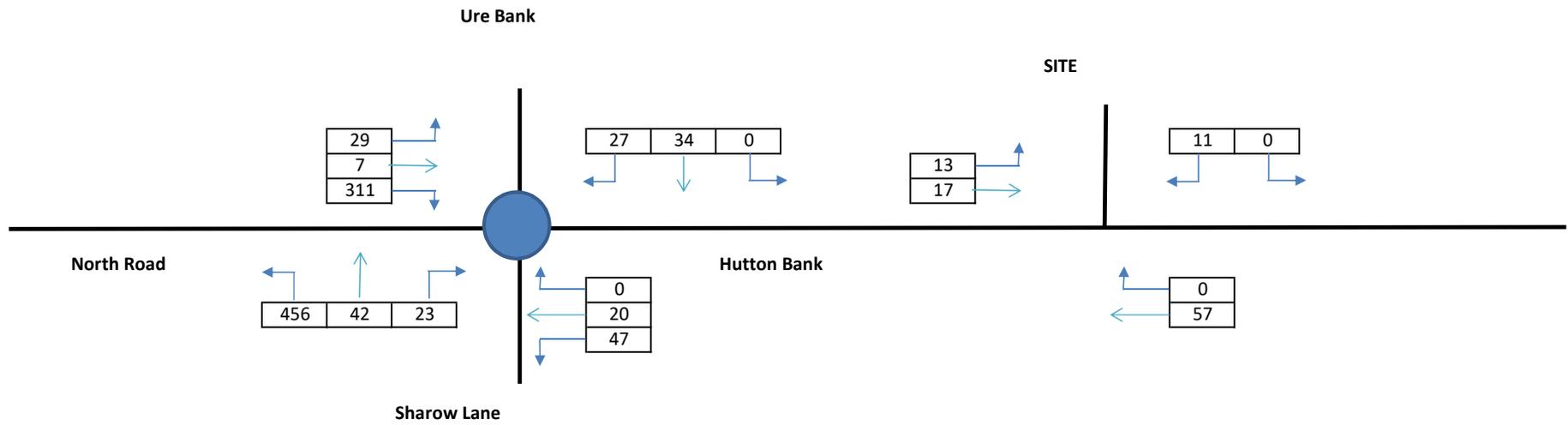
**Figure 13: 2018 With Development Traffic**  
**AM Peak: 0800-0900**

Notes 123 PCUs



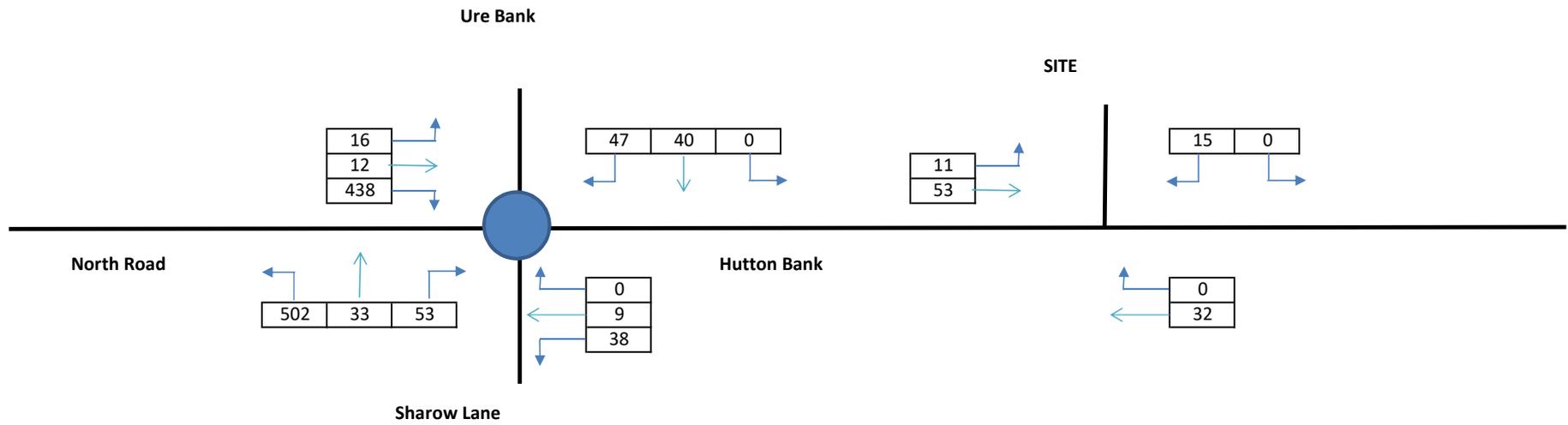
**Figure 14: 2018 With Development Traffic**  
**PM Peak: 1700-1800**

Notes 123 PCUs



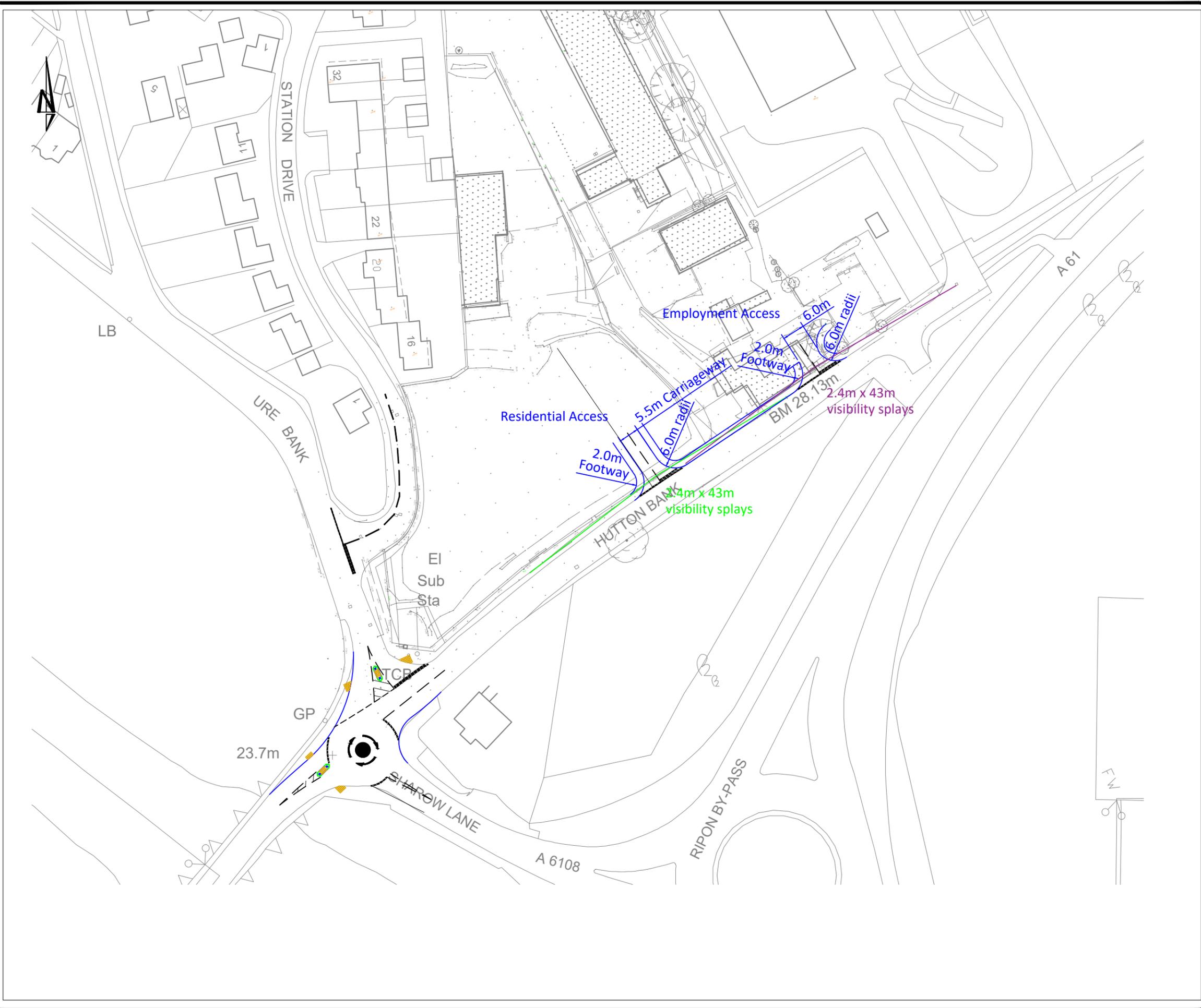
**Figure 15: 2023 With Development Traffic**  
**AM Peak: 0800-0900**

Notes 123 PCUs



# APPENDICES

## **APPENDIX A – PROPOSED SITE ACCESS**



**Notes:**

1. All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.
2. This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications. This drawing is copyright.

Rev	Date	Description	Ckd	By
B	28/06/18	With employment	TC	GE
A	06/09/18	Minor amendments	TC	GE



Adamson House, Towers Business Park  
 Wilmslow Road  
 Manchester  
 M20 2YV  
 Tel: 0161 955 4422  
 Email: manchester@coraiht.com  
 Web: www.coraiht.com

Client  
**Primetalent Ltd.**

Project  
**Hutton Nank, Rippon**

Title  
**Proposed Site Access & Highway Improvements**

Drawing Status

Job No. **16-1094**

Drawn	Checked	Scale at A3	Date	Issue Date
LB	TC	1:1000	30/08/18	-

Drawing No. **001** **B**

## **APPENDIX B – PROPOSED SITE LAYOUT**



**Schedule of Accommodation**

To be read in conjunction with drawing no. 3081-0-001-I



Reference	No. of Beds	Type	No. of Units	Percentage	Sq. Ft. (GIA)	Total Sq. Ft. (GIA)
HT A	1/2	Semi-detached	3	6.98	650.00	1950.00
HT B	2	Semi/Terrace	14	32.56	808.00	11312.00
HT C	3	Semi-detached	8	18.60	915.00	7320.00
HT D	3	Detached	4	9.30	1000.00	4000.00
HT D2	3	Semi-detached	1	2.33	1000.00	1000.00
HT D3	3	Semi-detached	1	2.33	1000.00	1000.00
HT E	4	Detached	6	13.95	1500.00	9000.00
A	n/a	Commercial/Industrial	4	9.30	1500.00	6000.00
B	n/a	Commercial/Industrial	2	4.65	1650.00	3300.00
<b>Totals</b>			<b>43</b>	<b>100.00</b>		<b>44882.00</b>

\*policy compliant\* 40% affordable subject to VBC and Viability

revision	date	content	initials
K	25.06.19	COMMERCIAL UNITS AMENDED	OB
J	25.06.19	COMMERCIAL UNITS AMENDED	OB
I	17.06.19	LAYOUT AMENDS TO PLOTS 1-12 & 32-37 COMMERCIAL UNITS INCORPORATED	OB
H	27.03.19	PLOTS 26 & 27 AMENDED TO IMPROVE PRIVACY AND AMENITY SPACE	OB
G	21.03.19	PLOTS 26 & 27 AMENDED TO IMPROVE PRIVACY AND AMENITY SPACE	OB
F	06.01.19	DRIVE AMENDED TO 19, 24 & 25	OB
E	09.01.19	1 No. 1 BED ADDED AND 1 No. HTB REMOVED	OB
D	04.12.18	PRIVATE DRIVES FROM HUTTON BANK OMITTED	OB
C	19.10.18	SCHEDULE AMENDED	OB
B	18.10.18	PLOTS TO WESTERN BOUNDARY MOVED TO INCREASE DISTANCE TO SURROUNDING PROPERTIES, BUFFER LANDSCAPE INTRODUCED TO WESTERN AND NORTHERN BOUNDARIES	OB
A	31.08.18	PLOT 12 GARAGE POSITION AMENDED & DIMS ADDED TO WESTERN BOUNDARY	OB

project	PROPOSED RESIDENTIAL HUTTON BANK RIPON
client	FRONTLINE ESTATES
title	PROPOSED SITE LAYOUT
date	24.08.18
scale	1:500@A1
drawn	OB
drawing number	3081-0-001 - K
checked	

**niemen**  
architects

Niemen Architects  
Deck 2 The Waterscape  
42 Leeds & Bradford Road  
Kirkstall Leeds LS5 3EG  
Tel: 0113 239 5400  
Fax: 0113 239 5401  
office@niemen.co.uk

www.niemen.co.uk

**PLANNING**  
 subject to structural review  
 subject to accurate measured survey

## **APPENDIX C – TRICS DATA**

## TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	HC HAMPSHIRE	1 days
	KC KENT	1 days
	SC SURREY	1 days
	WS WEST SUSSEX	1 days
03	SOUTH WEST	
	DC DORSET	1 days
	DM DEVON	2 days
	SM SOMERSET	1 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	3 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	2 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	3 days
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	6 days
	SY SOUTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	2 days
	GM GREATER MANCHESTER	1 days
	LC LANCASHIRE	1 days
	MS MERSEYSIDE	1 days
09	NORTH	
	CB CUMBRIA	2 days
	DH DURHAM	1 days
	TW TYNE & WEAR	1 days
10	WALES	
	PS POWYS	2 days
	VG VALE OF GLAMORGAN	1 days

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

## Secondary Filtering selection:

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

Parameter: Number of dwellings  
 Actual Range: 10 to 98 (units: )  
 Range Selected by User: 10 to 100 (units: )

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 27/11/17

*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	13 days
Tuesday	7 days
Wednesday	8 days
Thursday	7 days
Friday	6 days

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

Selected survey types:

Manual count	41 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:

Edge of Town Centre	6
Suburban Area (PPS6 Out of Centre)	19
Edge of Town	16

*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	37
No Sub Category	4

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

## Secondary Filtering selection:

Use Class:

C1	1 days
C3	40 days

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

Population within 1 mile:

1,001 to 5,000	3 days
5,001 to 10,000	13 days
10,001 to 15,000	10 days
15,001 to 20,000	6 days
20,001 to 25,000	3 days
25,001 to 50,000	6 days

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

## Secondary Filtering selection (Cont.):

Population within 5 miles:

5,001 to 25,000	6 days
25,001 to 50,000	5 days
50,001 to 75,000	4 days
75,001 to 100,000	9 days
100,001 to 125,000	2 days
125,001 to 250,000	8 days
250,001 to 500,000	6 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	13 days
1.1 to 1.5	27 days

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

Travel Plan:

Yes	3 days
No	38 days

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

PTAL Rating:

No PTAL Present	41 days
-----------------	---------

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



LIST OF SITES relevant to selection parameters (Cont.)

9	DV-03-A-03 TERRACED & SEMI DETACHED LOWER BRAND LANE		DEVON
	HONITON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 70 <i>Survey date: MONDAY 28/09/15</i>		<i>Survey Type: MANUAL</i>
10	ES-03-A-02 PRIVATE HOUSING SOUTH COAST ROAD		EAST SUSSEX
	PEACEHAVEN Edge of Town Residential Zone Total Number of dwellings: 37 <i>Survey date: FRIDAY 18/11/11</i>		<i>Survey Type: MANUAL</i>
11	GM-03-A-10 DETACHED/SEMI BUTT HILL DRIVE		GREATER MANCHESTER
	PRESTWICH MANCHESTER Edge of Town Residential Zone Total Number of dwellings: 29 <i>Survey date: WEDNESDAY 12/10/11</i>		<i>Survey Type: MANUAL</i>
12	HC-03-A-19 HOUSES & FLATS CANADA WAY		HAMPSHIRE
	LIPHOOK Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 62 <i>Survey date: MONDAY 27/11/17</i>		<i>Survey Type: MANUAL</i>
13	KC-03-A-03 MIXED HOUSES & FLATS HYTHE ROAD		KENT
	WILLESBOROUGH ASHFORD Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 51 <i>Survey date: THURSDAY 14/07/16</i>		<i>Survey Type: MANUAL</i>
14	LC-03-A-30 SEMI-DETACHED WATSON ROAD		LANCASHIRE
	BLACKPOOL Edge of Town Centre Residential Zone Total Number of dwellings: 24 <i>Survey date: FRIDAY 14/06/13</i>		<i>Survey Type: MANUAL</i>
15	LN-03-A-03 SEMI DETACHED ROOKERY LANE		LINCOLNSHIRE
	BOULTHAM LINCOLN Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 22 <i>Survey date: TUESDAY 18/09/12</i>		<i>Survey Type: MANUAL</i>
16	LN-03-A-04 DETACHED & SEMI-DETACHED EGERTON ROAD		LINCOLNSHIRE
	LINCOLN Edge of Town Centre Residential Zone Total Number of dwellings: 30 <i>Survey date: MONDAY 29/06/15</i>		<i>Survey Type: MANUAL</i>
17	MS-03-A-03 DETACHED BEMPTON ROAD		MERSEYSIDE
	OTTERSPOOL LIVERPOOL Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 15 <i>Survey date: FRIDAY 21/06/13</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

18	NF-03-A-01	SEMI DET. & BUNGALOWS		NORFOLK
	YARMOUTH ROAD			
	CAISTER-ON-SEA			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	27		
	Survey date: TUESDAY	16/10/12		Survey Type: MANUAL
19	NF-03-A-02	HOUSES & FLATS		NORFOLK
	DEREHAM ROAD			
	NORWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	98		
	Survey date: MONDAY	22/10/12		Survey Type: MANUAL
20	NF-03-A-03	DETACHED HOUSES		NORFOLK
	HALING WAY			
	THETFORD			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	10		
	Survey date: WEDNESDAY	16/09/15		Survey Type: MANUAL
21	NY-03-A-08	TERRACED HOUSES		NORTH YORKSHIRE
	NICHOLAS STREET			
	YORK			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	21		
	Survey date: MONDAY	16/09/13		Survey Type: MANUAL
22	NY-03-A-09	MIXED HOUSING		NORTH YORKSHIRE
	GRAMMAR SCHOOL LANE			
	NORTHALLERTON			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	52		
	Survey date: MONDAY	16/09/13		Survey Type: MANUAL
23	NY-03-A-10	HOUSES AND FLATS		NORTH YORKSHIRE
	BOROUGHBRIDGE ROAD			
	RIPON			
	Edge of Town			
	No Sub Category			
	Total Number of dwellings:	71		
	Survey date: TUESDAY	17/09/13		Survey Type: MANUAL
24	NY-03-A-11	PRIVATE HOUSING		NORTH YORKSHIRE
	HORSEFAIR			
	BOROUGHBRIDGE			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	23		
	Survey date: WEDNESDAY	18/09/13		Survey Type: MANUAL
25	NY-03-A-12	TOWN HOUSES		NORTH YORKSHIRE
	RACECOURSE LANE			
	NORTHALLERTON			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	47		
	Survey date: TUESDAY	27/09/16		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

26	NY-03-A-13	TERRACED HOUSES		NORTH YORKSHIRE
	CATTERICK ROAD OLD HOSPITAL COMPOUND CATTERICK GARRISON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 10 <i>Survey date: WEDNESDAY 10/05/17</i>			<i>Survey Type: MANUAL</i>
27	PS-03-A-01	MIXED HOUSES		POWYS
	BRYN GLAS  WELSHPOOL Edge of Town Centre Residential Zone Total Number of dwellings: 16 <i>Survey date: MONDAY 11/05/15</i>			<i>Survey Type: MANUAL</i>
28	PS-03-A-02	DETACHED/SEMI-DETACHED		POWYS
	GUNROG ROAD  WELSHPOOL Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 28 <i>Survey date: MONDAY 11/05/15</i>			<i>Survey Type: MANUAL</i>
29	SC-03-A-04	DETACHED & TERRACED		SURREY
	HIGH ROAD  BYFLEET Edge of Town Residential Zone Total Number of dwellings: 71 <i>Survey date: THURSDAY 23/01/14</i>			<i>Survey Type: MANUAL</i>
30	SF-03-A-05	DETACHED HOUSES		SUFFOLK
	VALE LANE  BURY ST EDMUNDS Edge of Town Residential Zone Total Number of dwellings: 18 <i>Survey date: WEDNESDAY 09/09/15</i>			<i>Survey Type: MANUAL</i>
31	SH-03-A-03	DETACHED		SHROPSHIRE
	SOMERBY DRIVE BICTON HEATH SHREWSBURY Edge of Town No Sub Category Total Number of dwellings: 10 <i>Survey date: FRIDAY 26/06/09</i>			<i>Survey Type: MANUAL</i>
32	SH-03-A-05	SEMI-DETACHED/TERRACED		SHROPSHIRE
	SANDCROFT SUTTON HILL TELFORD Edge of Town Residential Zone Total Number of dwellings: 54 <i>Survey date: THURSDAY 24/10/13</i>			<i>Survey Type: MANUAL</i>
33	SH-03-A-06	BUNGALOWS		SHROPSHIRE
	ELLESMERE ROAD  SHREWSBURY Edge of Town Residential Zone Total Number of dwellings: 16 <i>Survey date: THURSDAY 22/05/14</i>			<i>Survey Type: MANUAL</i>
34	SM-03-A-01	DETACHED & SEMI		SOMERSET
	WEMBDON ROAD NORTHFIELD BRIDGWATER Edge of Town Residential Zone Total Number of dwellings: 33 <i>Survey date: THURSDAY 24/09/15</i>			<i>Survey Type: MANUAL</i>



TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.086	41	35	0.286	41	35	0.372
08:00 - 09:00	41	35	0.149	41	35	0.390	41	35	0.539
09:00 - 10:00	41	35	0.150	41	35	0.179	41	35	0.329
10:00 - 11:00	41	35	0.136	41	35	0.148	41	35	0.284
11:00 - 12:00	41	35	0.156	41	35	0.163	41	35	0.319
12:00 - 13:00	41	35	0.173	41	35	0.171	41	35	0.344
13:00 - 14:00	41	35	0.166	41	35	0.173	41	35	0.339
14:00 - 15:00	41	35	0.163	41	35	0.188	41	35	0.351
15:00 - 16:00	41	35	0.252	41	35	0.189	41	35	0.441
16:00 - 17:00	41	35	0.294	41	35	0.176	41	35	0.470
17:00 - 18:00	41	35	0.341	41	35	0.160	41	35	0.501
18:00 - 19:00	41	35	0.228	41	35	0.156	41	35	0.384
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			2.294			2.379			4.673

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.003	41	35	0.004	41	35	0.007
08:00 - 09:00	41	35	0.006	41	35	0.006	41	35	0.012
09:00 - 10:00	41	35	0.005	41	35	0.003	41	35	0.008
10:00 - 11:00	41	35	0.003	41	35	0.004	41	35	0.007
11:00 - 12:00	41	35	0.003	41	35	0.003	41	35	0.006
12:00 - 13:00	41	35	0.002	41	35	0.001	41	35	0.003
13:00 - 14:00	41	35	0.003	41	35	0.003	41	35	0.006
14:00 - 15:00	41	35	0.003	41	35	0.003	41	35	0.006
15:00 - 16:00	41	35	0.005	41	35	0.006	41	35	0.011
16:00 - 17:00	41	35	0.002	41	35	0.003	41	35	0.005
17:00 - 18:00	41	35	0.003	41	35	0.002	41	35	0.005
18:00 - 19:00	41	35	0.003	41	35	0.004	41	35	0.007
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.041			0.042			0.083

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

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

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.001	41	35	0.001	41	35	0.002
08:00 - 09:00	41	35	0.005	41	35	0.004	41	35	0.009
09:00 - 10:00	41	35	0.004	41	35	0.004	41	35	0.008
10:00 - 11:00	41	35	0.003	41	35	0.002	41	35	0.005
11:00 - 12:00	41	35	0.003	41	35	0.003	41	35	0.006
12:00 - 13:00	41	35	0.001	41	35	0.001	41	35	0.002
13:00 - 14:00	41	35	0.003	41	35	0.002	41	35	0.005
14:00 - 15:00	41	35	0.001	41	35	0.002	41	35	0.003
15:00 - 16:00	41	35	0.001	41	35	0.001	41	35	0.002
16:00 - 17:00	41	35	0.001	41	35	0.001	41	35	0.002
17:00 - 18:00	41	35	0.002	41	35	0.002	41	35	0.004
18:00 - 19:00	41	35	0.000	41	35	0.000	41	35	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.025			0.023			0.048

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.000	41	35	0.000	41	35	0.000
08:00 - 09:00	41	35	0.001	41	35	0.001	41	35	0.002
09:00 - 10:00	41	35	0.000	41	35	0.000	41	35	0.000
10:00 - 11:00	41	35	0.000	41	35	0.000	41	35	0.000
11:00 - 12:00	41	35	0.001	41	35	0.001	41	35	0.002
12:00 - 13:00	41	35	0.000	41	35	0.000	41	35	0.000
13:00 - 14:00	41	35	0.000	41	35	0.000	41	35	0.000
14:00 - 15:00	41	35	0.000	41	35	0.000	41	35	0.000
15:00 - 16:00	41	35	0.001	41	35	0.001	41	35	0.002
16:00 - 17:00	41	35	0.000	41	35	0.000	41	35	0.000
17:00 - 18:00	41	35	0.000	41	35	0.000	41	35	0.000
18:00 - 19:00	41	35	0.000	41	35	0.000	41	35	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.003			0.003			0.006

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.008	41	35	0.025	41	35	0.033
08:00 - 09:00	41	35	0.002	41	35	0.026	41	35	0.028
09:00 - 10:00	41	35	0.002	41	35	0.008	41	35	0.010
10:00 - 11:00	41	35	0.004	41	35	0.010	41	35	0.014
11:00 - 12:00	41	35	0.003	41	35	0.004	41	35	0.007
12:00 - 13:00	41	35	0.008	41	35	0.005	41	35	0.013
13:00 - 14:00	41	35	0.007	41	35	0.002	41	35	0.009
14:00 - 15:00	41	35	0.005	41	35	0.008	41	35	0.013
15:00 - 16:00	41	35	0.022	41	35	0.003	41	35	0.025
16:00 - 17:00	41	35	0.019	41	35	0.005	41	35	0.024
17:00 - 18:00	41	35	0.023	41	35	0.008	41	35	0.031
18:00 - 19:00	41	35	0.010	41	35	0.007	41	35	0.017
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.113			0.111			0.224

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.100	41	35	0.353	41	35	0.453
08:00 - 09:00	41	35	0.190	41	35	0.571	41	35	0.761
09:00 - 10:00	41	35	0.179	41	35	0.230	41	35	0.409
10:00 - 11:00	41	35	0.170	41	35	0.194	41	35	0.364
11:00 - 12:00	41	35	0.198	41	35	0.200	41	35	0.398
12:00 - 13:00	41	35	0.220	41	35	0.217	41	35	0.437
13:00 - 14:00	41	35	0.199	41	35	0.223	41	35	0.422
14:00 - 15:00	41	35	0.211	41	35	0.235	41	35	0.446
15:00 - 16:00	41	35	0.394	41	35	0.247	41	35	0.641
16:00 - 17:00	41	35	0.413	41	35	0.235	41	35	0.648
17:00 - 18:00	41	35	0.468	41	35	0.207	41	35	0.675
18:00 - 19:00	41	35	0.297	41	35	0.209	41	35	0.506
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			3.039			3.121			6.160

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.018	41	35	0.075	41	35	0.093
08:00 - 09:00	41	35	0.055	41	35	0.182	41	35	0.237
09:00 - 10:00	41	35	0.048	41	35	0.067	41	35	0.115
10:00 - 11:00	41	35	0.047	41	35	0.068	41	35	0.115
11:00 - 12:00	41	35	0.054	41	35	0.047	41	35	0.101
12:00 - 13:00	41	35	0.059	41	35	0.048	41	35	0.107
13:00 - 14:00	41	35	0.055	41	35	0.058	41	35	0.113
14:00 - 15:00	41	35	0.059	41	35	0.055	41	35	0.114
15:00 - 16:00	41	35	0.142	41	35	0.080	41	35	0.222
16:00 - 17:00	41	35	0.105	41	35	0.054	41	35	0.159
17:00 - 18:00	41	35	0.109	41	35	0.064	41	35	0.173
18:00 - 19:00	41	35	0.061	41	35	0.044	41	35	0.105
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.812			0.842			1.654

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED  
MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.003	41	35	0.013	41	35	0.016
08:00 - 09:00	41	35	0.003	41	35	0.010	41	35	0.013
09:00 - 10:00	41	35	0.002	41	35	0.007	41	35	0.009
10:00 - 11:00	41	35	0.004	41	35	0.008	41	35	0.012
11:00 - 12:00	41	35	0.006	41	35	0.005	41	35	0.011
12:00 - 13:00	41	35	0.010	41	35	0.008	41	35	0.018
13:00 - 14:00	41	35	0.004	41	35	0.001	41	35	0.005
14:00 - 15:00	41	35	0.006	41	35	0.004	41	35	0.010
15:00 - 16:00	41	35	0.007	41	35	0.006	41	35	0.013
16:00 - 17:00	41	35	0.011	41	35	0.004	41	35	0.015
17:00 - 18:00	41	35	0.011	41	35	0.006	41	35	0.017
18:00 - 19:00	41	35	0.014	41	35	0.001	41	35	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.081			0.073			0.154

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED  
MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.000	41	35	0.013	41	35	0.013
08:00 - 09:00	41	35	0.000	41	35	0.003	41	35	0.003
09:00 - 10:00	41	35	0.000	41	35	0.001	41	35	0.001
10:00 - 11:00	41	35	0.000	41	35	0.001	41	35	0.001
11:00 - 12:00	41	35	0.000	41	35	0.001	41	35	0.001
12:00 - 13:00	41	35	0.000	41	35	0.001	41	35	0.001
13:00 - 14:00	41	35	0.000	41	35	0.000	41	35	0.000
14:00 - 15:00	41	35	0.001	41	35	0.001	41	35	0.002
15:00 - 16:00	41	35	0.000	41	35	0.000	41	35	0.000
16:00 - 17:00	41	35	0.000	41	35	0.001	41	35	0.001
17:00 - 18:00	41	35	0.004	41	35	0.001	41	35	0.005
18:00 - 19:00	41	35	0.004	41	35	0.000	41	35	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.009			0.023			0.032

*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.*

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL COACH PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.000	41	35	0.000	41	35	0.000
08:00 - 09:00	41	35	0.000	41	35	0.001	41	35	0.001
09:00 - 10:00	41	35	0.000	41	35	0.000	41	35	0.000
10:00 - 11:00	41	35	0.000	41	35	0.000	41	35	0.000
11:00 - 12:00	41	35	0.000	41	35	0.000	41	35	0.000
12:00 - 13:00	41	35	0.000	41	35	0.000	41	35	0.000
13:00 - 14:00	41	35	0.000	41	35	0.000	41	35	0.000
14:00 - 15:00	41	35	0.000	41	35	0.000	41	35	0.000
15:00 - 16:00	41	35	0.001	41	35	0.000	41	35	0.001
16:00 - 17:00	41	35	0.000	41	35	0.000	41	35	0.000
17:00 - 18:00	41	35	0.000	41	35	0.000	41	35	0.000
18:00 - 19:00	41	35	0.000	41	35	0.000	41	35	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.001			0.001			0.002

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

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

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED  
MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.003	41	35	0.026	41	35	0.029
08:00 - 09:00	41	35	0.003	41	35	0.015	41	35	0.018
09:00 - 10:00	41	35	0.002	41	35	0.008	41	35	0.010
10:00 - 11:00	41	35	0.004	41	35	0.008	41	35	0.012
11:00 - 12:00	41	35	0.006	41	35	0.006	41	35	0.012
12:00 - 13:00	41	35	0.010	41	35	0.010	41	35	0.020
13:00 - 14:00	41	35	0.004	41	35	0.001	41	35	0.005
14:00 - 15:00	41	35	0.007	41	35	0.005	41	35	0.012
15:00 - 16:00	41	35	0.008	41	35	0.006	41	35	0.014
16:00 - 17:00	41	35	0.011	41	35	0.005	41	35	0.016
17:00 - 18:00	41	35	0.015	41	35	0.006	41	35	0.021
18:00 - 19:00	41	35	0.018	41	35	0.001	41	35	0.019
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			0.091			0.097			0.188

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	41	35	0.129	41	35	0.479	41	35	0.608
08:00 - 09:00	41	35	0.250	41	35	0.794	41	35	1.044
09:00 - 10:00	41	35	0.232	41	35	0.314	41	35	0.546
10:00 - 11:00	41	35	0.225	41	35	0.280	41	35	0.505
11:00 - 12:00	41	35	0.261	41	35	0.257	41	35	0.518
12:00 - 13:00	41	35	0.297	41	35	0.279	41	35	0.576
13:00 - 14:00	41	35	0.265	41	35	0.284	41	35	0.549
14:00 - 15:00	41	35	0.281	41	35	0.303	41	35	0.584
15:00 - 16:00	41	35	0.566	41	35	0.336	41	35	0.902
16:00 - 17:00	41	35	0.548	41	35	0.299	41	35	0.847
17:00 - 18:00	41	35	0.615	41	35	0.284	41	35	0.899
18:00 - 19:00	41	35	0.386	41	35	0.261	41	35	0.647
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			4.055			4.170			8.225

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	10 - 98 (units: )
Survey date date range:	01/01/09 - 27/11/17
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

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