CALA HOMES (SOUTH) LIMITED

In respect of

LA5, Land West Of Tring

## Scoping Report

Revision D

## DOCUMENT SIGNATURE AND REVIEW SHEET

## Project Details

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| Name | K. Stock | M. Fuller | M. Fuller |
| Signature |  |  |  |
| Date | January 2014 | January 2014 | January 2014 |

## Document Review

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| :---: | :---: | :---: | :---: |
| A | Feb. 2014 | Assessment periods updated | MFF |
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## 1 INTRODUCTION

1.1 Transport Planning Associates (TPA) is instructed by Cala Homes (South) Limited to consider the transportation issues associated with the potential residential development of land south of Icknield Way, Tring.
1.2 The site is known as a local allocation and referenced as Proposal LA5 West Tring, as set out in Section 20 of the Dacorum Borough Council (DBC) Core Strategy, for around 150 homes, playing fields and open space, an extension to the adjacent industrial estate and possible extension to the cemetery.
1.3 It is proposed that the site will be developed for up to around 150 dwellings.
1.4 This Scoping Report describes the methodology proposed for assessing the effect the development will have on the surrounding transportation infrastructure. Whilst the site is fully located within the Dacorum planning authority boundary and as such Hertfordshire is the local highway authority, it is located in close proximity to Buckinghamshire and as such it has been prepared further to discussions with highway officers at Hertfordshire County Council (HCC) but has been prepared for agreement with officers at both Hertfordshire and Buckinghamshire County Council (BCC). It is written in accordance with the DfT's "Guidance on Transport Assessment" (March 2007), as considered appropriate.
1.5 Notes of a meeting attended by HCC and DBC in August 2013 to discuss the transport issues for Local Allocation sites, including LA5, have also been used to inform this report.

## Deliverables

1.6 Once the Scoping Report is agreed, TPA intends to prepare a Transport Assessment (TA) and Residential Travel Plan to support the planning application. The TA will be prepared with reference to local and national planning guidance set out in the following documents as appropriate:
(i) National Planning Policy Framework;
(ii) Dacorum Borough Council Adopted Core Strategy;
(iii) Hertfordshire County Council Local Transport Plan;
(iv) Tring, Northchurch and Berkhamsted Urban Transport Plan;
(v) Hertfordshire Speed Management Strategy;
(vi) Roads in Hertfordshire - Highway Design Guide; and
(vii) Planning Obligations Guidance - Toolkit for Hertfordshire document.
1.7 The TA will include Chapters or information on the following:
(i) Baseline Traffic Flows;
(ii) Accessibility and Access Strategy;
(iii) Trip Generation and Attraction;
(iv) Trip Assignment;
(v) Public Transport; and
(vi) Operational Assessments.
1.8 This scoping report is presented using these chapters as headings.

## 2 BASELINE TRAFFIC FLOWS

2.1 If suitable survey data is not held by the local highway authorities, an independent surveying company will be commissioned to carry out Automatic Traffic Counts (ATC) on Icknield Way and Aylesbury Road in the vicinity of the site to record existing vehicle speeds and traffic movements.
2.2 The surveys will also provide relevant data with which to forecast the distribution of development traffic onto the network.
2.3 Extended AM and PM peak hour (i.e. 0730-0930 and 1630-1900) manual turning count and queue length surveys will also be undertaken by independent surveyors at the A41, B4009 and B4635 junctions to the west of the site.

## 3 ACCESSIBILITY \& ACCESS STRATEGY

3.1 The accessibility of the site will be assessed against national and local transport planning policy documents, including NPPF, the Dacorum Borough Council Adopted Core Strategy, and Hertfordshire County Council's Local Transport Plan policies.
3.2 This section will include plans showing existing walking and cycling routes / distances to local facilities and services (including isochronal mapping, as appropriate), and the availability of and connectivity to bus and rail facilities.

## Access Strategy

3.3 Vehicular access is proposed from a new junction(s) on Icknield Way to the north of the site and/or Aylesbury Road to the south. It is agreed with highway officers that priority junctions in both locations would be appropriate with either road, subject to capacity testing.
3.4 The option of providing a link road through the development site will be considered; particularly with reference to providing a route for bus services between Icknield Way and Aylesbury Road. The potential for rat-running will also be considered in this context, although it is understood from highway officers that this is not likely to be a concern in this location.
3.5 At this stage however, it is envisaged that if vehicular accesses are to be provided both from Icknield Way and Aylesbury Road that only a pedestrian and cycle connection will be provided to link the two. This could be used as an emergency access, but would also be designed so as not to compromise the potential for a bus route to be provided between Ickneild Way and Aylesbury Road in the future. Similarly, it is envisaged that the access road within the new scheme will have a minimum carriageway width of 6.5 m on this basis.
3.6 As part of the Transportation Assessment, the proposed access junctions and internal junctions serving the development will be considered alongside local and national highway design guidance in terms of geometry, design speed, internal road hierarchy and pedestrian and cycle routes with reference to HCC's highway design guidance Roads in Hertfordshire.
3.7 The TA will also consider whether internal roads are likely to be offered for adoption.
3.8 It is proposed to relocate the existing 40 mph speed limit on Icknield Way to the east of the A41 roundabout, and also to relocate the existing 30 mph speed limit on Aylesbury Road further west towards the A41 roundabout. The relevant traffic regulation orders will be required, as appropriate.
3.9 The potential access strategy is illustrated on Figure 3.1.

## Cycling and Walking

3.10 The TA will consider the walking and cycling trips generated by the development. It will identify where improvements might be considered necessary to encourage travel by foot and cycle. This will be agreed with HCC's Rights of Way team as appropriate, including discussions with the relevant officers at BCC.
3.11 There are existing public right of ways (PRoW) crossing the site. These are illustrated in Appendix A.
3.12 PROW No. 71 runs north to south between Icknield Way and Aylesbury Road. It will remain on its current alignment and it is envisaged will form the western boundary of the proposed built development with the land to the west being provided as public open space. The surface and width of the PROW will be improved as appropriate.
3.13 PROW No.48A crosses the site diagonally providing a link between Icknield Way and Okeley Lane. The proposed masterplan will consider the alignment of the PROW and seek to accommodate it on its existing alignment if practicable or ultimately divert it. The surface and width of the PROW will be improved as appropriate to enhance links between the development and the established residential area to the east.
3.14 Pedestrian and cycle access will be considered and the likely desire lines to adjacent residential areas, Icknield Way Industrial Estate, local schools and the town centre will be identified. New pedestrian and cycle links will be provided to connect the established residential area to the east to the development and the new public open space to be provided to the west of PROW No.71.
3.15 Figure 3.2 illustrates potential pedestrian and cycle improvements which could be provided by the applicant either within land under the control of the applicant or within the adopted highway.

## Highway Safety Assessment

3.16 Analysis will be undertaken of the latest five years accident data available from the Highway Authority to reflect the most recent situation in the area and will consider the impact of the development scheme upon the safety of pedestrians, cyclists and motorists in the vicinity.
3.17 Where necessary, the TA will suggest improvements to maintain highway safety. Such improvements will be established through further discussions with highway officers throughout the process.

## 4 TRIP GENERATION

## Trip Forecasts

4.1 In order to forecast the impact of new trips associated with the proposed development, trip rates for all modes of travel have been derived from the TRICS 7 database. The TRICS database provides trip rate information based on existing development traffic generation observed at similar sites throughout the United Kingdom. Sites within Greater London have been excluded as a result of the greater public transport opportunities available in that area.
4.2 Trip rates extrapolated for the residential units are based on the following parameters;
(i) sites with up to 300 dwellings
(ii) sites within England, excluding Greater London;
(iii) weekday surveys only;
(iv) edge of town and suburban locations; and
(v) multi-modal surveys.
4.3 Sites within the 'mixed private / non private housing' category has been considered as it is anticipated that around 40 percent of the proposed dwellings will be affordable homes. This is therefore considered to provide a realistic assessment of the development proposals.
4.4 The derived average residential trip rates are summarised in Table 4.1 and included at Appendix B for agreement.

Table 4.1 -Residential Trip Rates per dwelling (two-way) - Mixed Private / Non Private Housing

| RESIDENTIAL | Vehicles | Car <br> Passenger | Pedestrians | Cyclists | PTUs | OGVs | PSVs |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Trip Rate | Trip Rate | Trip Rate | Trip Rate | Trip Rate | Trip Rate | Trip Rate |
| AM Peak 0800- <br> $\mathbf{0 9 0 0}$ | 0.430 | 0.230 | 0.202 | 0.032 | 0.043 | 0.005 | 0.002 |
| PM Peak 1700- <br> 1800 | 0.477 | 0.179 | 0.134 | 0.034 | 0.034 | 0.001 | 0.000 |
| Daily | 4.381 | 1.634 | 1.570 | 0.235 | 0.324 | 0.057 | 0.012 |
| Modal Share <br> (Daily) | $53.3 \%$ | $19.9 \%$ | $19.1 \%$ | $2.9 \%$ | $3.9 \%$ | $0.7 \%$ | $0.1 \%$ |

## 5 TRIP ASSIGNMENT

5.1 At this stage TPA envisage that development traffic will be distributed on to the local highway network at the access junctions pro-rata in line with existing movements recorded on Icknield Way and Aylesbury Road.
5.2 Should the site provide a link between Icknield Way and Aylesbury Road, development traffic will be assigned to each of the site access junctions based on the proposed internal site layout, as appropriate.
5.3 Traffic will be distributed at the A41 roundabout junction in accordance with existing turning movements.

## 6 PUBLIC TRANSPORT

6.1 The Transport Assessment will consider the scheme in terms of the potential for penetration of the site by public transport, based upon the potential diversion of existing bus services and/or the provision of new services. It will also consider the predicted passenger usage of such services within an economic/viability assessment.
6.2 Initial discussion will be held with public transport operators in the area to determine their requirements for access to and within the site; with focus on whether a link road between Icknield Way and Aylesbury Road is considered necessary.
6.3 Discussions will also be carried out with HCC's Passenger Transport team to seek to agree the public transport strategy as appropriate.

## 7 OPERATIONAL ASSESSMENTS

## Assessment Periods

7.1 The TA will consider in detail the traffic forecast to be associated with the development proposal and its potential impact on the highway network for the AM and PM weekday peak hours only.
7.2 The highway network will be assessed for the year of application as the Baseline and five years after the date of the application as the future assessment year, in accordance with Guidance on Transport Assessment assuming early delivery of the LA5 allocation. The highway network will also be assessed for the assumed year of completion in 2024, in accordance with policy CS3 of the Core Strategy.

## Traffic Growth

7.3 This baseline data would be increased to represent traffic growth and committed developments from the year of survey using nationally produced local traffic growth predictions ("TEMPRO NTM" factors).
7.4 TEMPRO will be used to growth traffic flows to five years after the date of the planning application as agreed with highways officers and also to the assumed assumed year of completion in 2024 in accordance with policy CS3 of the Core Strategy.
7.5 The TEMPRO calculations are included in Appendix C and summarised below. This assumes that the year of application will be 2015 and therefore five years after the date of the application will be 2020, although growth rates would be revised if this changes, as necessary:

TEMPRO V6.2 Growth Rates 2015-2020

- AM Peak - 1.0713;
- PM Peak-1.0707.

TEMPRO V6.2 Growth Rates 2015-2024

- AM Peak - 1.1237;
- PM Peak - 1.1236.
7.6 It is not considered that any committed development sites need to be considered and that the above growth rates are sufficient to provide suitable background traffic on the local highway network.


## Capacity Assessments

7.7 Junction capacity assessments will be undertaken of the proposed site access junction(s) using PICADY to assess the suitability of the design to accommodate the development traffic.
7.8 Detailed operational assessments of the A41/B488/B4635 roundabout to the west of the site will be undertaken using ARCADY and the B4009 London Road/Upper Icknield Way junction to the west of the site will be assessed using PICADY to assess the impact of the development proposals in terms of queuing and delay at these locations. It is not considered necessary to carry out operational assessments elsewhere on the local or strategic highway network.
7.9 Mitigation measures will focus on reducing the need to travel at source through comprehensive Travel Planning measures to minimise solo-car trips.
7.10 Capacity enhancement measures such as adjustments to carriageway alignment, entry lanes, signal timings or existing phasing will be considered secondary to Travel Planning measures. Such improvements and measures will be established through negotiations with highway officers, as necessary.

## 8 DRAFT FRAMEWORK TRAVEL PLAN

8.1 A Framework Travel Plan will be prepared in association with the Transport Assessment, which will set out a package of measures associated with the development and will aim to reduce the level of single occupancy car use associated with the scheme. Targets will be set and monitored in conjunction with highway officers.
8.2 The Framework Travel Plan will be prepared with reference to Hertfordshire's Travel Plan Guidance for Business and Residential Development, as appropriate.
8.3 A key emphasis of the Framework Travel Plan will be linking the development with other residential and employment areas to minimise the need to travel by car.
8.4 The list of initiatives and measures contained within the Framework Travel Plan will be suggested to maximise the opportunity to influence future travel patterns. A Travel Plan budget will be derived and agreed.
8.5 A significant part of the responsibility of delivering the Travel Plan involves the establishment of a Travel Plan coordinator who will be responsible for the management of the plan to ensure its success through regular dialogue with the local highway authority, promotion of the travel plan through appropriate marketing and the suggestion and implementation of enhancements to the Travel Plan as and when necessary.

## FIGURES



## APPENDIX A

 You are not dermitted to copy, subu-licinence, , distrinibuteor sell any of this data to third parties in in trom. or sell any of this data to third parties in any form.
(This restriction may not apoly to HCC and its licenced contractors agents and partners.)


Scale before copying
1:2500

Icknield Way Aylesbury Road Tring


## APPENDIX B

## TRI P RATE CALCULATI ON SELECTI ON PARAMETERS:

Land Use : 03-RESIDENTIAL
Category: M - MIXED PRIVATE/NON-PRIVATE HOUSING

## MULTI-MODAL VEHICLES

Selected regions and areas:

## 02 SOUTH EAST

| ES | EAST SUSSEX | 1 days |
| :--- | :--- | :--- |
| HC | HAMPSHIRE | 1 days |

KC KENT 1 days
RE READING 1 days
SC SURREY 2 days
WS WEST SUSSEX 1 days
03 SOUTH WEST
BR BRISTOL CITY 1 days
DV DEVON 1 days
05 EAST MI DLANDS
LE LEICESTERSHIRE 1 days
06 WEST MIDLANDS
HE HEREFORDSHIRE 1 days
07 YORKSHI RE \& NORTH LI NCOLNSHI RE
NY NORTH YORKSHIRE
1 days
08 NORTH WEST
MS MERSEYSIDE 3 days
09 NORTH
CB CUMBRIA 1 days
This section displays the number of survey days per TRICS® sub-region in the selected set

## Filtering Stage $\mathbf{2}$ 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: | 14 to 282 (units: ) |
| Range Selected by User: | 14 to 300 (units: ) |

Public Transport Provision:
Selection by: Include all surveys
Date Range: $\quad 01 / 01 / 05$ to $02 / 10 / 13$
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:

| Monday | 4 days |
| :--- | :--- |
| Tuesday | 2 days |
| Wednesday | 3 days |
| Thursday | 4 days |
| Friday | 3 days |

This data displays the number of selected surveys by day of the week.
Selected survey types:
Manual count 16 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:
Suburban Area (PPS6 Out of Centre) 9
Edge of Town

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

## Filtering Stage 3 selection:

## Use Class:

C3 16 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 ${ }^{\circledR}$.

Population within 1 mile:

| 1,001 to 5,000 | 4 days |
| :--- | :--- |
| 5,001 to 10,000 | 2 days |
| 15,001 to 20,000 | 2 days |
| 20,001 to 25,000 | 4 days |
| 25,001 to 50,000 | 4 days |

This data displays the number of selected surveys within stated 1-mile radii of population.
Population within 5 miles:

| 5,001 to 25,000 <br> 25,001 to 50,000 | 3 days |
| :--- | :--- |
| 50,001 to 75,000 | 1 days |
| 75,001 to 100,000 | 1 days |
| 100,001 to 125,000 | 2 days |
| 125,001 to 250,000 | 5 days |
| 250,001 to 500,000 | 3 days |

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

| 0.5 or Less | 1 days |
| :--- | :--- |
| 0.6 to 1.0 | 5 days |
| 1.1 to 1.5 | 9 days |
| 1.6 to 2.0 | 1 days |

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

Travel Plan:
Yes
4 days
No
12 days

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

## LIST OF SITES relevant to selection parameters

1 BR-03-M-02
CLARENCE ROAD
BRISTOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings:
Survey date: MONDAY
2 CB-03-M-03 SEMI-DETACHED
MOORCLOSE ROAD
SALTERBECK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings:
82
Survey date: MONDAY
20/06/05
3 DV-03-M-01
HOUSES \& FLATS
TOPSHAM ROAD

## EXETER

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: Survey date: THURSDAY

61
06/10/11
4 ES-03-M-03 MI XED HOUSES
FIELD END
MARESFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 68
Survey date: WEDNESDAY 02/10/13
5 HC-03-M-04
HOUSES \& FLATS
HUNTS POND ROAD
TITCHFIELD
NEAR FAREHAM
Edge of Town
Residential Zone
Total Number of dwellings:
Survey date: TUESDAY
282
11/12/12
6 HE-03-M-01 SEMI D./ TERRACED
WHITECROSS ROAD
WIDEMARSH
HEREFORD
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Number of dwellings: 57
Survey date: WEDNESDAY 01/03/06
7 KC-03-M-01 BLOCKS OF FLATS
HIGH STREET
RAMSGATE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings:
Survey date: TUESDAY
08/12/09 Survey Type: MANUAL

## BRISTOL CITY

Survey Type: MANUAL

## CUMBRIA

Survey Type: MANUAL

## DEVON

Survey Type: MANUAL

## EAST SUSSEX

Survey Type: MANUAL HAMPSHI RE

Survey Type: MANUAL

## HEREFORDSHI RE

Survey Type: MANUAL

## KENT

## LIST OF SITES relevant to selection parameters (Cont.)

8 LE-03-M-01 SEMI DETACHED
LEI CESTERSHI RE
RYDER ROAD
BRAUNSTONE FRITH
LEICESTER
Edge of Town
Residential Zone
Total Number of dwellings: 16 Survey date: THURSDAY 27/09/12
9 MS-03-M-01 HOUSI NG
OFF KINGSWAY
PRECOT
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 40 Survey date: MONDAY 25/06/07
10 MS-03-M-02 TERRACED
LOVEL ROAD
SPEKE
LIVERPOOL
Edge of Town
Residential Zone
Total Number of dwellings: 27
Survey date: FRIDAY 21/06/13
11 MS-03-M-03 SEMI DETACHED/ TERRACED
LOVEL ROAD
SPEKE
LIVERPOOL
Edge of Town
Residential Zone
Total Number of dwellings: 24
Survey date: FRIDAY 21/06/13
12 NY-03-M-03 SEMI D./ TERRACED
CAWTHORN AVENUE
HARROGATE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: THURSDAY 11/09/08
13 RE-03-M-01 BLOCKS OF FLATS
OXFORD ROAD
READING
Edge of Town
Built-Up Zone
Total Number of dwellings: 79
Survey date: FRIDAY 03/11/06
14 SC-03-M-04 HOUSES/ FLATS
EPSOM ROAD
GUILDFORD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings:
Survey date: THURSDAY 13/10/11
Survey Type: MANUAL

## LIST OF SITES relevant to selection parameters (Cont.)

| 15 | HOUSES \& FLATS |  | SURREY |
| :---: | :---: | :---: | :---: |
|  | HOLYWELL WAY |  |  |
|  | STANWELL |  |  |
|  | STAINES |  |  |
|  | Suburban Area (PPS6 Out of Centre) |  |  |
|  | Residential Zone |  |  |
| 16 | Total Number of dwellings: | 52 |  |
|  | Survey date: MONDAY | 19/11/12 | Survey Type: MANUAL |
|  | WS-03-M-03 TERRACED \& FLATS UPPER SHOREHAM ROAD |  | WEST SUSSEX |
|  |  |  |  |
|  | Suburban Area (PPS6 Out of Centre) |  |  |
|  | Residential Zone |  |  |
|  | Total Number of dwellings: | 48 |  |
|  | Survey date: WEDNESDAY | 18/04/12 | Survey Type: MANUAL |

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

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/NON-PRIVATE HOUSING
MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | $\begin{aligned} & \text { No. } \\ & \text { Days } \\ & \hline \end{aligned}$ | 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 | 16 | 70 | 0.097 | 16 | 70 | 0.235 | 16 | 70 | 0.332 |
| 08:00-09:00 | 16 | 70 | 0.133 | 16 | 70 | 0.297 | 16 | 70 | 0.430 |
| 09:00-10:00 | 16 | 70 | 0.138 | 16 | 70 | 0.174 | 16 | 70 | 0.312 |
| 10:00-11:00 | 16 | 70 | 0.155 | 16 | 70 | 0.153 | 16 | 70 | 0.308 |
| 11:00-12:00 | 16 | 70 | 0.172 | 16 | 70 | 0.142 | 16 | 70 | 0.314 |
| 12:00-13:00 | 16 | 70 | 0.155 | 16 | 70 | 0.162 | 16 | 70 | 0.317 |
| 13:00-14:00 | 16 | 70 | 0.150 | 16 | 70 | 0.161 | 16 | 70 | 0.311 |
| 14:00-15:00 | 16 | 70 | 0.148 | 16 | 70 | 0.147 | 16 | 70 | 0.295 |
| 15:00-16:00 | 16 | 70 | 0.204 | 16 | 70 | 0.164 | 16 | 70 | 0.368 |
| 16:00-17:00 | 16 | 70 | 0.265 | 16 | 70 | 0.212 | 16 | 70 | 0.477 |
| 17:00-18:00 | 16 | 70 | 0.292 | 16 | 70 | 0.185 | 16 | 70 | 0.477 |
| 18:00-19:00 | 16 | 70 | 0.261 | 16 | 70 | 0.179 | 16 | 70 | 0.440 |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 2.170 |  |  | 2.211 |  |  | 4.381 |

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:
Survey date date range:
Number of weekdays (Monday-Friday):
14-282 (units: )
01/01/05-02/10/13
Number of Saturdays: 16

Number of Sundays:
0
$-0$
Surveys manually removed from selection:
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/M - MIXED PRIVATE/NON-PRIVATE HOUSING

MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 16 | 70 | 0.002 | 16 | 70 | 0.000 | 16 | 70 | 0.002 |
| 08:00-09:00 | 16 | 70 | 0.003 | 16 | 70 | 0.002 | 16 | 70 | 0.005 |
| 09:00-10:00 | 16 | 70 | 0.000 | 16 | 70 | 0.002 | 16 | 70 | 0.002 |
| 10:00-11:00 | 16 | 70 | 0.003 | 16 | 70 | 0.001 | 16 | 70 | 0.004 |
| 11:00-12:00 | 16 | 70 | 0.009 | 16 | 70 | 0.006 | 16 | 70 | 0.015 |
| 12:00-13:00 | 16 | 70 | 0.003 | 16 | 70 | 0.001 | 16 | 70 | 0.004 |
| 13:00-14:00 | 16 | 70 | 0.004 | 16 | 70 | 0.002 | 16 | 70 | 0.006 |
| 14:00-15:00 | 16 | 70 | 0.003 | 16 | 70 | 0.004 | 16 | 70 | 0.007 |
| 15:00-16:00 | 16 | 70 | 0.002 | 16 | 70 | 0.005 | 16 | 70 | 0.007 |
| 16:00-17:00 | 16 | 70 | 0.001 | 16 | 70 | 0.002 | 16 | 70 | 0.003 |
| 17:00-18:00 | 16 | 70 | 0.000 | 16 | 70 | 0.001 | 16 | 70 | 0.001 |
| 18:00-19:00 | 16 | 70 | 0.000 | 16 | 70 | 0.001 | 16 | 70 | 0.001 |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.030 |  |  | 0.027 |  |  | 0.057 |

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:
Survey date date range:
Number of weekdays (Monday-Friday):
Number of Saturdays:
Number of Sundays:
Surveys manually removed from selection:

```
14-282 (units: )
01/01/05-02/10/13
16
0
0
2
```

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/M - MIXED PRIVATE/NON-PRIVATE HOUSING
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 16 | 70 | 0.000 | 16 | 70 | 0.000 | 16 | 70 | 0.000 |
| 08:00-09:00 | 16 | 70 | 0.001 | 16 | 70 | 0.001 | 16 | 70 | 0.002 |
| 09:00-10:00 | 16 | 70 | 0.001 | 16 | 70 | 0.001 | 16 | 70 | 0.002 |
| 10:00-11:00 | 16 | 70 | 0.001 | 16 | 70 | 0.001 | 16 | 70 | 0.002 |
| 11:00-12:00 | 16 | 70 | 0.000 | 16 | 70 | 0.000 | 16 | 70 | 0.000 |
| 12:00-13:00 | 16 | 70 | 0.000 | 16 | 70 | 0.000 | 16 | 70 | 0.000 |
| 13:00-14:00 | 16 | 70 | 0.000 | 16 | 70 | 0.000 | 16 | 70 | 0.000 |
| 14:00-15:00 | 16 | 70 | 0.001 | 16 | 70 | 0.001 | 16 | 70 | 0.002 |
| 15:00-16:00 | 16 | 70 | 0.002 | 16 | 70 | 0.002 | 16 | 70 | 0.004 |
| 16:00-17:00 | 16 | 70 | 0.000 | 16 | 70 | 0.000 | 16 | 70 | 0.000 |
| 17:00-18:00 | 16 | 70 | 0.000 | 16 | 70 | 0.000 | 16 | 70 | 0.000 |
| 18:00-19:00 | 16 | 70 | 0.000 | 16 | 70 | 0.000 | 16 | 70 | 0.000 |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.006 |  |  | 0.006 |  |  | 0.012 |

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:
Survey date date range:
Number of weekdays (Monday-Friday):
14-282 (units: )
01/01/05-02/10/13
Number of Saturdays: 16

Number of Sundays:
0
,
Surveys manually removed from selection:
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/M - MIXED PRIVATE/NON-PRIVATE HOUSING
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 | 16 | 70 | 0.008 | 16 | 70 | 0.012 | 16 | 70 | 0.020 |
| 08:00-09:00 | 16 | 70 | 0.008 | 16 | 70 | 0.024 | 16 | 70 | 0.032 |
| 09:00-10:00 | 16 | 70 | 0.004 | 16 | 70 | 0.005 | 16 | 70 | 0.009 |
| 10:00-11:00 | 16 | 70 | 0.004 | 16 | 70 | 0.009 | 16 | 70 | 0.013 |
| 11:00-12:00 | 16 | 70 | 0.006 | 16 | 70 | 0.008 | 16 | 70 | 0.014 |
| 12:00-13:00 | 16 | 70 | 0.006 | 16 | 70 | 0.005 | 16 | 70 | 0.011 |
| 13:00-14:00 | 16 | 70 | 0.008 | 16 | 70 | 0.003 | 16 | 70 | 0.011 |
| 14:00-15:00 | 16 | 70 | 0.010 | 16 | 70 | 0.009 | 16 | 70 | 0.019 |
| 15:00-16:00 | 16 | 70 | 0.012 | 16 | 70 | 0.007 | 16 | 70 | 0.019 |
| 16:00-17:00 | 16 | 70 | 0.012 | 16 | 70 | 0.012 | 16 | 70 | 0.024 |
| 17:00-18:00 | 16 | 70 | 0.022 | 16 | 70 | 0.012 | 16 | 70 | 0.034 |
| 18:00-19:00 | 16 | 70 | 0.017 | 16 | 70 | 0.012 | 16 | 70 | 0.029 |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.117 |  |  | 0.118 |  |  | 0.235 |

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:
Survey date date range:
Number of weekdays (Monday-Friday):
14-282 (units: )
01/01/05-02/10/13
Number of Saturdays: 16

Number of Sundays:
0
$-0$
Surveys manually removed from selection:
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/M - MIXED PRIVATE/NON-PRIVATE HOUSING
MULTI-MODAL VEHI CLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 16 | 70 | 0.108 | 16 | 70 | 0.299 | 16 | 70 | 0.407 |
| 08:00-09:00 | 16 | 70 | 0.190 | 16 | 70 | 0.470 | 16 | 70 | 0.660 |
| 09:00-10:00 | 16 | 70 | 0.164 | 16 | 70 | 0.231 | 16 | 70 | 0.395 |
| 10:00-11:00 | 16 | 70 | 0.200 | 16 | 70 | 0.196 | 16 | 70 | 0.396 |
| 11:00-12:00 | 16 | 70 | 0.214 | 16 | 70 | 0.189 | 16 | 70 | 0.403 |
| 12:00-13:00 | 16 | 70 | 0.203 | 16 | 70 | 0.222 | 16 | 70 | 0.425 |
| 13:00-14:00 | 16 | 70 | 0.196 | 16 | 70 | 0.228 | 16 | 70 | 0.424 |
| 14:00-15:00 | 16 | 70 | 0.222 | 16 | 70 | 0.204 | 16 | 70 | 0.426 |
| 15:00-16:00 | 16 | 70 | 0.335 | 16 | 70 | 0.241 | 16 | 70 | 0.576 |
| 16:00-17:00 | 16 | 70 | 0.353 | 16 | 70 | 0.291 | 16 | 70 | 0.644 |
| 17:00-18:00 | 16 | 70 | 0.392 | 16 | 70 | 0.264 | 16 | 70 | 0.656 |
| 18:00-19:00 | 16 | 70 | 0.354 | 16 | 70 | 0.249 | 16 | 70 | 0.603 |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 2.931 |  |  | 3.084 |  |  | 6.015 |

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:
Survey date date range:
Number of weekdays (Monday-Friday):
14-282 (units: )
01/01/05-02/10/13
Number of Saturdays: 16

Number of Sundays:
0
$-0$
Surveys manually removed from selection:
2
This section displays a quick summary of some of the data filtering selections made by the TRICS ${ }^{8}$ 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/M - MIXED PRIVATE/NON-PRIVATE HOUSING
MULTI-MODAL PEDESTRI ANS
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 | 16 | 70 | 0.028 | 16 | 70 | 0.054 | 16 | 70 | 0.082 |
| 08:00-09:00 | 16 | 70 | 0.057 | 16 | 70 | 0.145 | 16 | 70 | 0.202 |
| 09:00-10:00 | 16 | 70 | 0.047 | 16 | 70 | 0.067 | 16 | 70 | 0.114 |
| 10:00-11:00 | 16 | 70 | 0.043 | 16 | 70 | 0.054 | 16 | 70 | 0.097 |
| 11:00-12:00 | 16 | 70 | 0.043 | 16 | 70 | 0.060 | 16 | 70 | 0.103 |
| 12:00-13:00 | 16 | 70 | 0.060 | 16 | 70 | 0.050 | 16 | 70 | 0.110 |
| 13:00-14:00 | 16 | 70 | 0.055 | 16 | 70 | 0.039 | 16 | 70 | 0.094 |
| 14:00-15:00 | 16 | 70 | 0.062 | 16 | 70 | 0.066 | 16 | 70 | 0.128 |
| 15:00-16:00 | 16 | 70 | 0.139 | 16 | 70 | 0.088 | 16 | 70 | 0.227 |
| 16:00-17:00 | 16 | 70 | 0.096 | 16 | 70 | 0.049 | 16 | 70 | 0.145 |
| 17:00-18:00 | 16 | 70 | 0.073 | 16 | 70 | 0.061 | 16 | 70 | 0.134 |
| 18:00-19:00 | 16 | 70 | 0.072 | 16 | 70 | 0.062 | 16 | 70 | 0.134 |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.775 |  |  | 0.795 |  |  | 1.570 |

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:
Survey date date range:
Number of weekdays (Monday-Friday):
14-282 (units: )
01/01/05-02/10/13
Number of Saturdays: 16

Number of Sundays:
0
0
Surveys manually removed from selection:
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/M - MIXED PRIVATE/NON-PRIVATE HOUSING
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 16 | 70 | 0.004 | 16 | 70 | 0.025 | 16 | 70 | 0.029 |
| 08:00-09:00 | 16 | 70 | 0.000 | 16 | 70 | 0.043 | 16 | 70 | 0.043 |
| 09:00-10:00 | 16 | 70 | 0.006 | 16 | 70 | 0.016 | 16 | 70 | 0.022 |
| 10:00-11:00 | 16 | 70 | 0.008 | 16 | 70 | 0.011 | 16 | 70 | 0.019 |
| 11:00-12:00 | 16 | 70 | 0.004 | 16 | 70 | 0.006 | 16 | 70 | 0.010 |
| 12:00-13:00 | 16 | 70 | 0.010 | 16 | 70 | 0.019 | 16 | 70 | 0.029 |
| 13:00-14:00 | 16 | 70 | 0.011 | 16 | 70 | 0.008 | 16 | 70 | 0.019 |
| 14:00-15:00 | 16 | 70 | 0.005 | 16 | 70 | 0.012 | 16 | 70 | 0.017 |
| 15:00-16:00 | 16 | 70 | 0.026 | 16 | 70 | 0.016 | 16 | 70 | 0.042 |
| 16:00-17:00 | 16 | 70 | 0.021 | 16 | 70 | 0.008 | 16 | 70 | 0.029 |
| 17:00-18:00 | 16 | 70 | 0.023 | 16 | 70 | 0.011 | 16 | 70 | 0.034 |
| 18:00-19:00 | 16 | 70 | 0.027 | 16 | 70 | 0.004 | 16 | 70 | 0.031 |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.145 |  |  | 0.179 |  |  | 0.324 |

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:
Survey date date range:
Number of weekdays (Monday-Friday):
14-282 (units: )
01/01/05-02/10/13
Number of Saturdays: 16

Number of Sundays:
0
$\longrightarrow-0$
Surveys manually removed from selection:
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/M - MIXED PRIVATE/NON-PRIVATE HOUSING
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 16 | 70 | 0.148 | 16 | 70 | 0.390 | 16 | 70 | 0.538 |
| 08:00-09:00 | 16 | 70 | 0.255 | 16 | 70 | 0.682 | 16 | 70 | 0.937 |
| 09:00-10:00 | 16 | 70 | 0.220 | 16 | 70 | 0.319 | 16 | 70 | 0.539 |
| 10:00-11:00 | 16 | 70 | 0.255 | 16 | 70 | 0.269 | 16 | 70 | 0.524 |
| 11:00-12:00 | 16 | 70 | 0.267 | 16 | 70 | 0.264 | 16 | 70 | 0.531 |
| 12:00-13:00 | 16 | 70 | 0.279 | 16 | 70 | 0.296 | 16 | 70 | 0.575 |
| 13:00-14:00 | 16 | 70 | 0.269 | 16 | 70 | 0.277 | 16 | 70 | 0.546 |
| 14:00-15:00 | 16 | 70 | 0.300 | 16 | 70 | 0.291 | 16 | 70 | 0.591 |
| 15:00-16:00 | 16 | 70 | 0.511 | 16 | 70 | 0.352 | 16 | 70 | 0.863 |
| 16:00-17:00 | 16 | 70 | 0.483 | 16 | 70 | 0.359 | 16 | 70 | 0.842 |
| 17:00-18:00 | 16 | 70 | 0.510 | 16 | 70 | 0.348 | 16 | 70 | 0.858 |
| 18:00-19:00 | 16 | 70 | 0.469 | 16 | 70 | 0.327 | 16 | 70 | 0.796 |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 3.966 |  |  | 4.174 |  |  | 8.140 |

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:
Survey date date range:
Number of weekdays (Monday-Friday):
14-282 (units: )
01/01/05-02/10/13
Number of Saturdays: 16

Number of Sundays:
0
$-0$
Surveys manually removed from selection:
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.

## APPENDIX C






