

Transport Statement

Proposed Residential Development Whiteacre Lane, Barrow

Redrow Homes Ltd (Lancashire Division)

September 2014

Doc Ref: SMS/14270/TS/0

S|C|P

Prepared by:	S. 013-8-32	
Checked by:	Culton -	

Document Revision Control

Revision	Date	Status	Prepared By	Approved By
0	04.09.14	Final	SMS	DTR

Lawrence Buildings 2 Mount Street Manchester M2 5WQ

> T: 0161 832 4400 F: 0161 832 5111

E: info@scptransport.co.uk W: www. scptransport.co.uk

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of SCP being obtained. SCP accepts no responsibility or liability for the consequence of this document being used for a purpose other than the purposes for which it was commissioned. Any person using or relying on the document for such other purposes agrees and will by such use or reliance be taken to confirm his agreement to indemnify SCP for all loss or damage resulting there from. SCP accepts no responsibility or liability for this document to any party other than the person by whom it was commissioned.





CONTENTS

1.0	INTRODUCTION	2
2.0	EXISTING CONDITIONS	3
3.0	PROPOSED DEVELOPMENT	6
4.0	TRIP ASSESSMENT	8
5.0	SUMMARY AND CONCLUSIONS	9

APPENDICES

- 1 Architect's Outline Proposals Drawing
- 2 Proposed Site Access Drawing
- 3 TRICS Output Residential

1.0 INTRODUCTION

1.1 SCP is appointed by Redrow Homes Ltd (Lancashire Division) to provide transportation planning and highway design advice in relation to the proposed development of land to the south of Whiteacre Lane in Barrow, hereafter referred to as 'the site'.

Site Location

1.2 The location of the site is shown in a strategic context in **Figure 1** below.



Figure 1: Application Site Location (Strategic Context)

Proposed Development Overview

1.3 This Transport Statement supports an outline proposal for residential development of around 25 houses. All matters are reserved aside from access. For the purpose of assessment a notional capacity of 25 houses has been used.

Pre-Application Enquiry Highway Advice

1.4 The local highway authority, Lancashire County Council, provided the following comments in response to the Applicant's formal pre-application enquiry:

"I have no particular adverse comment on the proposed layout and site access, and generally these are acceptable. It would appear that acceptable visibility splays can be provided along Whiteacre Lane. I may have comments when a planning application is made concerning matters of detail such as the width of carriageways at internal road junctions; parking and sizes of garages."

Planning History

1.5 An outline application for 7 residential dwellings to the northern portion of land which sought approval of access only was submitted and approved in August 2012 (application reference 3/2011/0776).

This Report

1.6 This report briefly explains the existing situation and describes the development proposals. It considers the number of trips that are likely to be generated by the development.

2.0 EXISTING CONDITIONS

- 2.1 The site is located to the south east of Barrow and to the north west of Wiswell. The site is approximately 650 metres from the village centres (straight line distance measured from the centre of the site frontage).
- 2.2 The site consists of agricultural land and has been used for agricultural grazing purposes in the past. The site is bounded to the north by Whiteacre Lane. To the east of the site lies the A59. Agricultural land lies to the south and west of the site. Existing residential development fronting Whiteacre Lane lies further to the west of the site.
- 2.3 The location of the site in relation to the local area is illustrated in **Figure 2** below.



Figure 2: Site Location (Local Context)



Existing Highway Context

- 2.4 The Whiteacre Lane carriageway fronting the site varies in width from 3.5 metres at the western end of the site frontage to 7.3 metres at the eastern end of the site frontage. There are no footways along the site frontage. Grass verges of varying widths are provided north and south of Whiteacre Lane within the vicinity of the site.
- 2.5 Whiteacre Lane is subject to a 30mph speed limit within the vicinity of the site.
- 2.6 Whiteacre Lane links to Whalley Road and Clitheroe Road to the west of the site. Whalley Road provides access to Barrow and Clitheroe to the north. Clitheroe Road connects Barrow with Whalley to the south.

Road Safety Study

2.7 The road safety record for the local highway network has been reviewed. The most recent five years of Personal-Injury Accident (PIA) data has been obtained from the DfT and is summarised in **Figure 3** below.

Figure 3: PIA Summary



2.8 There have been no reported PIAs along Whiteacre Lane in the vicinity of the site or at the junction of Whalley Road and Whiteacre Lane between 1st January 2009 and 31st December 2013. As such there are no highway safety issues that require detailed consideration as part of the planning application that this report supports.

Accessibility

- 2.9 A range of local facilities including a restaurant, take-away food outlet, a public house, church and primary school are located within around 800 metres walk of the site frontage.
- 2.10 Adjacent to the western boundary of the site is a Public Rights of Way (PROW) reference 3-47-FP 5. This PROW routes south along the site boundary and then splits east and west towards Wiswell and Clitheroe Road respectively.
- 2.11 Oakhill College is located approximately 1.8 kilometres to the south of the site and provides education from nursery level through to secondary school level.
- 2.12 The nearest bus stops to the site are situated on Clitheroe Road south of the junction with Whiteacre Lane. A significant number of bus routes serve these stops.
- 2.13 A summary of the bus routes that serve the nearest bus stops to the site is provided in **Table 1** below.



Table 1: Summary of Local Bus Services

Service	Route	Frequency	Frequency
Number		Mon-Fri / Sat	Sunday
5	Clitheroe – Whalley – Great Mitton – Hurst Green – Knowle Green – Ribchester – Longridge – Chipping	120 / 120	-
14/14 A	Chatburn – Clitheroe – Whalley – Great Harwood – Rishton - Accrington – Oswaldtwistle -Royal Blackburn Hospital	60/ 60	-
22	Blackburn – Langho – Whalley - Clitheroe	30 / 30	60
25	Clitheroe – Whalley – Brockhall – Wilpshire – St Marys College - Blackburn	120 / 120	-
26/27	Burnley – Pediham – Shuttleworth Mead – Whalley - Clitheroe	30 / 60	60
155	Clitheroe – Whalley – Langho – Wilpshire – Warrenside Close – Roe Lee – Openshaw Drive – Blackburn Bus Station	60	-
231	Accrington – Clayton-le-Moors – Great Harwood – Whaley – Billington - Clitheroe	60 / 120	-
280	Preston – Mellor Brook – Langho – Whalley - Clitheroe	65 /65	120

- 2.14 The nearest railway station to the site is at Whalley. The station is located approximately 1.8 kilometres to the south west of the site (straight line distance). Trains servicing Clitheroe to the north and Blackburn, Bolton and Manchester Victoria to the south stop at Whalley.
- 2.15 In its response to the pre-application enquiry the local planning and highway authority did not raise concerns regatrding the site's accessibility. As such it is assumed the site is considered to be accessibile by sustainable transport modes.

3.0 PROPOSED DEVELOPMENT

<u>Overview</u>

3.1 This report supports an outline proposal for residential development of around 25 houses (units) including 7 affordable units with access off Whiteacre Lane. Associated on-site vehicular and bicycle parking would be provided for each unit in accordance with local policy guidance. The Architect's outline proposals are presented in the drawing at **Appendix 1**.

Site Access Arrangements

- 3.2 Access to the proposed dwellings would be via a new access of Whiteacre Lane roughly midway along the site frontage.
- 3.3 The access road would be designed to adoptable standards as set out in the local highway authority's Policy and Design Guide, "Creating Civilised Streets", dated February 2010 and revised June 2010.
- 3.4 The access would incorporate 6 metre radius kerbs and a 5.5 metre wide carriageway for the majority of its length. This is wide enough for two vehicles to pass each other and is within the range of acceptable carriageway widths set out in the local highway authority's design guide mentioned above. Two metre wide footways would be provided on both sides of the access. These would link to the proposed 2 metre wide footway along the Whiteacre Lane site frontage.

Site Access Visibility Splays

3.5 In its consultation response to the previous planning application referred to above, the local highway authority requested highway visibility splays of 2.4 metres by 60 metres to be provided at the proposed access to the site off Whiteacre Lane. According to the local highway authority the visibility splays were to be measured to the nearside kerb edge. Manual for Streets (MfS) 2 states at paragraph 10.5.3 that "a more accurate assessment of visibility splay is made by measuring to the nearside edge of the vehicle track". The visibility splay drawing presented at **Appendix 2** demonstrates that 2.4 metre by 60 metre visibility splays to the nearside edge of the vehicle track are achievable within the application site boundary and public highway.

Parking **199**

- 3.6 Car parking would be provided within the development with a minimum of two off-street spaces per dwelling, thereby minimising the potential for on-street overspill parking.
- 3.7 Secure cycle storage areas would be provided within the curtilages of the dwellings.

Refuse Collection and Goods Vehicles

3.8 The internal access road would provide sufficient road space to allow cars and refuse vehicles to drive into and out of the site in forward gear. Turning heads would be provided to allow goods vehicle to turn with the site.

4.0 TRIP ASSESSMENT

4.1 This chapter sets out the methodology used to estimate the number of trips generated by the proposed uses on the site and draws conclusions on the anticipated effect of the development on the local transport network.

Estimated Vehicle Trip Generation

- 4.2 Estimates of vehicle trip generation for the proposed development have been derived from surveys carried out at comparable sites contained within the TRICS database. The site selection criteria used to derive the TRICS based trip rates is as follows:
 - Site within England only and excluding the Greater London area
 - Privately owned housing development between 10 and 60 units
 - Weekday only surveys
 - Developments classed as edge of town and neighbourhood centre only
 - Developments with no Travel Plan only
- 4.3 The TRICS output is presented in **Appendix 3** and summarised in **Table 2** for the traditional weekday morning and evening peak hour periods.

Table 2: Peak Hour Vehicle Trip Rates (per dwelling)

Mode	AM		PM		12 Hour (7am to 7pm)	
	In	Out	In	Out	Two-Way	
Vehicles	0.166	0.440	0.411	0.240	5.170	

4.4 The above trip rates have been applied to the proposed number of dwellings (25) to derive the estimated trip generation summarised in **Table 3** below.

Table 3: Estimated Peak Hour Vehicle Trip Generation

Mode	AM		РМ		12 Hour (7am to 7pm)	
	In	Out	In	Out	Two-Way	
Vehicles	4	11	10	6	129	

4.5 It is estimated that the proposed development would generate 15 traffic movements (4 inbound and 11 outbound) during the morning peak hour period and 16 traffic movements (10 inbound and 6 outbound) during the weekday evening peak hour. This equates to approximately one additional vehicle every four minutes during peak times.

4.6 This would be undetectable on Whiteacre Lane and therefore the effect of the development on the capacity of the existing highway network would be negligible.

5.0 SUMMARY AND CONCLUSIONS

Summary Summary

- 5.1 This Transport Statement has been prepared by SCP on behalf of Redrow Homes Ltd (Lancashire Division) in support of an outline proposal for residential development of around 25 houses at Whiteacre Lane in Barrow. All matters are reserved aside from access. For the purpose of assessment a notional capacity of 25 houses has been used.
- 5.2 The local highway authority, Lancashire County Council, provided the following comments in response to the Applicant's formal pre-application enquiry:

"I have no particular adverse comment on the proposed layout and site access, and generally these are acceptable. It would appear that acceptable visibility splays can be provided along Whiteacre Lane. I may have comments when a planning application is made concerning matters of detail such as the width of carriageways at internal road junctions; parking and sizes of garages."

- 5.3 An outline application for 7 residential dwellings to the northern portion of land which sought approval of access only was submitted and approved in August 2012 (application reference 3/2011/0776).
- 5.4 There have been no reported PIAs along Whiteacre Lane in the vicinity of the site or at the junction of Whalley Road and Whiteacre Lane between 1st January 2009 and 31st December 2013. As such there are no highway safety issues that require detailed consideration as part of the planning application that this report supports.
- 5.5 A range of local facilities including a restaurant, take-away food outlet, a public house, church and primary school are located within around 800 metres walk of the site frontage.
- 5.6 The nearest bus stops to the site are situated on Clitheroe Road south of the junction with Whiteacre Lane. A significant number of bus routes serve these stops.
- 5.7 The nearest railway station to the site is at Whalley. The station is located approximately 1.8 kilometres to the south west of the site (straight line distance). Trains servicing Clitheroe to the north and Blackburn, Bolton and Manchester Victoria to the south stop at Whalley.



- 5.8 Access to the proposed dwellings would be via a new access of Whiteacre Lane roughly midway along the site frontage. Adequate visibility splays can be provided at the proposed site access.
- 5.9 The access road would be designed to adoptable highway standards.
- 5.10 Car parking would be provided within the development with a minimum of two off-street spaces per dwelling, thereby minimising the potential for on-street overspill parking.
- 5.11 Secure cycle storage areas would be provided within the curtilages of the dwellings.
- 5.12 The internal access road would provide sufficient road space to allow cars and refuse vehicles to drive into and out of the site in forward gear. Turning heads would be provided to allow goods vehicle to turn with the site.
- 5.13 The impact of the proposals on the existing highway networks would be negligible.

Conclusion

5.14 In light of the above, it is concluded that the proposals are acceptable in traffic and transport terms.

S|C|P APPENDIX 1



S|C|P APPENDIX 2



S|C|P APPENDIX 3

TRI P RATE CALCULATI ON SELECTI ON PARAMETERS:

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

Selec	ted regions and areas:

05	EAS	TMIDLANDS	
	DS	DERBYSHIRE	1 days
	LE	LEI CESTERSHI RE	1 days
06	WES	T MIDLANDS	
	SH	SHROPSHIRE	1 days
	WO	WORCESTERSHIRE	1 days
80	NOR	TH WEST	
	CH	CHESHIRE	1 days
	GM	GREATER MANCHESTER	1 days
09	NOR	TH	
	CB	CUMBRIA	1 days

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

Filtering Stage 2 selection:

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

Parameter:	Number of dwellings
Actual Range:	10 to 48 (units:)
Range Selected by User:	10 to 60 (units:)

Public Transport Provision: Selection by:

Include all surveys

Date Range: 01/01/05 to 07/10/13

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	3 days
Wednesday	1 days
Thursday	2 days
Friday	1 days

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

Selected survey types:	
Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:	
Edge of Town	6
Neighbourhood Centre (PPS6 Local Centre)	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	5
No Sub Category	2

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.

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	2 days
10,001 to 15,000	3 days
15,001 to 20,000	2 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
75,001 to 100,000	2 days
100,001 to 125,000	2 days
250,001 to 500,000	1 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:	
0.6 to 1.0	2 days
1.1 to 1.5	5 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.

<u>Travel Plan:</u> No

7 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.

1

2

3

4

5

OF SITES relevant to s	selection parameters		
CB-03-A-03 HAWKSHEAD AVENU	Semi Detached E		CUMBRI A
WORKINGTON Edge of Town Residential Zone Total Number of dwe Survey date: * CH-03-A-05 SYDNEY ROAD SYDNEY CREWE	Ilings: THURSDAY DETACHED	40 20/11/08	Survey Type: MANUAL CHESHI RE
Edge of Town Residential Zone Total Number of dwe Survey date: ⁻ DS-03-A-01 THE AVENUE HOLMESDALE DRONFIELD	Ilings: TUESDAY SEMI D./ TERRACED	17 14/10/08	Survey Type: MANUAL DERBYSHI RE
Neighbourhood Centr Residential Zone Total Number of dwe Survey date: GM-03-A-10 BUTT HILL DRIVE PRESTWICH MANCHESTER	re (PPS6 Local Centre) Ilings: THURSDAY DETACHED / SEMI	20 22/06/06	Survey Type: MANUAL GREATER MANCHESTER
Edge of Town Residential Zone Total Number of dwe Survey date: N LE-03-A-01 REDWOOD AVENUE	Ilings: WEDNESDAY DETACHED	29 12/10/11	Survey Type: MANUAL LEI CESTERSHI RE
MELTON MOWBRAY Edge of Town Residential Zone Total Number of dwe Survey date: 7 SH-03-A-03	llings: TUESDAY DETATCHED	11 03/05/05	Survey Type: MANUAL

Survey d 6 SH-03-A-03 DETATCHED SOMERBY DRIVE **BICTON HEATH** SHREWSBURY Edge of Town No Sub Category Total Number of dwellings: 10 Survey date: FRIDAY 26/06/09 SEMI DETACHED 7 WO-03-A-02 MEADOWHILL ROAD REDDITCH Edge of Town No Sub Category Total Number of dwellings: 48

Survey date: TUESDAY

Survey Type: MANUAL

Survey Type: MANUAL

WORCESTERSHI RE

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.

02/05/06

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

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	25	0.091	7	25	0.194	7	25	0.285
08:00 - 09:00	7	25	0.166	7	25	0.440	7	25	0.606
09:00 - 10:00	7	25	0.194	7	25	0.251	7	25	0.445
10:00 - 11:00	7	25	0.109	7	25	0.171	7	25	0.280
11:00 - 12:00	7	25	0.200	7	25	0.217	7	25	0.417
12:00 - 13:00	7	25	0.131	7	25	0.103	7	25	0.234
13:00 - 14:00	7	25	0.177	7	25	0.160	7	25	0.337
14:00 - 15:00	7	25	0.229	7	25	0.194	7	25	0.423
15:00 - 16:00	7	25	0.251	7	25	0.223	7	25	0.474
16:00 - 17:00	7	25	0.400	7	25	0.229	7	25	0.629
17:00 - 18:00	7	25	0.411	7	25	0.240	7	25	0.651
18:00 - 19:00	7	25	0.246	7	25	0.143	7	25	0.389
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.605			2.565			5.170

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:	10 - 48 (units:)
Survey date date range:	01/01/05 - 07/10/13
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	25	0.011	7	25	0.023	7	25	0.034
08:00 - 09:00	7	25	0.006	7	25	0.029	7	25	0.035
09:00 - 10:00	7	25	0.000	7	25	0.000	7	25	0.000
10:00 - 11:00	7	25	0.006	7	25	0.006	7	25	0.012
11:00 - 12:00	7	25	0.006	7	25	0.000	7	25	0.006
12:00 - 13:00	7	25	0.017	7	25	0.006	7	25	0.023
13:00 - 14:00	7	25	0.006	7	25	0.000	7	25	0.006
14:00 - 15:00	7	25	0.000	7	25	0.000	7	25	0.000
15:00 - 16:00	7	25	0.006	7	25	0.000	7	25	0.006
16:00 - 17:00	7	25	0.023	7	25	0.029	7	25	0.052
17:00 - 18:00	7	25	0.006	7	25	0.006	7	25	0.012
18:00 - 19:00	7	25	0.017	7	25	0.000	7	25	0.017
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.104			0.099			0.203

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:	10 - 48 (units:)
Survey date date range:	01/01/05 - 07/10/13
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	25	0.086	7	25	0.234	7	25	0.320
08:00 - 09:00	7	25	0.206	7	25	0.691	7	25	0.897
09:00 - 10:00	7	25	0.211	7	25	0.280	7	25	0.491
10:00 - 11:00	7	25	0.114	7	25	0.229	7	25	0.343
11:00 - 12:00	7	25	0.246	7	25	0.297	7	25	0.543
12:00 - 13:00	7	25	0.177	7	25	0.149	7	25	0.326
13:00 - 14:00	7	25	0.211	7	25	0.206	7	25	0.417
14:00 - 15:00	7	25	0.326	7	25	0.240	7	25	0.566
15:00 - 16:00	7	25	0.423	7	25	0.291	7	25	0.714
16:00 - 17:00	7	25	0.554	7	25	0.309	7	25	0.863
17:00 - 18:00	7	25	0.503	7	25	0.286	7	25	0.789
18:00 - 19:00	7	25	0.360	7	25	0.171	7	25	0.531
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.417			3.383			6.800

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:	10 - 48 (units:)
Survey date date range:	01/01/05 - 07/10/13
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	25	0.023	7	25	0.063	7	25	0.086
08:00 - 09:00	7	25	0.131	7	25	0.383	7	25	0.514
09:00 - 10:00	7	25	0.109	7	25	0.120	7	25	0.229
10:00 - 11:00	7	25	0.051	7	25	0.091	7	25	0.142
11:00 - 12:00	7	25	0.080	7	25	0.097	7	25	0.177
12:00 - 13:00	7	25	0.051	7	25	0.057	7	25	0.108
13:00 - 14:00	7	25	0.051	7	25	0.063	7	25	0.114
14:00 - 15:00	7	25	0.057	7	25	0.069	7	25	0.126
15:00 - 16:00	7	25	0.251	7	25	0.063	7	25	0.314
16:00 - 17:00	7	25	0.103	7	25	0.069	7	25	0.172
17:00 - 18:00	7	25	0.069	7	25	0.046	7	25	0.115
18:00 - 19:00	7	25	0.103	7	25	0.057	7	25	0.160
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.079			1.178			2.257

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:	10 - 48 (units:)			
Survey date date range:	01/01/05 - 07/10/13			
Number of weekdays (Monday-Friday):	7			
Number of Saturdays:	0			
Number of Sundays:	0			
Surveys manually removed from selection:	1			

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

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	25	0.000	7	25	0.011	7	25	0.011
08:00 - 09:00	7	25	0.000	7	25	0.017	7	25	0.017
09:00 - 10:00	7	25	0.000	7	25	0.011	7	25	0.011
10:00 - 11:00	7	25	0.000	7	25	0.011	7	25	0.011
11:00 - 12:00	7	25	0.017	7	25	0.006	7	25	0.023
12:00 - 13:00	7	25	0.011	7	25	0.006	7	25	0.017
13:00 - 14:00	7	25	0.000	7	25	0.006	7	25	0.006
14:00 - 15:00	7	25	0.000	7	25	0.000	7	25	0.000
15:00 - 16:00	7	25	0.023	7	25	0.000	7	25	0.023
16:00 - 17:00	7	25	0.011	7	25	0.000	7	25	0.011
17:00 - 18:00	7	25	0.000	7	25	0.000	7	25	0.000
18:00 - 19:00	7	25	0.006	7	25	0.000	7	25	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates: 0.068 0.068 0.13						0.136			

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:	10 - 48 (units:)			
Survey date date range:	01/01/05 - 07/10/13			
Number of weekdays (Monday-Friday):	7			
Number of Saturdays:	0			
Number of Sundays:	0			
Surveys manually removed from selection:	1			

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

	ARRIVALS		DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	7	25	0.120	7	25	0.331	7	25	0.451
08:00 - 09:00	7	25	0.343	7	25	1.120	7	25	1.463
09:00 - 10:00	7	25	0.320	7	25	0.411	7	25	0.731
10:00 - 11:00	7	25	0.171	7	25	0.337	7	25	0.508
11:00 - 12:00	7	25	0.349	7	25	0.400	7	25	0.749
12:00 - 13:00	7	25	0.257	7	25	0.217	7	25	0.474
13:00 - 14:00	7	25	0.269	7	25	0.274	7	25	0.543
14:00 - 15:00	7	25	0.383	7	25	0.309	7	25	0.692
15:00 - 16:00	7	25	0.703	7	25	0.354	7	25	1.057
16:00 - 17:00	7	25	0.691	7	25	0.406	7	25	1.097
17:00 - 18:00	7	25	0.577	7	25	0.337	7	25	0.914
18:00 - 19:00	7	25	0.486	7	25	0.229	7	25	0.715
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates: 4.669 4.725 9.3						9.394			

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:	10 - 48 (units:)			
Survey date date range:	01/01/05 - 07/10/13			
Number of weekdays (Monday-Friday):	7			
Number of Saturdays:	0			
Number of Sundays:	0			
Surveys manually removed from selection:	1			