Greater Norwich Call for Sites Submission Form

FOR OFFICIAL USE ONLY	
Response Number:	0426
Date Received:	

This form is to be filled out by any interested parties who want to promote a site for a specific use or development to be allocated in the Greater Norwich Local Plan.

Only one form should be submitted for each individual site i.e. it is not necessary for a separate form to be completed for each landowner on a single site in multiple ownerships. However, a separate form must be completed for each individual site submitted.

Your completed form should be returned to the Greater Norwich Local Plan team no later than **5pm** on **Friday 8 July 2016.**

By email: callforsites@gnlp.org.uk

Or, if it is not possible submit the form electronically,

By Post to:

Greater Norwich Local Plan Team
PO Box 3466
Norwich
NR7 7NX

The responses received as part of the Greater Norwich Local Plan Call for Sites will be published and made available for public viewing. By submitting this form you are consenting to the details about you and your individual site(s) being stored by Norfolk County Council and shared with Broadland District Council, Norwich City Council and South Norfolk District Council, and that the details of the site will be published for consultation purposes.

Further advice and guidance can be obtained by visiting the Greater Norwich Local Plan website or by contacting the Greater Norwich Local Plan team directly:

Website: www.greaternorwichlocalplan.org.uk
E-mail: callforsites@gnlp.org.uk
Telephone: 01603 306603

1a. Contact Details	
Title	Mr
First Name	Paul
Last Name	Clarke
Job Title (where relevant)	Associate Partner
Organisation (where relevant)	Brown & Co
Address	The Atrium St Georges Street Norwich
Post Code	NR3 1AB
Telephone Number	01603 598278
Email Address	paul.clarke@brown-co.com

1b. I am…	
Owner of the site ☐	Parish/Town Council ☐
Developer ☐	Community Group ☐
Land Agent ☐	Local Resident ☐
Planning Consultant ☑	Registered Social Landlord ☐
Other (please specify):	

1c. Client/Landowner Details (if different from question 1a)	
Title	
First Name	
Last Name	
Job Title (where relevant)	
Organisation (where relevant)	
Address	c/o Planning Consultant
Post Code	
Telephone Number	
Email Address	

2. Site Details	
Site location / address and post code (please include as an attachment to this response form a location plan of the site on an scaled OS base with the boundaries of the site clearly shown)	Land at Norwich Road, Swardeston
Grid reference (if known)	
Site area (hectares)	6.84 hectares

Site Ownership		
3a. I (or my client)….		
Is the sole owner of the site	Is a part owner of the site	Do/Does not own (or hold any legal interest in) the site whatsoever
◉	○	○
3b. Please provide the name, address and contact details of the site's landowner(s) and attach copies of all relevant title plans and deeds (if available).		
3c. If the site is in multiple landownerships do all landowners support your proposal for the site?	Yes ○	No ○
3d. If you answered no to the above question please provide details of why not all of the sites owners support your proposals for the site.		

Current and Historic Land Uses		
4a. Current Land Use (Please describe the site's current land use e.g. agriculture, employment, unused/vacant etc.)		
Agriculture		
4b. Has the site been previously developed?	Yes ○	No ◉

4c. Describe any previous uses of the site. (please provide details of any relevant historic planning applications, including application numbers if known)

There is no relevant planning history related to the site.

Proposed Future Uses

5a. Please provide a short description of the development or land use you proposed (if you are proposing a site to be designated as local green space please go directly to question 6)

The proposed site would accommodate 173 dwellings with associated open space and affordable/social housing provision.

5b. Which of the following use or uses are you proposing?

Market Housing ☑	Business & offices ☐	Recreation & Leisure ☐
Affordable Housing ☑	General industrial ☐	Community Use ☐
Residential Care Home ☐	Storage & distribution ☐	Public Open Space ☑
Gypsy & Traveller Pitches ☐	Tourism ☐	Other (Please Specify)

5c. Please provide further details of your proposal, including details on number of houses and proposed floorspace of commercial buildings etc.

A sketch layout is provided as part of the submission.

5d. Please describe any benefits to the Local Area that the development of the site could provide.

The proposed development will provide a range of much needed dwellings, in terms of size and tenure, with associated open space.

Local Green Space
If you are proposed a site to be designated as Local Green Space please complete the following questions. These questions do not need to be completed if you are not proposing a site as Local Green Space. Please consult the guidance notes for an explanation of Local Green Space Designations.
6a.Which community would the site serve and how would the designation of the site benefit that community.
6b. Please describe why you consider the site to be of particular local significance e.g. recreational value, tranquillity or richness in wildlife.

Site Features and Constraints
Are there any features of the site or limitations that may constrain development on this site (please give details)?
7a. Site Access: Is there a current means of access to the site from the public highway, does this access need to be improved before development can take place and are there any public rights of way that cross or adjoin the site?
There is currently a field access from the B1113 Norwich Road, which at this point is within a 40mph limit. The access will need to be improved, however, the site frontage can accommodate the necessary visibility splays within the clients ownership.
7b. Topography: Are there any slopes or significant changes of in levels that could affect the development of the site?
The site is relatively flat.
7c. Ground Conditions: Are ground conditions on the site stable? Are there potential ground contamination issues?
The ground conditions are stable and there are no known contamination issues
7d. Flood Risk: Is the site liable to river, ground water or surface water flooding and if so what is the nature, source and frequency of the flooding?
No
7e. Legal Issues: Is there land in third party ownership, or access rights, which must be acquired to develop the site, do any restrictive covenants exist, are there any existing tenancies?
No

7f. Environmental Issues: Is the site located next to a watercourse or mature woodland, are there any significant trees or hedgerows crossing or bordering the site are there any known features of ecological or geological importance on or adjacent to the site?
No
7g. Heritage Issues: Are there any listed buildings, Conservation Areas, Historic Parklands or Schedules Monuments on the site or nearby? If so, how might the site's development affect them?
There are no known heritage assets in the vicinity of the site
7h. Neighbouring Uses: What are the neighbouring uses and will either the proposed use or neighbouring uses have any implications?
The neighbouring uses are Residential and Agricultural and have no implications on the potential for the proposed site to be developed for housing.
7i. Existing uses and Buildings: are there any existing buildings or uses that need to be relocated before the site can be developed.
No
7j. Other: (please specify):

Utilities			
8a. Which of the following are likely to be readily available to service the site and enable its development? Please provide details where possible.			
	Yes	No	Unsure
Mains water supply	◉	○	○
Mains sewerage	◉	○	○
Electricity supply	◉	○	○
Gas supply	◉	○	○
Public highway	◉	○	○
Broadband internet	◉	○	○

Other (please specify):	

8b. Please provide any further information on the utilities available on the site:

We have instructed Create Consulting to undertake an initial search on the capacity of utilities to accommodate the proposed development. Their findings are as follows:

All services are present for this site

Availability

9a. Please indicate when the site could be made available for the land use or development proposed.

Immediately	◉
1 to 5 years (by April 2021)	○
5 - 10 years (between April 2021 and 2026)	○
10 – 15 years (between April 2026 and 2031)	○
15 - 20 years (between April 2031 and 2036)	○

9b. Please give reasons for the answer given above.

The land is in a single ownership and, subject to obtaining the necessary planning permission, is available for development.

Market Interest

10. Please choose the most appropriate category below to indicate what level of market interest there is/has been in the site. Please include relevant dates in the comments section.

	Yes	Comments
Site is owned by a developer/promoter	○	
Site is under option to a developer/promoter	○	
Enquiries received	○	

Site is being marketed	○	
None	○	
Not known	◉	

Delivery	
11a. Please indicate when you anticipate the proposed development could be begun.	
Up to 5 years (by April 2021)	◉
5 - 10 years (between April 2021 and 2026)	○
10 – 15 years (between April 2026 and 2031)	○
15 - 20 years (between April 2031 and 2036)	○
11b. Once started, how many years do you think it would take to complete the proposed development (if known)?	
It is anticipated that the proposed development would be phased over a three to four year period - approximately 40-50 units per year.	

Viability			
12a. You acknowledge that there are likely to be policy requirements and Community Infrastructure Levy (CIL) costs to be met which will be in addition to the other development costs of the site (depending on the type and scale of land use proposed). These requirements are likely to include but are not limited to: Affordable Housing; Sports Pitches & Children's Play Space and Community Infrastructure Levy			☑
	Yes	No	Unsure
12b. Do you know if there are there any abnormal costs that could affect the viability of the site e.g. infrastructure, demolition or ground conditions?	○	◉	○
12c. If there are abnormal costs associated with the site please provide details:			
12d. Do you consider that the site is currently viable for its proposed use taking into account any and all current planning policy and CIL considerations and other abnormal development costs associated with the site?	◉	○	○

12e. Please attach any viability assessment or development appraisal you have undertaken for the site, or any other evidence you consider helps demonstrate the viability of the site.

No viability or development appraisal has been undertaken at the time of submission. However, the information that we have obtained to date would suggest that the site is deliverable within a relatively short timescale and viable.

Other Relevant Information

13. Please use the space below to for additional information or further explanations on any of the topics covered in this form

Swardeston is identified in Policy 15 of the Joint Core Strategy as a Service Village capable of accommodating growth of around 10-20 dwellings.

The site is located adjacent to the existing settlement boundary and presents a logical extension to the settlement boundary. The 2015 Site Specific Allocations Development Plan Document allocated a site under reference SWA1 in the village for 30 dwellings. Since that time, no planning application has been submitted for the allocated site.

In the absence of a 5 year land supply in the Norwich Policy Area, within which Swardeston is located, we believe this site is suitable to come forward for a development of around 173 dwellings which would contribute to meeting this supply. The site is available now, has no development constraints and can be delivered within 5 years.

Check List	
Your Details	✔
Site Details (including site location plan)	✔
Site Ownership	✔
Current and Historic Land Uses	✔
Proposed Future Uses	✔
Local Green Space (Only to be completed for proposed Local Green Space Designations)	☐
Site Features and Constraints	✔
Utilities	✔
Availability	✔
Market Interest	✔
Delivery	✔
Viability	✔
Other Relevant Information	✔
Declaration	✔

14. Declaration

I understand that:

Data Protection and Freedom of Information
The Data Controller of this information under the Data Protection Act 1998 will be Norfolk County Council, which will hold the data on behalf of Broadland District Council, Norwich City Council and South Norfolk District Council. The purposes of collecting this data are:

- To assist in the preparation of the Greater Norwich Local Plan
- To contact you, if necessary, regarding the answers given in your form.
- To evaluate the development potential of the submitted site for the uses proposed within the form.

Disclaimer
The responses received as part of the Greater Norwich Local Plan "Call for Sites" will be published and made available for public viewing. By submitting this form you are consenting to the details about you and your individual sites being stored by Norfolk County Council, and the details being published for consultation purposes. Any information you consider to be confidential is clearly marked in the submitted response form and you have confirmed with the Council(s) in advance that such information can be kept confidential as instructed in the Greater Norwich Local Plan Call for Sites Response Form Guidance Notes.

I agree that the details within this form can be held by Norfolk County Council and that those details can be shared with Broadland District Council, Norwich City Council and South Norfolk District Council for the purposes specified in this declaration.

Name Amber Slater	Date 06/07/16

20m 0 20 40 60 80 100 120

1:2500

BROWN & CO

The Atrium, St. George's Street, Norwich, NR3 1AB
Tel: 01603 620326 Email: norwich@brown-co.com

Land South of Swardeston House, Swardeston

SCALE:	DATE:
1:2500 @A3	06/07/2016

MAP FILENAME: Call for sites 2016

N

Map data shown downloaded from Promap Digital Maps. Map reference:

Ordnance survey (C) Crown Copyright 2016. All rights reserved.
License number 100022432

This drawing is copyright. Only figured dimensions to be worked to.

revision		
A	Visibility splays added	SL

NORTH

client
-

project
Call for sites
Norwich Road
Swardeston

drawing
Site plan

date	scale	dra
June 27	1:2500@ A3	SL

OWEN BON
ARCHITE

Owen Bond at Brown & Co. The Atrium, St George's Street, Norwich. NR3
Registration no: 07972661. Registered in England & Wales.
T: 01603 620326 E: architects@owenbond.co.uk W: ow

2016	PP16/032	001

BROWN&CO

Norwich Office

The Atrium
St George's Street
Norwich
NR3 1AB
DX 5250 Norwich 1
E nick.moys@brown-co.com
T 01603 629871
F 01603 616199
W brown-co.com

Our ref: NDM/CD/16/32
Your ref: GNDP0426

17th May 2017

Greater Norwich Projects Team
c/o Norfolk County Council
County Hall
Martineau Lane
Norwich
NR1 2DG

Dear Sir

Proposed Residential Development, Land off Norwich Road, Swardeston

I write in connection with land at Norwich Road, Swardeston, on behalf of the landowner, Hethel Farming Ltd.

This site was submitted for consideration last year in response to the Greater Norwich Local Plan Call for Sites (reference GNDP0426).

I can advise that further technical work has now been completed in relation to the development potential of the site. I would draw your attention, in particular, to the attached Access Review study undertaken by Create Consulting.

This study demonstrates that a safe and suitable access to the site could be secured by the provision of a new access junction with a right turning facility located centrally on the site's frontage to the B1113. An additional footway/emergency access point would be provided to the north-east corner of the site.

Traffic modelling undertaken shows that this junction arrangement would have ample capacity to accommodate traffic flows from the proposed development and that the scheme would not have an unacceptable impact on the operation of the local highway network.

As noted in the Access Review, the site is conveniently located in relation to a wide range of local services, which would readily accessible on foot and bicycle. This is further illustrated on the attached annotated plans which show the location of local services relative to the proposed development site. The site is also close to Norwich, which is readily accessible by public transport.

Accordingly, it is considered that the land at Norwich Road, Swardeston, would represent a sustainable location for development in transport terms. Given its capacity for up to around 173 dwellings, the proposal would make a significant contribution to the provision of housing in the area.

I would ask that this information is taken into account in the consideration of the land for allocation for housing.

Yours faithfully

Nick Moys MRTPI
Senior Associate – Architecture & Planner
For and on behalf of Brown & Co – Property & Business Consultants LLP

Enc

Regulated by RICS. Brown & Co is the trading name of Brown & Co – Property and Business Consultants LLP. Registered Office: Granta Hall, Finkin Street, Grantham, Lincolnshire NG31 6QZ
Registered in England and Wales. Registered number OC302092. A list of members is available for inspection at the Registered Office.

BROWN & CO

LAND AT NORWICH ROAD, SWARDESTON

Distances to local facilities

Map 1

1	CHURCH	350m
2	BUS STOPS	325m
3	BAKERY	400m
4	GARAGE	450m
5	FARM SHOP	550m
6	PET SUPPLIES	675m
7	VILLAGE HALL	560m
8	SPORTS FIELDS	575m
9	CAFÉ	200m

May 2017

BROWN & CO

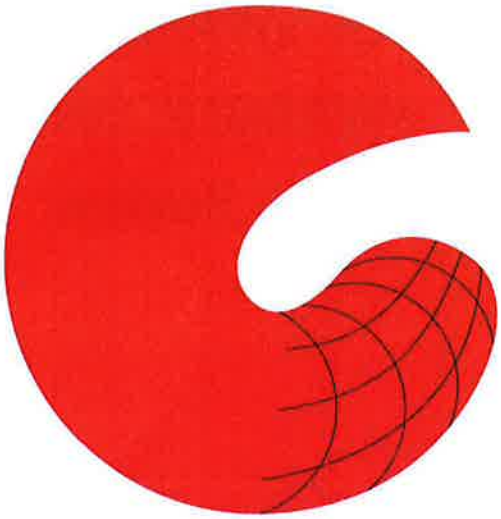
LAND AT NORWICH ROAD, SWARDESTON

Distances to local facilities

Map 2

10	VETS	450m
11	FARM SHOP	750m
12	PUBLIC HOUSE	950m
13	DAY NURSERY	1.0km
14	CHURCH	1.2km
15	SOCIAL CLUB	1.5km
16	PHARMACY	1.5km
17	TAKE AWAYS	1.5km
18	DOCTORS	1.7km
19	VILLAGE SCHOOLS	1.7km
20	POST OFFICE/SHOP	1.8km
21	SUPERMARKET	2.0km

May 2017



create
CONSULTING
ENGINEERS LTD

LAND SOUTH OF SWARDESTON HOUSE, SWARDESTON

Access Review

LAND SOUTH OF SWARDESTON HOUSE, SWARDESTON

Access Review

LAND SOUTH OF SWARDESTON HOUSE, SWARDESTON
Access Review

Client: Hethel Farming Limited

Engineer: Create Consulting Engineers Limited
15 Princes Street
Norwich
Norfolk
NR3 1AF

Tel: 01603 877010
Email: enquiries@createconsultingengineers.co.uk
Web: www.createconsultingengineers.co.uk

Report By: Mark Allen, BSc (Hons), MRTPI, MCIHT

Checked By: Aidan Fisher, BSc (Hons), MTPS

Reference: MA/CC/P16-1180/01

Date: May 2017

LAND SOUTH OF SWARDESTON HOUSE, SWARDESTON

Access Review

Contents

Appendices

Plans

1180/03/001 Residential Development – New Ghost Island Junction
Indicative Site Layout by Owen Bond (Architects)

Registration of Amendments

Revision and Date	Amendment Details	Revision Prepared By	Revision Approved By

1.0 INTRODUCTION

1.1 Create Consulting Engineers Ltd has been instructed by Hethel Farming Limited to undertake an Access Review for a proposed residential development of circa 173 dwellings off the B1113 at Land South of Swardeston House, Swardeston, Norfolk.

1.2 The Site identified for development comprises an area of approximately 7.0ha and is currently in agricultural use. It is bounded by existing development to the North and South and is currently served via a gated field access onto the B1113 towards the North-east corner and lies approximately 350m to the South-west of Swardeston village centre. The village of Mulbarton lies approximately 1 mile to the South with the two villages being connected by the B1113 Main Distributor Road. This road incorporates an existing footway link and functions as a public transport corridor (for buses).

1.3 While Swardeston itself offers a good range of immediately local services and facilities (but no school), the city of Norwich lies approximately 3 miles to the North-east and is accessible via public transport including the Harford Park & Ride service, with access via the B1113 and A140. Mulbarton to the South-west offers a local infant and junior school, shops, medical centre, employment areas, a sports & social club etc. and is also readily accessible via public transport to/from Swardeston.

1.4 The nearest bus stops to the Site are on the B1113 approximately 325m to the North with the main local bus route being the 37 "Purple Line" offering a half-hourly frequency throughout the day between Mulbarton - Swardeston – Norwich and the 10A route between East Harling and Norwich via the B1113, offering up to five connections each-way through the daytime between 0648 – 1848hrs. Footway links are already installed on the B1113 between the Site and the aforementioned bus stops.

1.5 The main objective of this Access Review report is to assess the "headline" transport issues associated with the potential development of this Site. This report considers matters of direct access to/from the Site, the likely travel demands of the future residents and the Site's location is also taken into account in relation to public amenities, employment opportunities, schools and nearby leisure facilities.

1.6 The report explores the travel options for future residents outlining the opportunities for travel by walking, cycling and public transport. Indicative measures are also outlined for maximising the future uptake of more sustainable modes of travel and minimising single occupancy private car use generated by the scheme.

1.7 In due course, a detailed Transport Assessment would be provided in support of the proposed development that builds upon this initial Access Review, as the scheme progresses to a more advanced planning application stage.

2.0 TRANSPORT POLICY

National Guidance

2.1 National planning policy reflects and responds to growing concern over environmental issues and a greater public awareness of the problems associated with unrestrained car use. Current policies place a greater emphasis on increasing accessibility by more sustainable modes, such as walking, cycling and public transport.

National Planning Policy Framework (2012) (NPPF)

2.2 Paragraph 7 of the NPPF identifies that there are three main dimensions to sustainable development which are; an economic role, a social role and an environmental role. However, all of these dimensions give need for the planning system to perform a number of separate, though, conjoint roles.

2.3 The policies for sustainable transport commence at paragraph 29 by identifying that transport has a role to play in facilitating sustainable development and also in contributing to the wider sustainability and health issues. The Government recognises that the transport system needs to be balanced in favour of sustainable transport modes, but, is also cognisant of the fact that different policies and measures will be required for different communities and that the opportunities to maximise use of sustainable transport varies between urban and rural areas.

2.4 Paragraph 32 requires that all developments generating a significant amount of movement should be supported by either a full Transport Assessment or a Transport Statement. The development will also need to ensure that all opportunities to maximise sustainable transport modes have been taken up (dependent upon the nature and location of the Site); that safe and suitable access can be achieved for all people and; that improvements to the transport network can be undertaken that cost-effectively limit the significant effects of the development. It also identifies that development will only become unacceptable in transport terms where the residual cumulative impacts of development are severe.

2.5 At paragraph 34, the NPPF requires that development generating significant levels of movement are located in areas where the need to travel can be minimised and the use of green transport maximised. It recognises, however, that this requirement needs to take account of other policies within the framework, particularly for schemes in more rural areas.

2.6 Travel Plans are very much part of the Government's overall transport strategy with paragraph 36 of the NPPF identifying them as 'a key tool' to exploit opportunities for the use of sustainable travel modes. This is, however, balanced by paragraphs 37 and 38 of the NPPF which identify that planning also has a role in promoting more sustainable modes of travel by ensuring that developments are located in areas where land uses such as retail

and employment are accessible, as far as possible, within reasonable walking and cycling distance of where people live.

2.7 The Site is situated in a sustainable edge-of-village location. It should be recognised, however, that the location in question has a rural hinterland where access to a private car will unavoidably still be required for some journeys.

2.8 With respect to transport issues, the proposed development is in accordance with the NPPF.

Other Relevant Guidance

2.9 The Government's recently published Planning Practice Guidance (2014) supports the overarching NPPF and provides information on structuring a Transport Assessment in support of a proposed development. It requires that a robust assessment will establish evidence that may be useful in:

- Improving the sustainability of transport provision;
- Enhancing accessibility;
- Creating choice amongst different modes of transport;
- Improving health and well-being;
- Supporting economic vitality;
- Improving public understanding of the transport implications of development;
- Enabling other highway and transport authorities/service providers to support and deliver the transport infrastructure that conforms to the Local Plan;
- Supporting local shops and the high street.

2.10 Key issues which should be considered when developing a robust transport evidence base, include the need to:

- Assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms;
- Assess the opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport;
- Highlight and promote opportunities to reduce the need for travel where appropriate;
- Identify opportunities to prioritise the use of alternative modes in both existing and new development locations, if appropriate;
- Consider the cumulative residual impacts of existing and proposed schemes on transport networks;
- Assess the quality and capacity of transport infrastructure and its ability to meet forecast demands;
- Identify the short, medium and long-term transport proposals across all modes.

Local Policies

Norfolk's Third Local Transport Plan (2011 to 2026)

2.11 Norfolk's Third Local Transport Plan (LTP) was adopted in March 2011.

2.12 Known as "Connecting Norfolk", the LTP3 sets out the County's strategy and policy framework for delivery of transportation schemes up to 2026. It will be used as a guide for transport investment and considered by other agencies when determining planning or delivery decisions.

2.13 Connecting Norfolk's vision is to develop a transport system that allows residents and visitors a range of low carbon options to meet their transport needs and attracts and retains business investment in the county. Six strategic aims underpin this vision:

- Maintaining and managing the highway network;
- Delivering sustainable growth;
- Enhancing strategic connections;
- Reducing emissions;
- Improving road safety;
- Improving accessibility.

2.14 This will be done by:

- Making the best use of what Norfolk has to facilitate reliable journeys;
- Reducing the need to travel;
- Influencing others and ensuring transport is integrated into development plans ;
- Working with communities and Norfolk's partners to seek new solutions and new ways of delivering;
- Lobbying for and pursuing improvements to Norfolk's strategic transport network.

South Norfolk Local Plan Policies

2.15 Policy 15 of the Joint Core Strategy (JCS) identifies Swardeston as a Service Village and states that the village possesses a good range of facilities including a garage, bakery, village hall, bowling green, farm shop and pub, but has no school. The village has good access to Norwich via the B1113 and A140.

Section Summary

2.16 Considering the proposed development at Land South of Swardeston House, Swardeston, and having reviewed the aforementioned transport-related policies, it can be said that on transport and highways-related issues, the residential scheme reported on in this report adheres to the national and local planning requirements.

2.17 This is principally on account of the following:

- The Site proposed for development is well related to Swardeston with good accessibility to local services, facilities and public transport connections;
- Based on 173 dwellings, the worse-case AM peak hour period traffic generation arising from the scheme would result in an average of only 1.5 vehicle movements per minute distributed via the B1113 that is classified as a Main Distributor Route in Norfolk's Route Hierarchy;
- Measures would be put in place to reduce the traffic impact of the scheme further by means of bespoke Travel Planning and off-site highways improvements including extension of the existing 30mph village speed limit.

3.0 EXISTING SITUATION

Pedestrian and Cyclist Facilities

3.1 Pedestrian access to the Site is via an existing footway link on the West side of the B1113 installed between Mulbarton and Swardeston. While this footway offers the potential for walking between these two villages (including access to/from the schools at Mulbarton), it is noted that this footway has been afforded limited maintenance and would significantly benefit from "siding-out" to remove the encroached verge. This would restore the footway to its original constructed width (estimated to be at least 1.2m).

3.2 Footways are already provided within the village centre of Swardeston and also Mulbarton.

Photo 1: Existing Site Access (note: existing footway provision)

3.3 A selection of local services and facilities within Swardeston and Mulbarton with approximate travel distances are presented in the list below:

- Bus Stop (approx. 325m to the North)
- Garage (approx. 450m to the North)
- Bakery (approx. 450m to the North)
- Car Sales (approx. 475m to the North)
- Farm Shop/Nursery (approx. 500m to the North)
- Hair Salon (approx. 500m to the North)
- Pet Shop/Supplies (approx. 600m to the North)
- Café (approx. 200m to the South)
- Vets (approx. 450m to the South)
- Farm Shop (approx. 750m to the South)

- Public House (approx. 950m to the South)
- Day Nursery (approx. 1,000m to the South)
- Sports Club/Recreation (approx. 1,250m to the South)
- Pharmacy (approx. 1,250m to the South)
- Mulbarton Post Office (approx. 1 mile to the South)
- Mulbarton infant and junior schools (approx. 1 mile to the South)
- Co-operative Supermarket (approx. 1 ½ mile to the South)

3.4 Access to all of the aforementioned would be viable by foot or bicycle for future residents.

3.5 Additionally, the city of Norwich lies approximately 3 miles to the North-east and would also be within reasonable cycling distance of the Site.

Public Transport Facilities

3.6 The nearest bus stops to the Site are on the B1113 approximately 325m to the North with the main local bus route being the 37 "Purple Line" offering a half-hourly frequency throughout the day between Mulbarton - Swardeston – Norwich and the 10A route between East Harling and Norwich via the B1113, offering up to five connections each-way through the daytime between 0648 – 1848hrs. Footway links are already installed on the B1113 between the Site and the aforementioned bus stops.

3.7 Norwich is accessible via public transport including the Harford Park & Ride service, with access via the B1113 and A140.

Highway Network

3.8 The Site identified for development comprises an area of approximately 7.0ha and is currently in agricultural use. It is bounded by existing development to the North and South and is currently served via a gated field access onto the B1113 towards the North-east corner and lies approximately 350m to the South-west of Swardeston village centre.

3.9 The B1113 is a Main Distributor Route within Norfolk's Route Hierarchy and connects with the A140 Principal Route approximately 2 miles to the North-east. The B1113 itself links with Harford to the North (on the outskirts of the main built-up area of Norwich) and the A1066 at Garboldisham approximately 16 miles to the South-west.

3.10 The A140 Principal Route continues towards Norwich, or turning southbound at the B1113/A140 junction leads towards the A140/A47(T) grade-separated junction, which in turn provides access to the strategic road network. Alternatively, continuing on the A140 southbound towards Diss and Ipswich.

Photo 2: B1113 (looking North, from the North-east corner of the Site)

Traffic Volumes and Speeds

3.11 An independent traffic survey was undertaken w/c 09 January 2017 on the local section of B1113 in connection with this report.

3.12 To assess *actual* speeds on the local section of road, The Design Manual for Roads & Bridges requires a sample size of at least 200 vehicles in each direction in line with TA22/81 "Vehicle Speed Measurement on All Purpose Roads".

3.13 An Automatic traffic counter (ATC) was specified by Create Consulting Engineers Ltd and installed by PCC Ltd on the B1113. Thus unit was located approximately 50m to the South of the proposed access point (at grid referenced at 52.572133, 1.242011), where the existing mandatory speed limit is posted as 40mph. It is noted that the speed limit reduces to 30mph on the approach into Swardeston village centre approximately 150m to the North-east of the proposed access point onto the B1113.

3.14 During the survey period (11 to 17 January 2017) approximately 20,000 individual vehicles were recorded along the B1113 in each direction.

3.15 The results of the recent traffic survey are presented in full at Appendix A of this report and summarised in Table 3.1 below:

Direction (B1113)	Mean Speed (mph)	85th%ile Speed (mph)	AM Peak 0800-0900 (vph)	PM Peak 1700-1800 (vph)	Daily 0700-1900 (vpd)
Northbound	34.3	39.2	555*	265*	3,489
Southbound	33.6	38.7	193*	466*	2,996

Table 3.1: Traffic Survey Results

**recorded mid-week on Tuesday 17 January 2017*

3.16 During the survey period, passenger cars and other light vehicles comprised approximately 99% of all northbound traffic and approximately 99% of southbound traffic. HGVs accounted for less than 1% of all traffic northbound and southbound.

3.17 The results of the ATC survey shows that traffic is distributed onto B1113 to the North and South in tidal proportions i.e. biased towards the North (Norwich) in the morning period and towards the South during the evening period.

3.18 DfT Circular 01/2013 "Setting Local Speed Limits" states:

"Mean speed and 85th%ile speed (the speed at or below which 85% of vehicles are travelling) are the most commonly used measures of actual traffic speed. Traffic authorities should continue to routinely collect and assess both, but, mean speeds should be used as the basis for determining local speed limits."

3.19 The results of the ATC survey show that speeding is not a significant issue along the local section of B1113 and the existing 40mph speed limit is self-enforcing. Additionally, it is reasonable to assert that the introduction of development frontage along this section of road (on account of the proposed development) would serve to attenuate traffic speeds below those recorded by the ATC installation (in both directions).

Highway Safety

3.20 A review of local highway safety has been undertaken utilising personal injury accident data obtained using the "Crash Map" database.

3.21 The Crash Map database includes information collected by the police relating to road traffic incidents where there has been a "Personal Injury Accident". This data is approved by the National Statistics Authority and reported on by the Department for Transport.

3.22 The current Crashmap database includes incidents from 1999 up to 2016 and data outputs extracted from Crashmap for the most recent three year period to date are presented on the schematic diagram below:

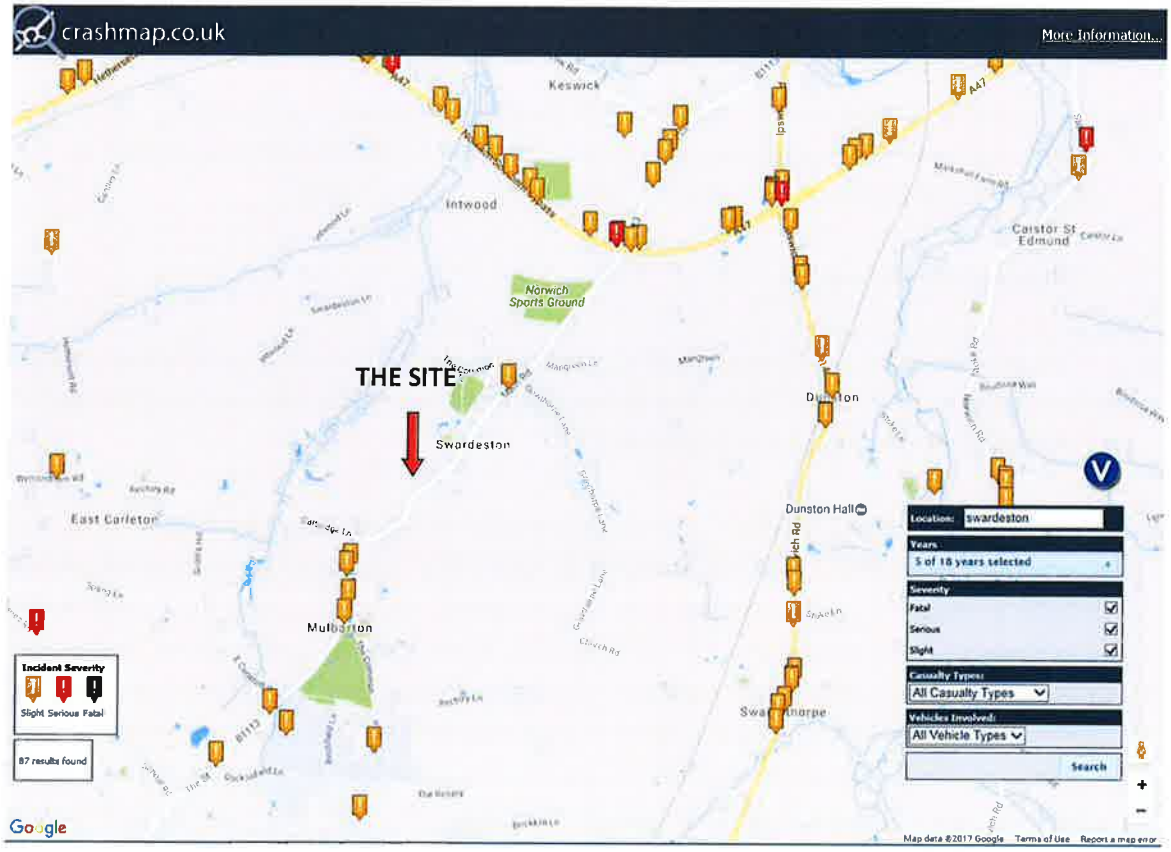


Figure 2: Crashmap Accident Data

3.23 The Crashmap database shows no accidents having been recorded along the frontage of the Site or within the village of Swardeston.

3.24 The nearest accident to the Site was on the B1113 to the North of Mulbarton, located approximately 800m North of the proposed access point occurring on 10 September 2016 and was "Slight" in classification. The next nearest recorded incidents are also classified as "Slight" and occurred on 03 September 2014 and 22 April 2016. These are located approximately 100m apart and consequently, can be considered to be unrelated. While these incidents are of concern, they are isolated and located sufficiently distant from the Site such that they do not have a significant bearing on the development being proposed.

3.25 There are numerous accidents along the A47, A11 and A140, however, the overwhelming number of accidents are "Slight" in classification and can be considered to be attributable to the high volumes of traffic using these routes and driver errors, rather than any fundamental shortcoming with respect to highway infrastructure.

3.26 The analysis of highway accident data on Crashmap outlined above does not indicate any prevailing road safety issues on the local highway network that should prevent the proposed development considered herein from proceeding.

4.0 THE DEVELOPMENT

4.1 The proposed development comprises 173 dwellings including a proportion of affordable units with on-site infrastructure and public open space. The scheme is illustrated on the Indicative Site Layout presented in the "Plans" section of this report.

Proposed Access Strategy

4.2 The primary access to the main residential component of the Site will be a via a new junction arrangement onto the B1113 located approximately mid-way along the main road frontage of the proposed development at Swardeston.

4.3 To safeguard existing "corridor" flows on this section of the B1113, the access to serve the proposed development would be provided by means of a "ghost island" arrangement, rather than a simple T-junction layout. The "ghost island" layout is presented on Drawing 1180/03/001 and also incorporates an extension of the existing 30mph speed limit to the South, to the extents of the proposed development frontage. The preliminary design is presented to Design Manual for Roads & Bridges standards, based around an elevated design speed of 70kph (above that recorded by the recent ATC survey) and therefore, it should be noted that the scheme is not dependent on the extension of the 30mph speed limit from a design and visibility perspective.

4.4 In conjunction with the proposed development frontage, new "ghost island" junction and speed limit extension, future designs speeds along this section of the B1113 should be considerably reduced compared to current levels. In due course, the Highway Authority may accept a reduced design speed to 50kph for the proposed access arrangements. This would mean the "ghost island" deceleration length could be shortened and visibility splays set to 90m in each direction, rather than the 120m splays currently shown on Drawing 1180/03/001.

4.5 Prior to moving forward to detailed design, the proposed access arrangements would be subject to a Stage 1 Road Safety Audit(s), as required by the Highway Authority in due course.

4.6 In addition to the main central access point, a new footway connection would be made available onto the B1113 towards the North-east corner of the Site, as shown on the Indicative Site Layout. This would enable even more convenient pedestrian access towards Swardeston village centre and the nearest bus stops. This additional access point could be designed to function also as an emergency vehicle route (approximately 3.75m in width) in the unlikely event that the main central access onto the B1113 became compromised. Unauthorised use of the emergency access point by general development traffic could be prevented by installation of lockable bollards, or similar.

Photo 3: B1113 (looking North, 25m beyond the South-east corner of the Site)

5.0 HIGHWAY IMPACTS

5.1 This section of the report considers the potential trip demands arising from the proposed development and assesses the likely operational performance of the proposed "ghost island" arrangement onto the B1113 against existing 2017 background traffic flows. In due course, further traffic analysis could be carried out as part of a more detailed Transport Assessment.

5.2 Multi-modal trip rates for the proposed development have been extracted from the TRICS database for private housing. In reality, the proposed development would include a proportion of affordable housing, however, this is not accounted for as part of this analysis in order to provide a "worse-case" estimation of forecast trip generation. Copies of TRICS database sheets are presented in full in Appendix B.

5.3 Table 5.1 below summarises the vehicular trips forecast to be generated by the proposed development for the AM and PM network peaks and also for the 12 hour period covered by the trip rate data.

Land Use	AM Peak		PM Peak		12 Hour	
	Arr.	Dep.	Arr.	Dep.	Arr.	Dep.
Private Units (Rate)	0.143	0.376	0.332	0.193	2.233	2.333
Total Trips	**25**	**65**	**57**	**33**	**386**	**403**

Table 5.1: Vehicular Trip Rates (173 x Private Units)

5.4 In terms of vehicular traffic, the proposed residential development would produce primarily passenger car movements and generate only a very limited number of LGV/HGV movements on a day-to-day basis. A vehicle-to-PCU factor of "1" has, therefore, been applied to the development traffic in the traffic modelling that supports this report.

5.5 The 12 hour multi-modal daily trip forecast for the total proposed development is summarised in the Table 5.2 below (where "vehicle occupants" includes drivers of vehicles from Table 5.1).

Mode	Private Units		Modal Split
	Rate	Trips	
Pedestrians	1.560	269.88	*22%*
Cycles	0.158	27.334	*2%*
Public Transport	0.108	18.684	*2%*
Vehicle Occupants	6.049	1,046.477	*74%*
Total Person Trips		**1,362**	**100%**

Table 5.2: 12 Hour Multi-modal Trip Generation (Total Development)

Vehicular Trip Distribution & Assignment

5.6 At this stage, it is asserted that the majority of development traffic will be distributed onto the B1113 in proportion with existing AM and PM peak period, tidal traffic flows. Further analysis of distribution would be undertaken as part of a more detailed Transport Assessment.

5.7 Diagrams for assignment of development traffic in addition to recorded AM peak and PM peak flows are presented in the figures below:

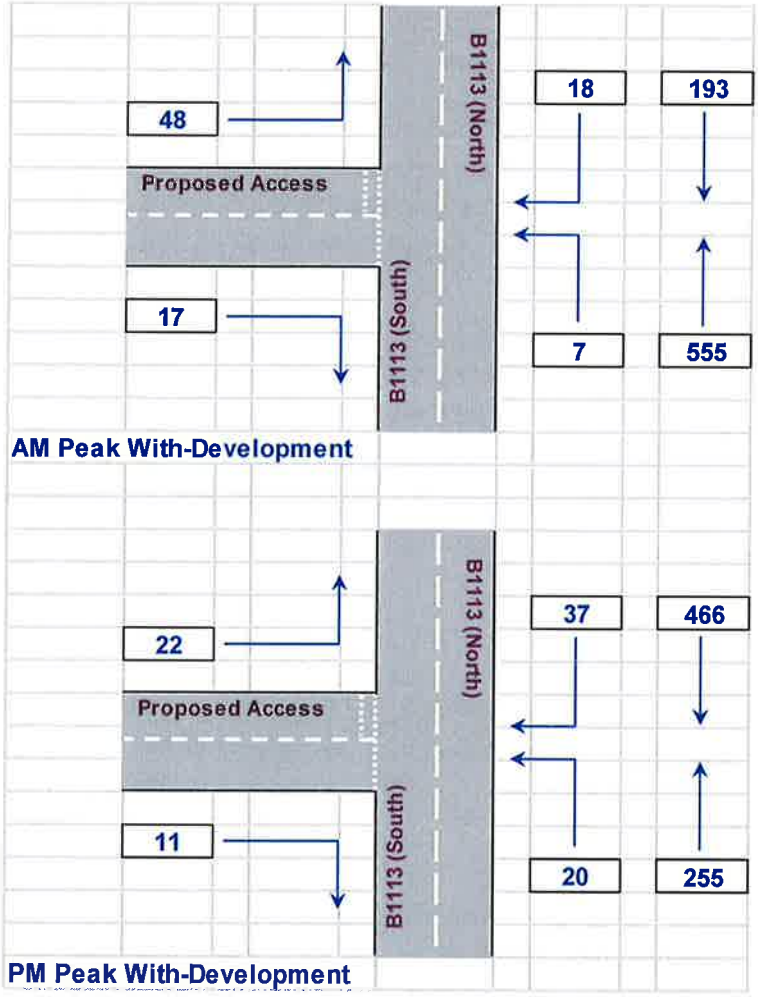


Figure 3: AM and PM Peak Traffic Flows (With-Development)

Capacity Assessment

5.8 PICADY (Priority Intersection Capacity and Delay) is a program for modelling three and four arm priority junctions. This programme is based on empirical relationships which link capacity and safety with various geometric junction parameters such as road widths and visibilities. Results from the modelling process when using the "Lane Simulation" option are expressed in queue lengths and delay offering a measure of theoretical junction performance. The full output reports from the PICADY junction modelling programmes are included at Appendix C.

B1113/Proposed "ghost island" arrangement

5.9 The AM peak and PM peak with-development traffic modelling results are summarised below:

Approach	AM Peak		PM Peak	
	Av. Max Queue (PCUs)	Delay (s)	Av. Max Queue (PCUs)	Delay (s)
Arm A	0.0	0.0	0.0	0.0
Arm B	0.2	9.784	0.1	8.563
Arm C	0.0	0.578	0.1	0.448

A: B1113 (S), B: Site Access, C: B1113 (N)

Table 5.3: B1113/Proposed "ghost island" arrangement (2017 With-development)

5.10 It can be seen from Table 5.3 that the PICADY forecast model shows the existing junction would be operating well within theoretical capacity in both the AM peak and PM peak hours.

Section Summary

5.11 The modelling undertaken demonstrates that the main junction identified to serve the proposed development will provide ample capacity to accommodate those additional levels of traffic generation arising from the proposed development and that the free-flow of traffic on the B1113 will not be significantly compromised.

Travel Planning

5.12 To encourage sustainable travel, it is proposed that the initial sales/rental literature for first residents of the scheme would include a simple Travel Welcome Pack.

5.13 The Travel Welcome Packs could contain:

- published map(s) for foot and cycleways in the area;
- up to date bus timetables for principal bus services to/from Swardeston;
- promotional material for local car-sharing schemes;
- details of local supermarkets offering deliveries;
- a list of useful web-site links for local walking, cycling and public transport.

6.0 CONCLUSIONS

6.1 Create Consulting Engineers Ltd has been instructed by Hethel Farming Limited to undertake an Access Review for a proposed residential development of circa 173 dwellings off the B1113 at Land South of Swardeston House, Swardeston, Norfolk.

6.2 Local services, facilities and public transport options are within readily achievable walking and cycling distance of the Site and it lies within close proximity to the city of Norwich which is readily accessible via public transport.

6.3 The primary access to the residential development will be a new "ghost island" arrangement onto the B1113 based on Design Manual for Roads & Bridges standards. An additional footway/emergency access point will be provided towards the North-east corner of the Site.

6.4 The analysis of highway accident data on Crashmap as outlined in this report does not indicate any prevailing road safety issues on the local highway network that should prevent the proposed development considered herein from coming forward.

6.5 The levels of anticipated development traffic arising from the proposed development have been tested and the analysis undertaken as part of this report demonstrates that the scheme's peak period impacts will be acceptable to the local highway network. Further analysis would be undertaken in due course as part of a detailed Transport Assessment.

6.6 In view of the above, there are no identified transport-related issues preventing the proposed "Land South of Swardeston House" residential development considered herein from being deemed acceptable in principle to the Highway Authority.

7.0 REPORT DISCLAIMER

7.1 Create Consulting disclaims any responsibility to the Client and others in respect of any matters outside the scope of this report.

7.2 The copyright of this report is vested in Create Consulting Engineers Ltd and Hethel Farming Limited. The Client, or his appointed representatives, may copy the report for purposes in connection with the development described herein. It shall not be copied by any other party or used for any other purposes without the written consent of Create Consulting Engineers Ltd or Hethel Farming Limited.

7.3 Create Consulting Engineers Ltd accepts no responsibility whatsoever to other parties to whom this report, or any part thereof, is made known. Any such other parties rely upon the report at their own risk.

APPENDICES

APPENDIX A

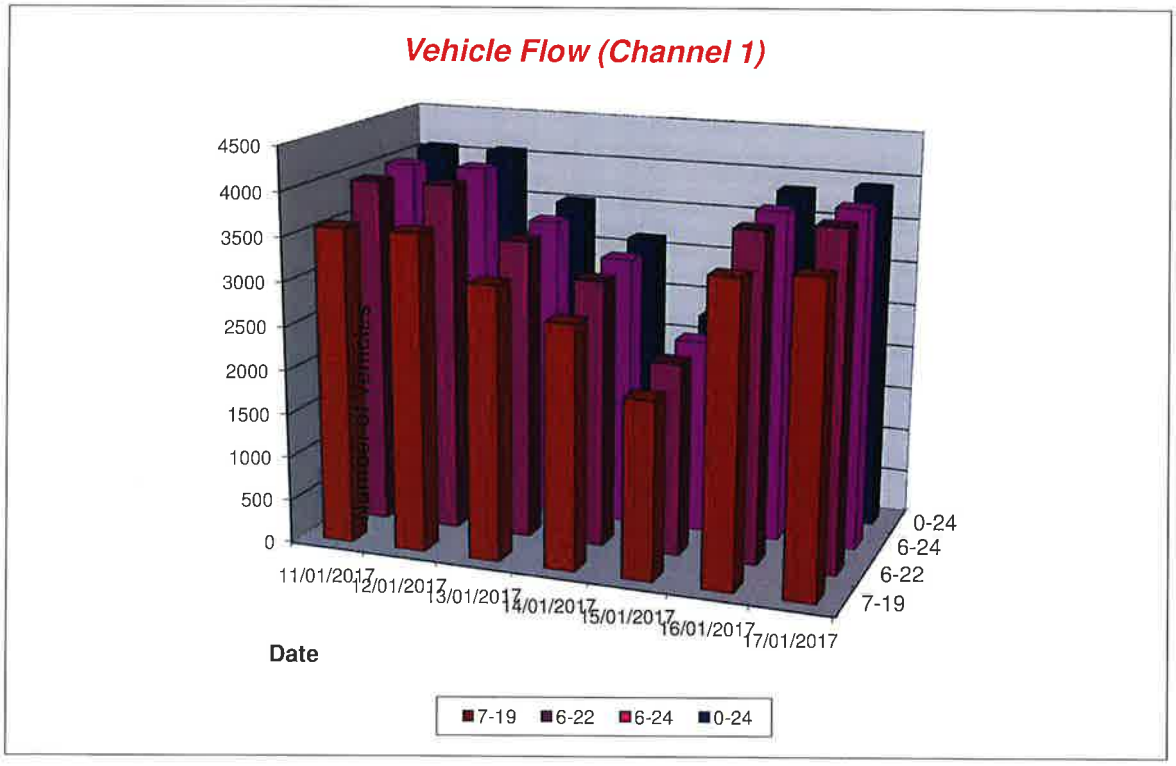
Swardeston ATC, B1113 Main Road

Produced by PCC Traffic Information Consultancy Ltd.

Channel 1 - Northbound | **Vehicle Flow** | **Week 1**

Hr Ending	11/01/2017 Wednesday	12/01/2017 Thursday	13/01/2017 Friday	14/01/2017 Saturday	15/01/2017 Sunday	16/01/2017 Monday	17/01/2017 Tuesday	5 Day Ave	7 Day Ave
1	8	8	9	12	20	3	11	8	10
2	1	3	2	3	11	1	4	2	4
3	3	2	3	6	11	6	5	4	5
4	2	3	3	6	6	3	4	3	4
5	9	8	8	4	13	13	9	9	9
6	40	34	40	20	13	42	37	39	32
7	134	122	117	45	18	118	119	122	96
8	530	537	483	85	32	514	542	521	389
9	590	543	547	214	70	568	555	561	441
10	371	344	321	332	201	344	327	341	320
11	259	265	214	327	253	241	255	247	259
12	235	215	176	339	281	248	231	221	246
13	227	250	198	289	254	213	223	222	236
14	218	207	172	267	223	203	191	198	212
15	209	217	203	258	211	190	197	203	212
16	262	286	269	201	172	214	237	254	234
17	290	287	198	187	127	286	274	267	236
18	236	289	179	143	87	226	265	239	204
19	164	163	149	124	117	166	192	167	154
20	130	121	86	107	64	116	110	113	105
21	60	75	51	61	54	46	60	58	58
22	41	48	42	57	31	37	48	43	43
23	36	33	30	31	14	29	24	30	28
24	16	14	23	27	10	8	6	13	15

7-19	3591	3603	3109	2766	2028	3413	3489	3441	3143
6-22	3956	3969	3405	3036	2195	3730	3826	3777	3445
6-24	4008	4016	3458	3094	2219	3767	3856	3821	3488
0-24	4071	4074	3523	3145	2293	3835	3926	3886	3552



Swardeston ATC, B1113 Main Road

Produced by PCC Traffic Information Consultancy Ltd.

Channel 1 - Northbound — Average Speed — Week 1

Hr Ending	11/01/2017 Wednesday	12/01/2017 Thursday	13/01/2017 Friday	14/01/2017 Saturday	15/01/2017 Sunday	16/01/2017 Monday	17/01/2017 Tuesday
1	39.2	38.3	37.6	36.1	31.5	37.4	41.1
2	35.9	31.8	42.8	41.0	33.7	34.3	40.7
3	36.1	41.8	39.0	35.1	34.0	36.9	35.2
4	33.7	40.3	39.2	37.5	37.2	37.8	39.2
5	40.3	39.1	37.5	42.9	33.8	36.9	36.5
6	37.4	36.7	37.0	35.9	37.1	37.5	36.7
7	36.6	35.5	35.2	32.7	33.8	36.6	37.0
8	32.4	32.8	31.2	34.1	35.6	32.2	32.0
9	33.1	34.1	31.2	33.8	37.4	33.3	34.1
10	34.6	34.0	32.9	31.3	35.7	34.9	33.6
11	33.7	34.7	28.1	33.1	35.9	34.8	34.8
12	34.1	35.1	27.0	34.7	35.4	34.2	35.0
13	35.3	34.4	31.8	34.6	34.8	35.1	35.3
14	35.5	34.5	33.2	35.4	35.8	35.9	36.1
15	35.5	34.3	33.8	35.0	35.9	35.9	34.9
16	35.0	34.6	34.4	35.2	35.1	35.2	34.8
17	33.5	33.5	35.6	35.3	36.5	35.3	35.3
18	34.9	31.8	34.5	35.9	35.1	32.9	34.5
19	34.5	33.6	35.2	34.9	35.6	34.7	34.6
20	36.1	35.3	36.7	34.9	36.0	37.0	36.4
21	37.5	36.3	35.9	37.0	37.9	38.6	36.7
22	38.5	34.3	36.5	35.8	37.8	38.4	36.2
23	37.9	36.6	36.7	37.9	36.9	35.6	36.2
24	38.7	36.8	37.2	35.0	38.8	41.7	39.1
10-12	33.9	34.8	27.6	33.9	35.6	34.5	34.9
14-16	35.2	34.5	34.1	35.1	35.5	35.5	34.8
0-24	34.4	34.1	32.7	34.4	35.7	34.5	34.6

Average	34.3

Channel 1 - Northbound — 85th Percentile

Hr Ending	11/01/2017 Wednesday	12/01/2017 Thursday	13/01/2017 Friday	14/01/2017 Saturday	15/01/2017 Sunday	16/01/2017 Monday	17/01/2017 Tuesday
1	41.3	43.5	42.2	38.8	36.6	39.7	45.6
2	-	32.6	44.8	45.6	39.2	-	44.7
3	40.9	42.7	42.0	46.6	40.0	45.4	40.5
4	34.2	48.5	43.0	43.6	43.9	40.5	44.9
5	45.6	47.3	40.5	45.0	38.1	40.6	38.2
6	43.4	47.1	43.1	42.5	43.2	43.2	42.7
7	42.4	40.4	39.8	40.0	40.0	42.2	42.4
8	37.1	38.1	35.6	39.2	39.5	37.4	37.2
9	38.3	38.4	36.3	38.3	43.4	38.3	38.3
10	39.4	38.8	37.6	36.6	40.2	39.0	38.2
11	38.1	39.3	34.4	37.4	39.7	39.4	39.1
12	38.8	39.4	31.6	38.6	39.2	38.6	38.8
13	40.6	38.8	37.2	38.7	38.6	39.3	40.0
14	39.8	38.7	37.8	39.5	40.4	40.5	41.0
15	39.6	38.9	38.4	40.1	39.8	41.2	39.3
16	39.5	38.6	39.4	39.8	39.9	39.6	40.5
17	38.6	38.2	39.6	39.8	42.1	39.6	39.5
18	38.9	36.9	39.4	41.5	39.3	37.7	39.6
19	40.0	38.6	40.8	38.9	40.1	41.3	38.8
20	40.7	41.5	41.6	41.2	39.9	42.5	41.7
21	43.8	41.7	40.0	41.3	44.6	46.2	41.7
22	44.9	39.6	42.0	41.4	43.9	44.2	41.7
23	44.5	41.4	41.4	44.1	41.9	42.6	40.8
24	45.6	43.2	42.7	39.5	42.5	48.5	43.3
10-12	38.1	39.3	34.4	37.4	39.7	39.4	39.1
14-16	39.6	38.7	39.0	39.9	39.8	40.1	39.7
0-24	39.2	38.8	38.1	39.2	39.9	39.4	39.4

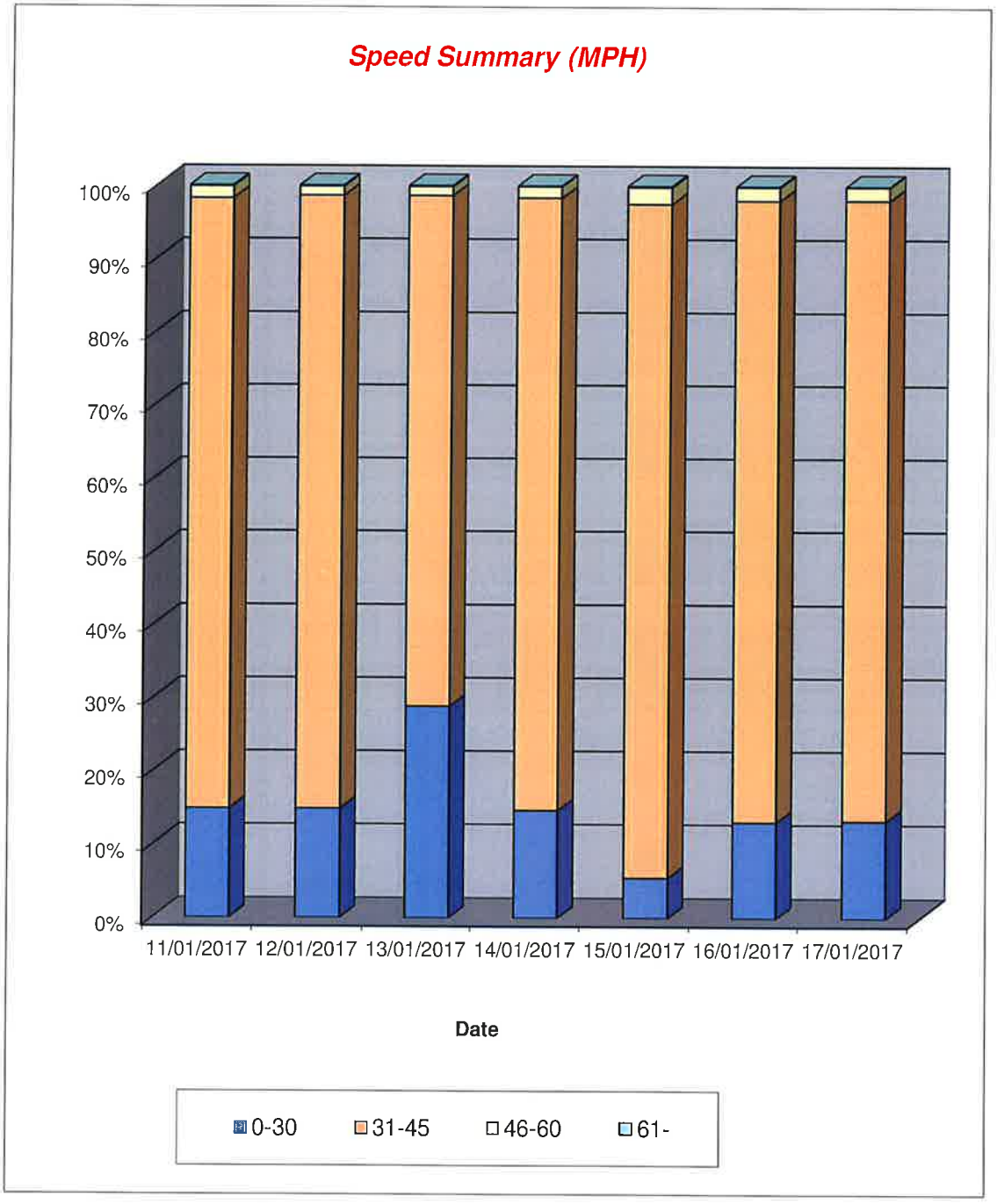
85th %ile	39.2

Swardeston ATC, B1113 Main Road

Produced by PCC Traffic Information Consultancy Ltd.

Channel 1 - Northbound | **Speed Summary** | **Week 1**

Speed (MPH)	11/01/2017 Wednesday	12/01/2017 Thursday	13/01/2017 Friday	14/01/2017 Saturday	15/01/2017 Sunday	16/01/2017 Monday	17/01/2017 Tuesday
0-30	604	604	1016	459	126	501	519
31-45	3396	3415	2460	2635	2111	3260	3333
46-60	66	50	43	49	52	71	72
61-	5	5	4	2	4	3	2
TOTAL	4071	4074	3523	3145	2293	3835	3926



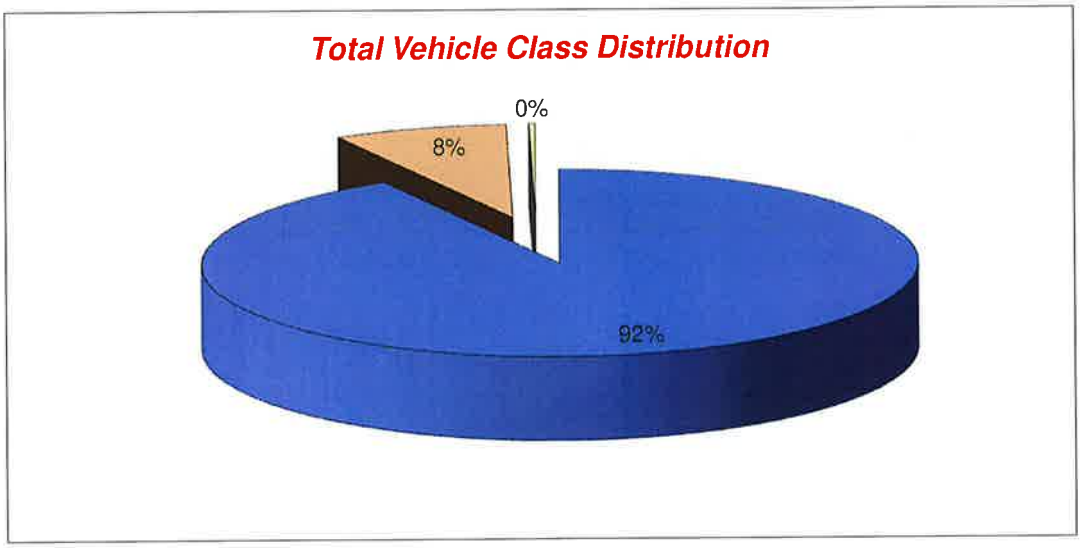
Swardeston ATC, B1113 Main Road

Produced by PCC Traffic Information Consultancy Ltd.

Channel 1 - Northbound | Vehicle Class | Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
11/01/2017				
7-19	3276	302	13	3591
6-22	3610	333	13	3956
6-24	3681	334	13	4008
0-24	3717	337	17	4071
12/01/2017				
7-19	3280	316	7	3603
6-22	3610	352	7	3969
6-24	3654	355	7	4016
0-24	3701	363	10	4074
13/01/2017				
7-19	2819	284	6	3109
6-22	3092	307	6	3405
6-24	3144	308	6	3458
0-24	3201	315	7	3523
14/01/2017				
7-19	2604	158	4	2766
6-22	2854	177	5	3036
6-24	2909	180	5	3094
0-24	2952	188	5	3145
15/01/2017				
7-19	1940	87	1	2028
6-22	2100	94	1	2195
6-24	2120	98	1	2219
0-24	2189	103	1	2293
16/01/2017				
7-19	3117	287	9	3413
6-22	3411	309	10	3730
6-24	3445	312	10	3767
0-24	3499	322	14	3835
17/01/2017				
7-19	3194	285	10	3489
6-22	3501	314	11	3826
6-24	3530	315	11	3856
0-24	3587	323	16	3926

Average				
7-19	2890	246	7	3143
6-22	3168	269	8	3445
6-24	3209	272	8	3488
0-24	3264	279	10	3552



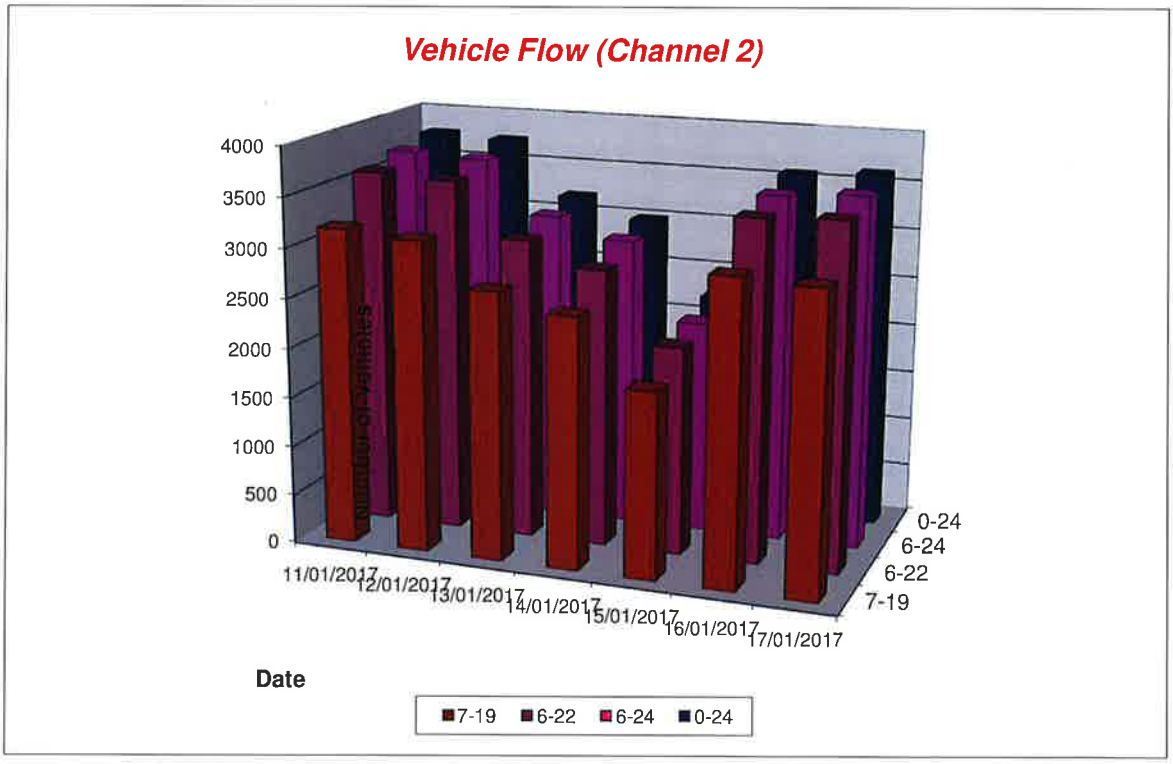
Swardeston ATC, B1113 Main Road

Produced by PCC Traffic Information Consultancy Ltd.

Channel 2 - Southbound **Vehicle Flow** **Week 1**

Hr Ending	11/01/2017 Wednesday	12/01/2017 Thursday	13/01/2017 Friday	14/01/2017 Saturday	15/01/2017 Sunday	16/01/2017 Monday	17/01/2017 Tuesday	5 Day Ave	7 Day Ave
1	8	8	13	24	29	14	9	10	15
2	5	7	8	10	16	3	4	5	8
3	5	3	2	7	12	1	2	3	5
4	1	3	4	4	5	2	1	2	3
5	12	10	8	7	14	8	7	9	9
6	46	51	28	7	8	44	48	43	33
7	81	89	81	23	16	76	83	82	64
8	175	176	179	36	31	193	176	180	138
9	201	182	184	100	25	186	193	189	153
10	172	182	144	133	61	152	153	161	142
11	168	191	154	197	113	166	151	166	163
12	210	211	179	285	176	214	190	201	209
13	223	235	177	274	295	226	208	214	234
14	238	239	188	244	227	233	191	218	223
15	289	252	235	248	234	240	253	254	250
16	282	296	242	285	236	281	277	276	271
17	414	420	361	275	232	404	435	407	363
18	516	446	434	263	139	457	466	464	389
19	294	293	219	184	109	282	303	278	241
20	142	139	120	108	78	127	167	139	126
21	110	108	83	74	73	114	123	108	98
22	89	107	51	70	53	70	86	81	75
23	65	54	52	70	37	58	72	60	58
24	23	35	41	61	18	16	21	27	31

7-19	3182	3123	2696	2524	1878	3034	2996	3006	2776
6-22	3604	3566	3031	2799	2098	3421	3455	3415	3139
6-24	3692	3655	3124	2930	2153	3495	3546	3503	3228
0-24	3769	3737	3187	2989	2237	3567	3619	3576	3301



Swardeston ATC, B1113 Main Road

Produced by PCC Traffic Information Consultancy Ltd.

Channel 2 - Southbound | Average Speed | Week 1

Hr Ending	11/01/2017 Wednesday	12/01/2017 Thursday	13/01/2017 Friday	14/01/2017 Saturday	15/01/2017 Sunday	16/01/2017 Monday	17/01/2017 Tuesday
1	39.0	36.7	36.1	36.5	30.7	39.8	38.4
2	38.8	41.2	37.1	37.4	35.1	39.9	44.3
3	41.5	30.2	37.0	38.9	35.9	43.2	44.7
4	38.1	39.9	42.0	37.5	35.3	38.1	39.1
5	37.7	43.5	37.2	38.0	36.6	37.3	41.4
6	37.4	37.5	35.9	32.5	34.5	37.4	38.0
7	35.6	35.0	32.8	34.5	31.1	37.2	35.7
8	33.5	32.8	31.8	33.5	33.6	33.9	33.7
9	33.3	34.9	32.2	33.0	35.6	34.3	33.2
10	34.0	32.4	33.1	32.3	35.0	33.7	33.9
11	33.1	33.9	28.7	33.5	33.7	34.7	34.0
12	32.5	32.5	24.2	33.7	35.3	32.9	34.9
13	33.5	34.0	31.1	34.0	34.0	35.4	34.0
14	32.8	33.2	32.5	33.9	34.4	33.6	34.7
15	33.0	33.3	33.5	33.5	35.2	34.1	34.3
16	32.9	33.0	34.1	33.2	33.7	33.4	33.4
17	32.5	31.6	31.7	32.6	33.9	32.6	32.4
18	32.8	32.2	33.7	33.7	33.9	32.5	32.4
19	33.2	31.7	33.8	34.8	34.5	34.1	33.4
20	36.5	34.5	36.0	35.4	35.6	35.1	34.7
21	36.1	35.6	35.6	35.5	35.6	36.2	35.9
22	34.8	34.9	33.9	35.4	35.9	35.7	34.8
23	34.5	35.5	36.4	34.1	37.0	36.8	34.9
24	38.7	36.8	35.6	31.9	40.0	39.0	36.4
10-12	32.8	33.2	26.3	33.6	34.7	33.7	34.5
14-16	33.0	33.1	33.8	33.3	34.4	33.7	33.8
0-24	33.5	33.2	32.5	33.7	34.5	34.0	33.8

Average	33.6

Channel 2 - Southbound | 85th Percentile

Hr Ending	11/01/2017 Wednesday	12/01/2017 Thursday	13/01/2017 Friday	14/01/2017 Saturday	15/01/2017 Sunday	16/01/2017 Monday	17/01/2017 Tuesday
1	41.1	40.4	37.5	43.0	35.3	46.3	46.4
2	42.3	45.1	42.2	41.2	40.3	42.7	47.0
3	47.5	34.9	43.5	43.7	38.1	-	51.6
4	-	42.9	48.3	43.3	38.1	38.2	-
5	40.4	50.5	46.7	47.8	40.5	40.9	46.5
6	42.0	44.7	42.0	38.4	37.9	42.9	42.7
7	40.5	39.3	38.4	39.3	39.1	43.2	41.6
8	38.4	37.4	36.4	39.7	39.3	38.5	37.9
9	38.8	39.4	37.5	38.4	39.7	39.4	38.0
10	39.1	38.3	37.3	37.3	39.7	39.6	38.3
11	38.6	38.8	34.1	38.6	38.1	39.3	38.8
12	37.3	38.4	29.7	38.3	39.7	37.8	40.3
13	38.6	39.1	35.7	39.1	38.7	39.8	38.6
14	38.1	37.5	37.1	39.1	39.1	39.1	39.5
15	38.2	37.4	38.5	38.0	39.4	38.9	38.7
16	37.8	38.3	38.8	37.5	38.5	37.5	38.0
17	36.6	36.4	35.8	37.3	38.5	37.6	36.4
18	37.9	36.1	38.4	38.6	39.5	37.5	37.2
19	38.5	36.9	38.8	39.1	40.1	38.7	38.3
20	41.9	39.2	39.6	40.2	40.0	40.3	38.8
21	40.4	41.2	40.9	39.9	40.8	40.5	40.0
22	40.6	40.7	40.3	40.2	41.4	42.0	40.2
23	38.3	40.8	40.0	39.9	41.0	42.7	39.5
24	47.9	42.2	40.1	37.2	44.7	45.5	40.3
10-12	38.6	38.8	34.1	38.6	38.1	39.3	38.8
14-16	38.0	38.1	38.6	37.6	38.8	38.6	38.5
0-24	38.6	38.4	38.0	38.8	39.3	39.2	38.8

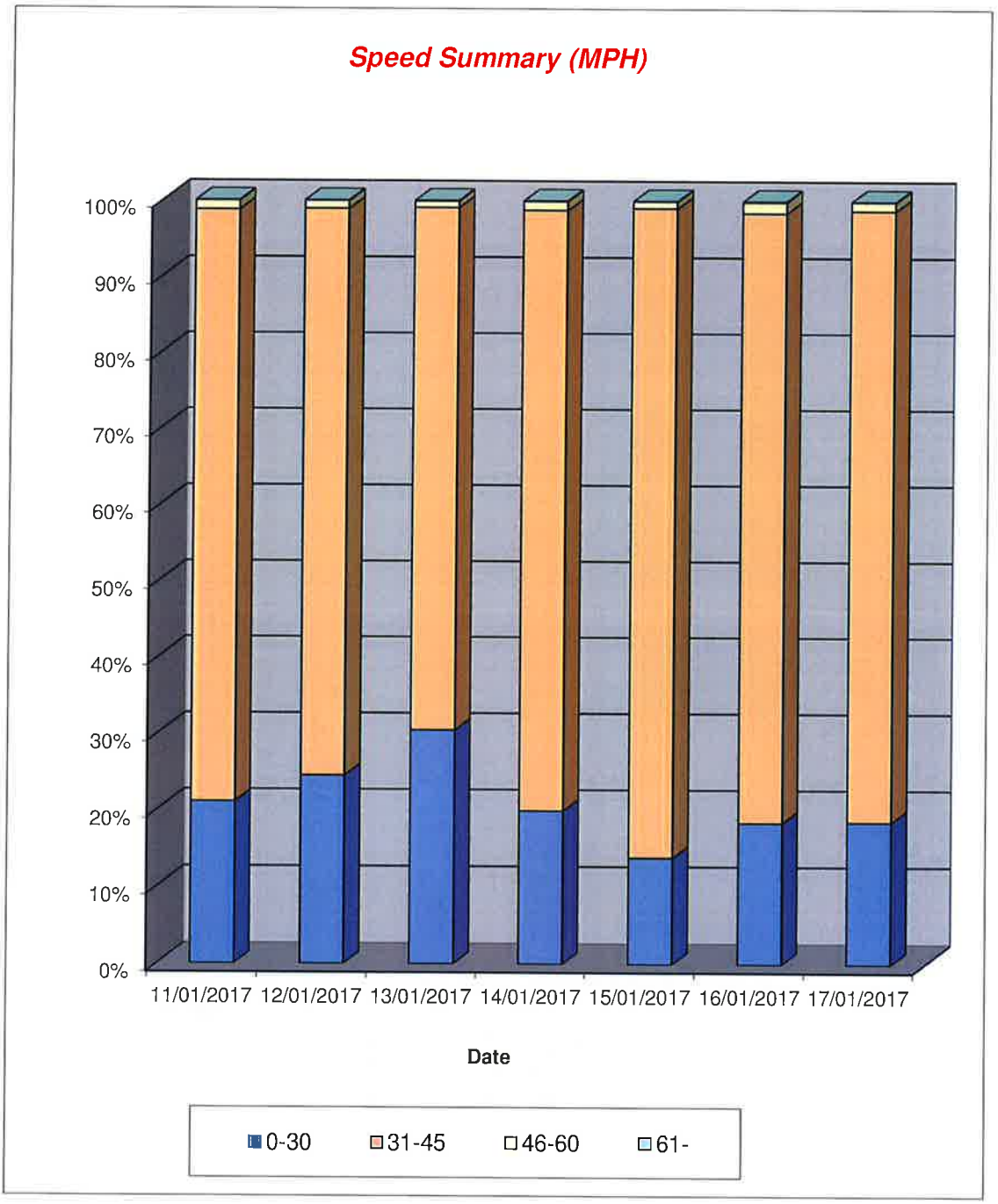
85th %ile	38.7

Swardeston ATC, B1113 Main Road

Produced by PCC Traffic Information Consultancy Ltd.

Channel 2 - Southbound | **Speed Summary** | **Week 1**

Speed (MPH)	11/01/2017 Wednesday	12/01/2017 Thursday	13/01/2017 Friday	14/01/2017 Saturday	15/01/2017 Sunday	16/01/2017 Monday	17/01/2017 Tuesday
0-30	791	914	969	593	308	653	667
31-45	2932	2783	2189	2359	1908	2859	2908
46-60	44	38	27	35	20	52	42
61-	2	2	2	2	1	3	2
TOTAL	3769	3737	3187	2989	2237	3567	3619



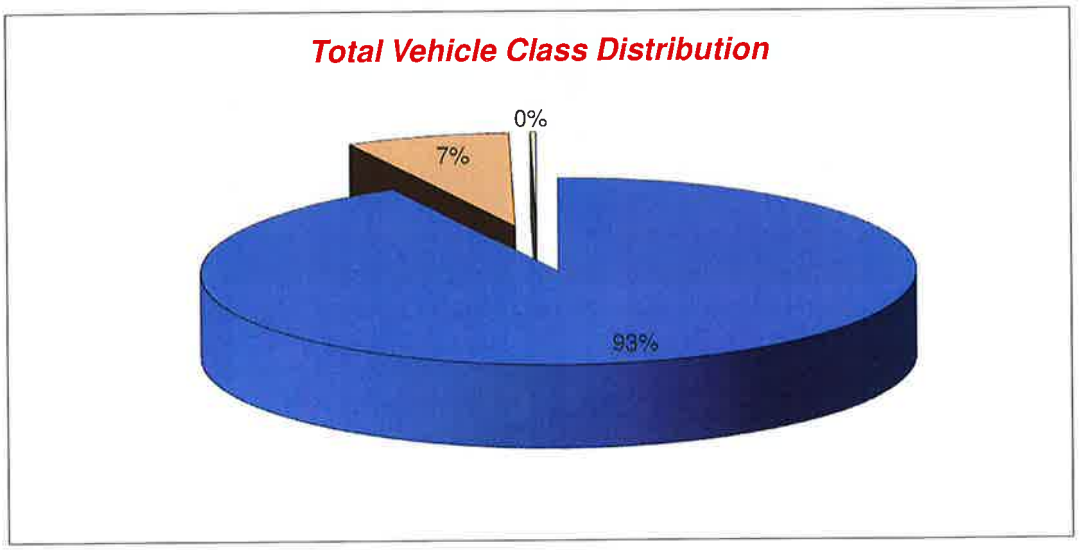
Swardeston ATC, B1113 Main Road

Produced by PCC Traffic Information Consultancy Ltd.

Channel 2 - Southbound | Vehicle Class | Week 1

Classes / Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
11/01/2017				
7-19	2888	284	10	3182
6-22	3287	307	10	3604
6-24	3373	309	10	3692
0-24	3446	313	10	3769
12/01/2017				
7-19	2832	282	9	3123
6-22	3253	303	10	3566
6-24	3342	303	10	3655
0-24	3422	305	10	3737
13/01/2017				
7-19	2431	259	6	2696
6-22	2752	273	6	3031
6-24	2844	274	6	3124
0-24	2901	280	6	3187
14/01/2017				
7-19	2386	134	4	2524
6-22	2650	145	4	2799
6-24	2777	149	4	2930
0-24	2834	151	4	2989
15/01/2017				
7-19	1809	69	0	1878
6-22	2018	80	0	2098
6-24	2072	81	0	2153
0-24	2155	82	0	2237
16/01/2017				
7-19	2760	261	13	3034
6-22	3135	273	13	3421
6-24	3208	274	13	3495
0-24	3276	278	13	3567
17/01/2017				
7-19	2718	263	15	2996
6-22	3155	284	16	3455
6-24	3245	287	16	3548
0-24	3311	292	16	3619

Average				
7-19	2546	222	8	2776
6-22	2893	238	8	3139
6-24	2980	240	8	3228
0-24	3049	243	8	3301



APPENDIX B

Calculation Reference: AUDIT-649801-161118-1123

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
	EX	ESSEX	1 days
	HC	HAMPSHIRE	1 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	2 days
03	**SOUTH WEST**		
	DC	DORSET	1 days
	DV	DEVON	3 days
	SM	SOMERSET	1 days
04	**EAST ANGLIA**		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	3 days
	SF	SUFFOLK	2 days
05	**EAST MIDLANDS**		
	LN	LINCOLNSHIRE	2 days
06	**WEST MIDLANDS**		
	SH	SHROPSHIRE	4 days
	ST	STAFFORDSHIRE	2 days
	WK	WARWICKSHIRE	2 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NE	NORTH EAST LINCOLNSHIRE	2 days
	NY	NORTH YORKSHIRE	6 days
	SY	SOUTH YORKSHIRE	1 days
08	**NORTH WEST**		
	CH	CHESHIRE	4 days
	GM	GREATER MANCHESTER	1 days
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	1 days
09	**NORTH**		
	CB	CUMBRIA	2 days
	TW	TYNE & WEAR	1 days
10	**WALES**		
	PS	POWYS	2 days
11	**SCOTLAND**		
	AG	ANGUS	1 days
	EA	EAST AYRSHIRE	1 days
	FA	FALKIRK	2 days
	HI	HIGHLAND	1 days
	PK	PERTH & KINROSS	1 days
12	**CONNAUGHT**		
	GA	GALWAY	1 days
	LT	LEITRIM	1 days
	MA	MAYO	1 days
	RO	ROSCOMMON	4 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:	6 to 432 (units:)
Range Selected by User:	6 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/08 to 12/11/15

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

Selected survey days:

Monday	12 days
Tuesday	12 days
Wednesday	10 days
Thursday	15 days
Friday	12 days

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

Selected survey types:

Manual count	61 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 Centre	7
Suburban Area (PPS6 Out of Centre)	30
Edge of Town	24

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	52
No Sub Category	9

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:

C1	1 days
C3	59 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®.

Filtering Stage 3 selection (Cont.):

Population within 1 mile:

1,001 to 5,000	13 days
5,001 to 10,000	14 days
10,001 to 15,000	12 days
15,001 to 20,000	9 days
20,001 to 25,000	6 days
25,001 to 50,000	7 days

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

Population within 5 miles:

5,000 or Less	3 days
5,001 to 25,000	12 days
25,001 to 50,000	7 days
50,001 to 75,000	4 days
75,001 to 100,000	14 days
100,001 to 125,000	5 days
125,001 to 250,000	8 days
250,001 to 500,000	7 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	19 days
1.1 to 1.5	40 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	3 days
No	58 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 **AG-03-A-01** **BUNGALOWS/DET.** **ANGUS**
KEPTIE ROAD

ARBROATH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY *22/05/12* *Survey Type: MANUAL*

2 **CA-03-A-04** **DETACHED** **CAMBRIDGESHIRE**

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

3 **CB-03-A-03** **SEMI DETACHED** **CUMBRIA**
HAWKSHEAD AVENUE

WORKINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: THURSDAY *20/11/08* *Survey Type: MANUAL*

4 **CB-03-A-04** **SEMI DETACHED** **CUMBRIA**
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY *24/04/09* *Survey Type: MANUAL*

5 **CH-03-A-05** **DETACHED** **CHESHIRE**
SYDNEY ROAD
SYDNEY
CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: TUESDAY *14/10/08* *Survey Type: MANUAL*

6 **CH-03-A-06** **SEMI-DET./BUNGALOWS** **CHESHIRE**
CREWE ROAD

CREWE
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 129
Survey date: TUESDAY *14/10/08* *Survey Type: MANUAL*

7 **CH-03-A-08** **DETACHED** **CHESHIRE**
WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY *22/05/12* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 **CH-03-A-09** **TERRACED HOUSES** **CHESHIRE**
GREYSTOKE ROAD
HURDSFIELD
MACCLESFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 24
Survey date: MONDAY *24/11/14* *Survey Type: MANUAL*

9 **DC-03-A-08** **BUNGALOWS** **DORSET**
HURSTDENE ROAD
CASTLE LANE WEST
BOURNEMOUTH
Edge of Town
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY *24/03/14* *Survey Type: MANUAL*

10 **DV-03-A-01** **TERRACED HOUSES** **DEVON**
BRONSHILL ROAD

TORQUAY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 37
Survey date: WEDNESDAY *30/09/15* *Survey Type: MANUAL*

11 **DV-03-A-02** **HOUSES & BUNGALOWS** **DEVON**
MILLHEAD ROAD

HONITON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 116
Survey date: FRIDAY *25/09/15* *Survey Type: MANUAL*

12 **DV-03-A-03** **TERRACED & SEMI DETACHED** **DEVON**
LOWER BRAND LANE

HONITON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 70
Survey date: MONDAY *28/09/15* *Survey Type: MANUAL*

13 **EA-03-A-01** **DETATCHED** **EAST AYRSHIRE**
TALISKER AVENUE

KILMARNOCK
Edge of Town
Residential Zone
Total Number of dwellings: 39
Survey date: THURSDAY *05/06/08* *Survey Type: MANUAL*

14 **ES-03-A-02** **PRIVATE HOUSING** **EAST SUSSEX**
SOUTH COAST ROAD

PEACEHAVEN
Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY *18/11/11* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

15 **EX-03-A-01** **SEMI-DET.** **ESSEX**
MILTON ROAD
CORRINGHAM
STANFORD-LE-HOPE
Edge of Town
Residential Zone
Total Number of dwellings: 237
Survey date: TUESDAY *13/05/08* *Survey Type: MANUAL*

16 **FA-03-A-01** **SEMI-DETACHED/TERRACED** **FALKIRK**
MANDELA AVENUE

FALKIRK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 37
Survey date: THURSDAY *30/05/13* *Survey Type: MANUAL*

17 **FA-03-A-02** **MIXED HOUSES** **FALKIRK**
ROSEBANK AVENUE & SPRINGFIELD DRIVE

FALKIRK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 161
Survey date: WEDNESDAY *29/05/13* *Survey Type: MANUAL*

18 **GA-03-A-04** **SEMi DET. & BUNGALOWS** **GALWAY**
R347 CAHEROYN ROAD

ATHENRY
Edge of Town Centre
Residential Zone
Total Number of dwellings: 21
Survey date: TUESDAY *09/10/12* *Survey Type: MANUAL*

19 **GM-03-A-10** **DETACHED/SEMI** **GREATER MANCHESTER**
BUTT HILL DRIVE
PRESTWICH
MANCHESTER
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY *12/10/11* *Survey Type: MANUAL*

20 **HC-03-A-17** **HOUSES & FLATS** **HAMPSHIRE**
CANADA WAY

LIPHOOK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 36
Survey date: THURSDAY *12/11/15* *Survey Type: MANUAL*

21 **HI-03-A-13** **HOUSING** **HIGHLAND**
KINGSMILLS ROAD

INVERNESS
Edge of Town
Residential Zone
Total Number of dwellings: 9
Survey date: THURSDAY *21/05/09* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

22 **LC-03-A-30** **SEMI-DETACHED** **LANCASHIRE**
WATSON ROAD

BLACKPOOL
Edge of Town Centre
Residential Zone
Total Number of dwellings: 24
Survey date: FRIDAY *14/06/13* *Survey Type: MANUAL*

23 **LN-03-A-03** **SEMI DETACHED** **LINCOLNSHIRE**
ROOKERY LANE
BOULTHAM
LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY *18/09/12* *Survey Type: MANUAL*

24 **LN-03-A-04** **DETACHED & SEMI-DETACHED** **LINCOLNSHIRE**
EGERTON ROAD

LINCOLN
Edge of Town Centre
Residential Zone
Total Number of dwellings: 30
Survey date: MONDAY *29/06/15* *Survey Type: MANUAL*

25 **LT-03-A-01** **SEMI-DETACHED & DETACHED** **LEITRIM**
ARD NA SI
ATTIRORY
CARRICK-ON-SHANNON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 90
Survey date: FRIDAY *24/04/15* *Survey Type: MANUAL*

26 **MA-03-A-01** **SEMI-DET. & TERRACED** **MAYO**
N26 STATION ROAD

BALLINA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 74
Survey date: FRIDAY *15/07/11* *Survey Type: MANUAL*

27 **MS-03-A-03** **DETACHED** **MERSEYSIDE**
BEMPTON ROAD
OTTERSPOOL
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY *21/06/13* *Survey Type: MANUAL*

28 **NE-03-A-02** **SEMI DETACHED & DETACHED** **NORTH EAST LINCOLNSHIRE**
HANOVER WALK

SCUNTHORPE
Edge of Town
No Sub Category
Total Number of dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

29 **NE-03-A-03** **PRIVATE HOUSES** **NORTH EAST LINCOLNSHIRE**
STATION ROAD

SCUNTHORPE
Edge of Town Centre
Residential Zone
Total Number of dwellings: 180
Survey date: TUESDAY *20/05/14* *Survey Type: MANUAL*

30 **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*

31 **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*

32 **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*

33 **NY-03-A-03** **PRIVATE HOUSING** **NORTH YORKSHIRE**
NEW ROW

BOROUGHBRIDGE
Edge of Town Centre
Residential Zone
Total Number of dwellings: 14
Survey date: MONDAY *15/09/08* *Survey Type: MANUAL*

34 **NY-03-A-06** **BUNGALOWS & SEMI DET.** **NORTH YORKSHIRE**
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY *14/10/11* *Survey Type: MANUAL*

35 **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*

LIST OF SITES relevant to selection parameters (Cont.)

36 **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*

37 **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*

38 **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*

39 **PK-03-A-01** **DETAC. & BUNGALOWS** **PERTH & KINROSS**
TULLYLUMB TERRACE
GORNHILL
PERTH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 36
Survey date: WEDNESDAY *11/05/11* *Survey Type: MANUAL*

40 **PS-03-A-01** **MIXED HOUSES** **POWYS**
BRYN GLAS

WELSHPOOL
Edge of Town Centre
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY *11/05/15* *Survey Type: MANUAL*

41 **PS-03-A-02** **DETACHED/SEMI-DETACHED** **POWYS**
GUNROG ROAD

WELSHPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY *11/05/15* *Survey Type: MANUAL*

42 **RO-03-A-01** **MIXED HOUSES** **ROSCOMMON**
GALWAY ROAD

ROSCOMMON
Edge of Town
No Sub Category
Total Number of dwellings: 80
Survey date: THURSDAY *07/05/09* *Survey Type: MANUAL*

43 **RO-03-A-02** **SEMI DET. & BUNGALOWS** **ROSCOMMON**
SLIGO ROAD

BALLAGHADERREEN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 31
Survey date: THURSDAY *14/07/11* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

44 **RO-03-A-03** **DETACHED HOUSES** **ROSCOMMON**
N61
GREATMEADOW
BOYLE
Edge of Town
No Sub Category
Total Number of dwellings: 23
Survey date: THURSDAY *25/09/14* *Survey Type: MANUAL*

45 **RO-03-A-04** **SEMI DET. & BUNGALOWS** **ROSCOMMON**
EAGLE COURT
ARDNANAGH
ROSCOMMON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 39
Survey date: FRIDAY *26/09/14* *Survey Type: MANUAL*

46 **SC-03-A-04** **DETACHED & TERRACED** **SURREY**
HIGH ROAD

BYFLEET
Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY *23/01/14* *Survey Type: MANUAL*

47 **SF-03-A-04** **DETACHED & BUNGALOWS** **SUFFOLK**
NORMANSTON DRIVE

LOWESTOFT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY *23/10/12* *Survey Type: MANUAL*

48 **SF-03-A-05** **DETACHED HOUSES** **SUFFOLK**
VALE LANE

BURY ST EDMUNDS
Edge of Town
Residential Zone
Total Number of dwellings: 18
Survey date: WEDNESDAY *09/09/15* *Survey Type: MANUAL*

49 **SH-03-A-03** **DETATCHED** **SHROPSHIRE**
SOMERBY DRIVE
BICTON HEATH
SHREWSBURY
Edge of Town
No Sub Category
Total Number of dwellings: 10
Survey date: FRIDAY *26/06/09* *Survey Type: MANUAL*

50 **SH-03-A-04** **TERRACED** **SHROPSHIRE**
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108
Survey date: THURSDAY *11/06/09* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

51 **SH-03-A-05** **SEMI-DETACHED/TERRACED** **SHROPSHIRE**
SANDCROFT
SUTTON HILL
TELFORD
Edge of Town
Residential Zone
Total Number of dwellings: 54
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

52 **SH-03-A-06** **BUNGALOWS** **SHROPSHIRE**
ELLESMERE ROAD

SHREWSBURY
Edge of Town
Residential Zone
Total Number of dwellings: 16
Survey date: THURSDAY *22/05/14* *Survey Type: MANUAL*

53 **SM-03-A-01** **DETACHED & SEMI** **SOMERSET**
WEMBDON ROAD
NORTHFIELD
BRIDGWATER
Edge of Town
Residential Zone
Total Number of dwellings: 33
Survey date: THURSDAY *24/09/15* *Survey Type: MANUAL*

54 **ST-03-A-05** **TERRACED & DETACHED** **STAFFORDSHIRE**
WATERMEET GROVE
ETRURIA
STOKE-ON-TRENT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: WEDNESDAY *26/11/08* *Survey Type: MANUAL*

55 **ST-03-A-06** **SEMI-DET. & TERRACED** **STAFFORDSHIRE**
STANFORD ROAD
BLAKENHALL
WOLVERHAMPTON
Edge of Town Centre
No Sub Category
Total Number of dwellings: 17
Survey date: FRIDAY *09/05/14* *Survey Type: MANUAL*

56 **SY-03-A-01** **SEMI DETACHED HOUSES** **SOUTH YORKSHIRE**
A19 BENTLEY ROAD
BENTLEY RISE
DONCASTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 54
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

57 **TW-03-A-02** **SEMI-DETACHED** **TYNE & WEAR**
WEST PARK ROAD

GATESHEAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY *07/10/13* *Survey Type: MANUAL*

58 **WK-03-A-01** **TERRACED/SEMI/DET.** **WARWICKSHIRE**
ARLINGTON AVENUE

LEAMINGTON SPA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 6
Survey date: FRIDAY *21/10/11* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

59	**WK-03-A-02**	**BUNGALOWS**		**WARWICKSHIRE**
	NARBERTH WAY			
	POTTERS GREEN			
	COVENTRY			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:		17	
	Survey date: THURSDAY		*17/10/13*	*Survey Type: MANUAL*
60	**WS-03-A-04**	**MIXED HOUSES**		**WEST SUSSEX**
	HILLS FARM LANE			
	BROADBRIDGE HEATH			
	HORSHAM			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:		151	
	Survey date: THURSDAY		*11/12/14*	*Survey Type: MANUAL*
61	**WS-03-A-05**	**TERRACED & FLATS**		**WEST SUSSEX**
	UPPER SHOREHAM ROAD			
	SHOREHAM BY SEA			
	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/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.066	4.835	61	55	0.250	18.277	61	55	0.316	23.112
08:00 - 09:00	61	55	0.143	10.429	**61**	**55**	**0.376**	**27.448**	61	55	0.519	37.877
09:00 - 10:00	61	55	0.147	10.732	61	55	0.182	13.269	61	55	0.329	24.001
10:00 - 11:00	61	55	0.129	9.388	61	55	0.152	11.122	61	55	0.281	20.510
11:00 - 12:00	61	55	0.141	10.298	61	55	0.145	10.559	61	55	0.286	20.857
12:00 - 13:00	61	55	0.160	11.708	61	55	0.155	11.339	61	55	0.315	23.047
13:00 - 14:00	61	55	0.168	12.293	61	55	0.166	12.120	61	55	0.334	24.413
14:00 - 15:00	61	55	0.163	11.925	61	55	0.183	13.334	61	55	0.346	25.259
15:00 - 16:00	61	55	0.264	19.274	61	55	0.189	13.832	61	55	0.453	33.106
16:00 - 17:00	61	55	0.284	20.727	61	55	0.174	12.705	61	55	0.458	33.432
17:00 - 18:00	**61**	**55**	**0.332**	**24.218**	61	55	0.193	14.114	**61**	**55**	**0.525**	**38.332**
18:00 - 19:00	61	55	0.236	17.236	61	55	0.168	12.250	61	55	0.404	29.486
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			2.233	163.063			2.333	170.369			4.566	333.432

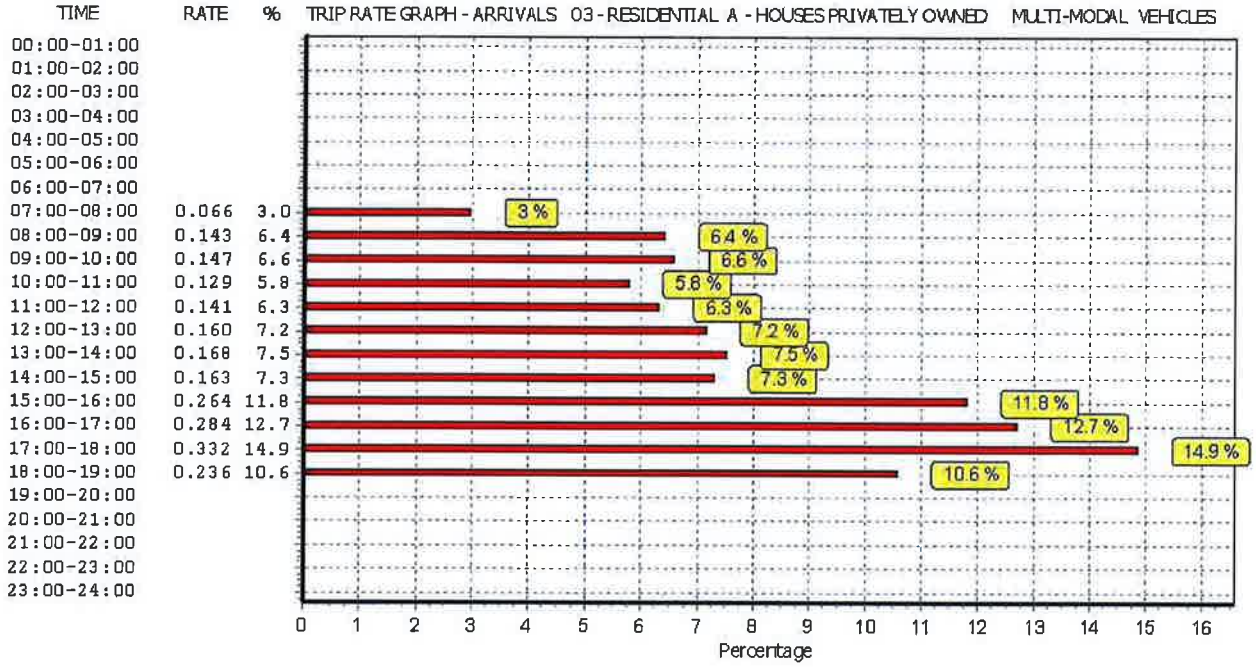
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

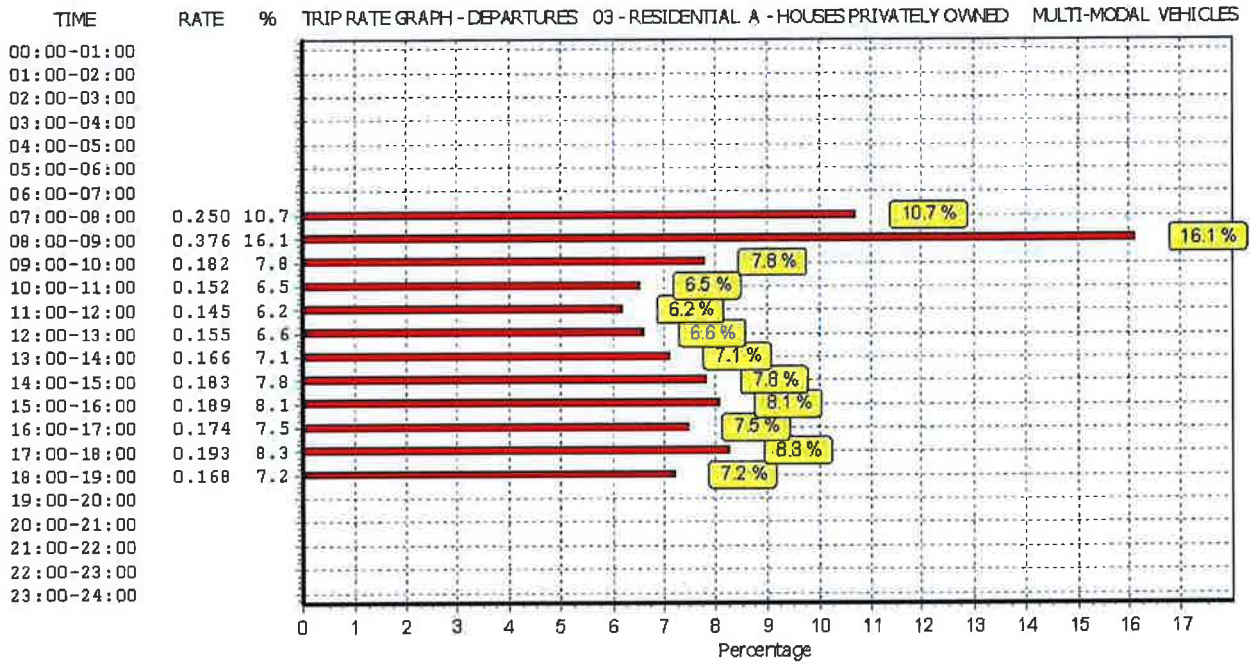
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

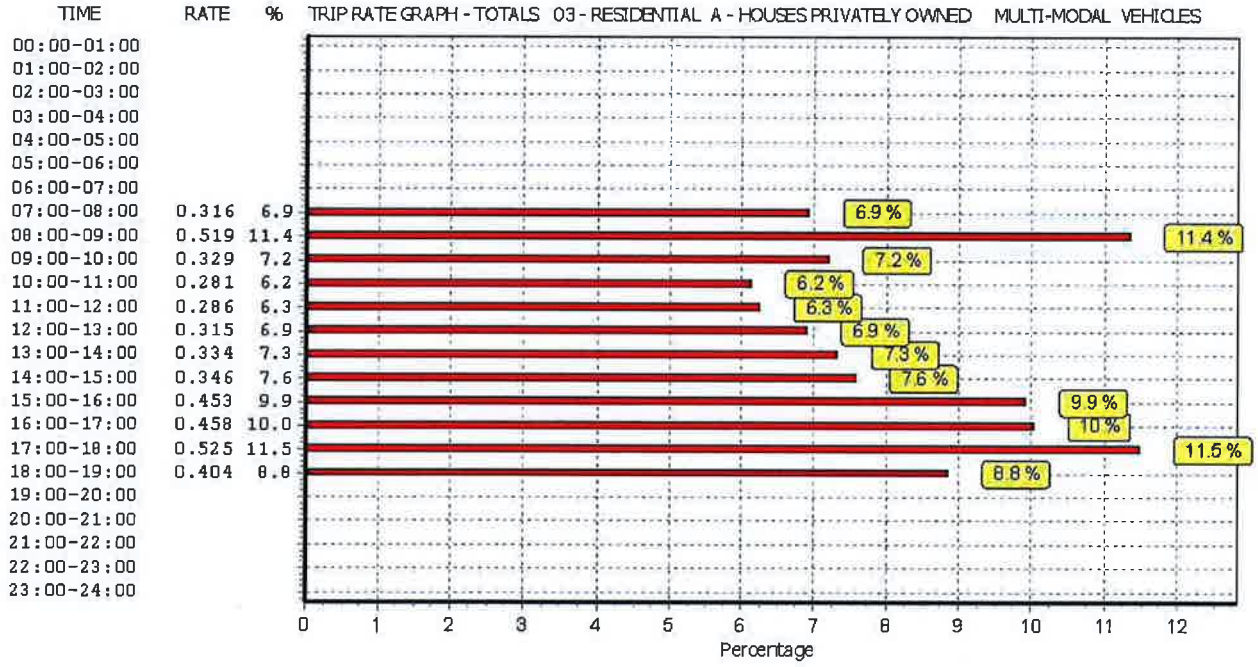
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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



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



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

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

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.003	0.217	61	55	0.003	0.195	61	55	0.006	0.412
08:00 - 09:00	61	55	0.004	0.282	61	55	0.004	0.282	61	55	0.008	0.564
09:00 - 10:00	61	55	0.003	0.238	61	55	0.003	0.217	61	55	0.006	0.455
10:00 - 11:00	61	55	0.003	0.217	61	55	0.003	0.195	61	55	0.006	0.412
11:00 - 12:00	61	55	0.002	0.173	61	55	0.002	0.173	61	55	0.004	0.346
12:00 - 13:00	61	55	0.002	0.130	61	55	0.002	0.130	61	55	0.004	0.260
13:00 - 14:00	61	55	0.002	0.152	61	55	0.001	0.108	61	55	0.003	0.260
14:00 - 15:00	61	55	0.002	0.173	61	55	0.002	0.152	61	55	0.004	0.325
15:00 - 16:00	**61**	**55**	**0.005**	**0.390**	**61**	**55**	**0.006**	**0.412**	**61**	**55**	**0.011**	**0.802**
16:00 - 17:00	61	55	0.004	0.282	61	55	0.004	0.282	61	55	0.008	0.564
17:00 - 18:00	61	55	0.004	0.260	61	55	0.003	0.195	61	55	0.007	0.455
18:00 - 19:00	61	55	0.003	0.195	61	55	0.004	0.260	61	55	0.007	0.455
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.037	2.709			0.037	2.601			0.074	5.310

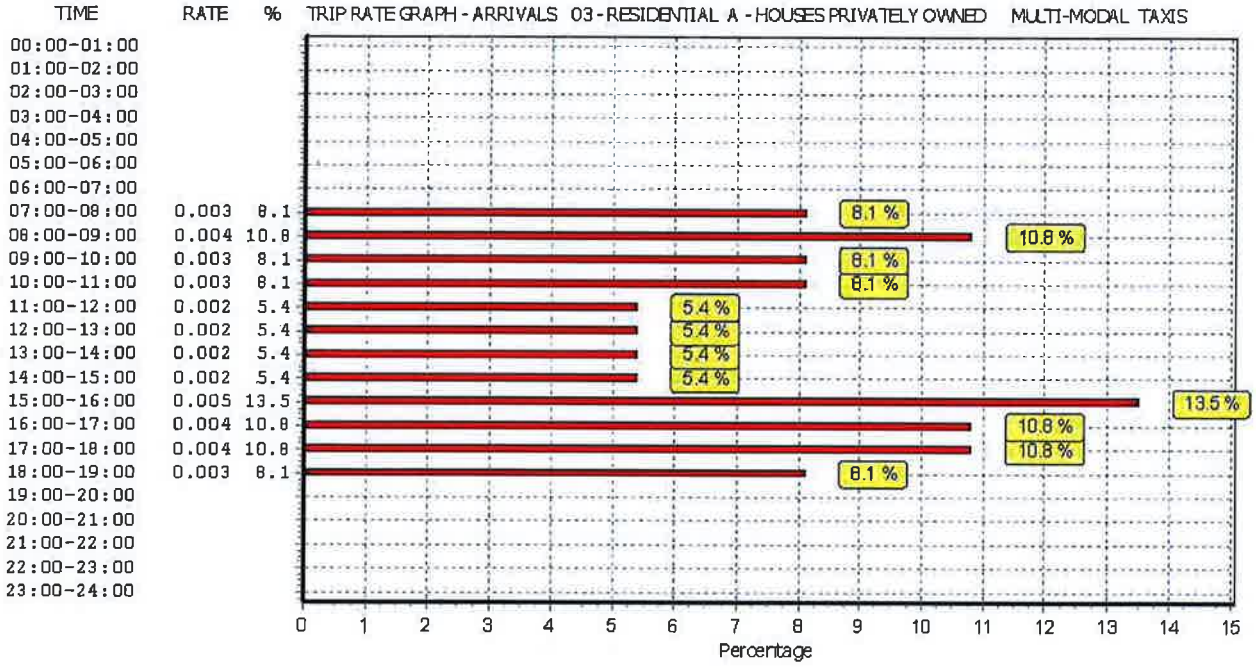
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

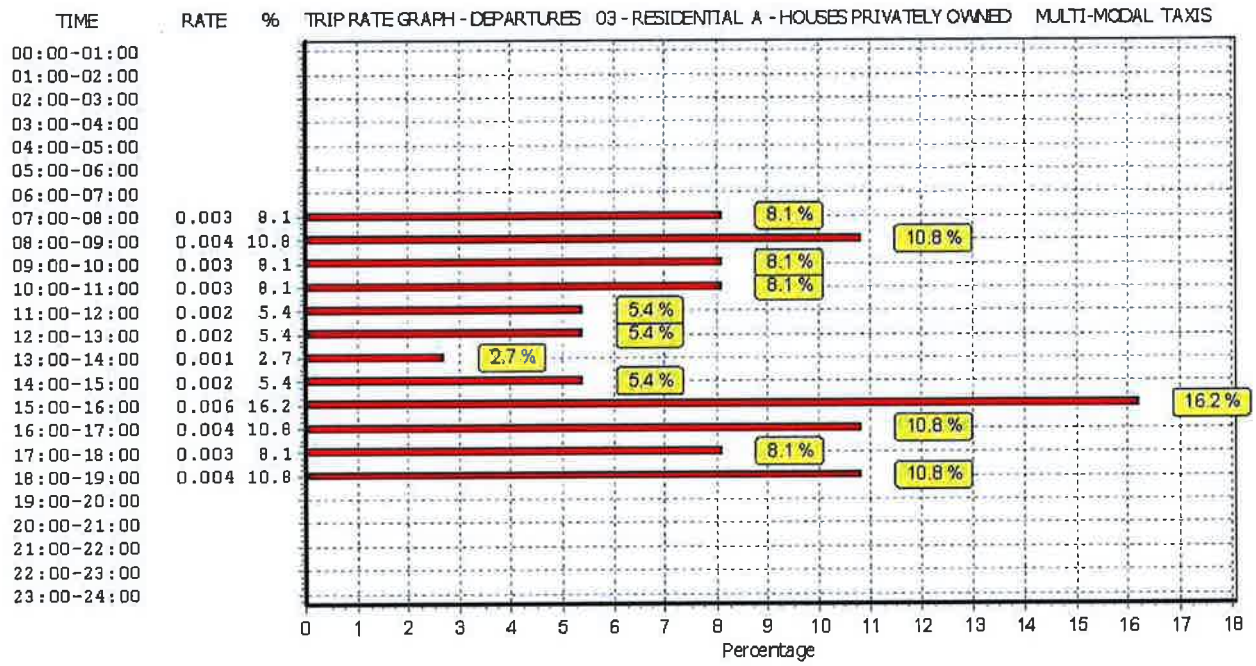
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

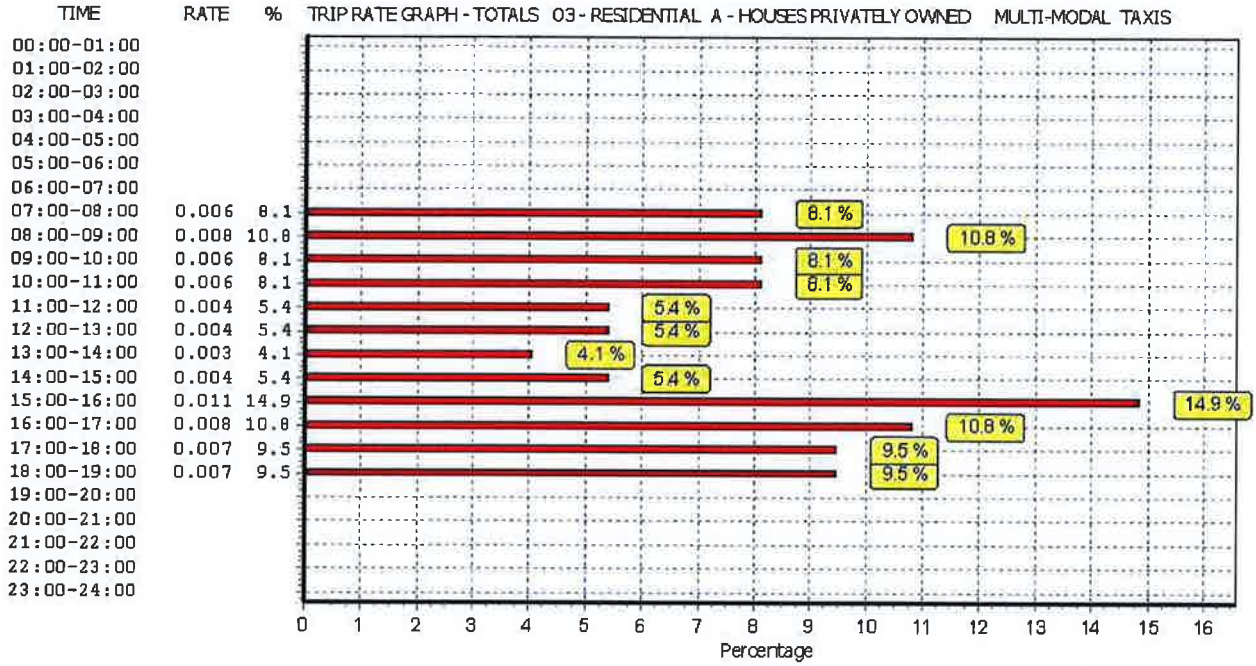
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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



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



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

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

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.001	0.065	61	55	0.001	0.108	61	55	0.002	0.173
08:00 - 09:00	**61**	**55**	**0.004**	**0.260**	**61**	**55**	**0.003**	**0.217**	**61**	**55**	**0.007**	**0.477**
09:00 - 10:00	61	55	0.003	0.195	61	55	0.002	0.130	61	55	0.005	0.325
10:00 - 11:00	61	55	0.002	0.173	61	55	0.002	0.173	61	55	0.004	0.346
11:00 - 12:00	61	55	0.003	0.217	61	55	0.003	0.195	61	55	0.006	0.412
12:00 - 13:00	61	55	0.002	0.173	61	55	0.003	0.195	61	55	0.005	0.368
13:00 - 14:00	61	55	0.002	0.152	61	55	0.002	0.173	61	55	0.004	0.325
14:00 - 15:00	61	55	0.001	0.065	61	55	0.002	0.173	61	55	0.003	0.238
15:00 - 16:00	61	55	0.001	0.043	61	55	0.001	0.043	61	55	0.002	0.086
16:00 - 17:00	61	55	0.001	0.108	61	55	0.001	0.087	61	55	0.002	0.195
17:00 - 18:00	61	55	0.001	0.087	61	55	0.001	0.087	61	55	0.002	0.174
18:00 - 19:00	61	55	0.000	0.022	61	55	0.000	0.022	61	55	0.000	0.044
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.021	1.560			0.021	1.603			0.042	3.163

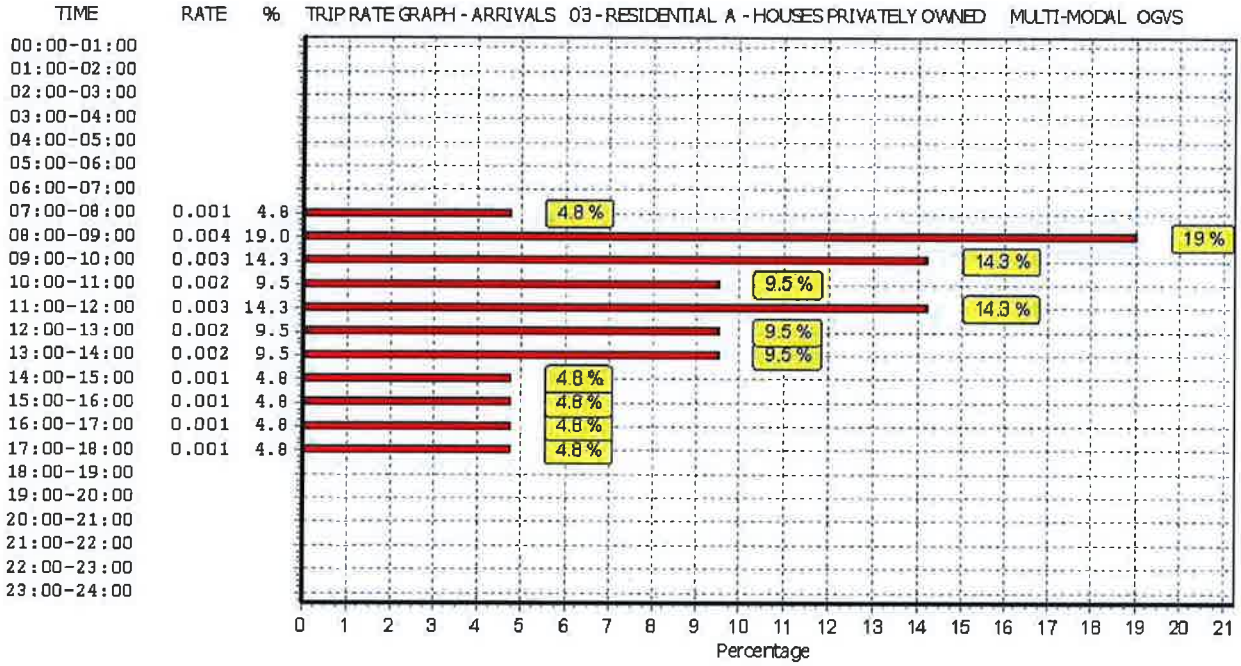
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

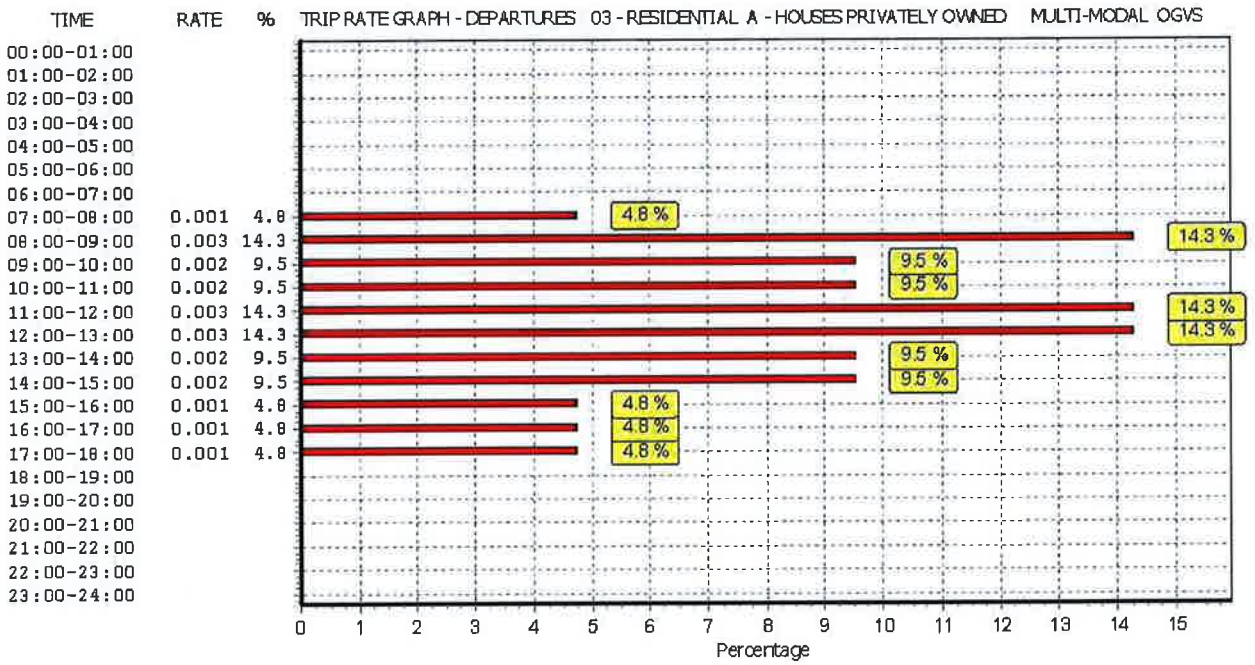
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

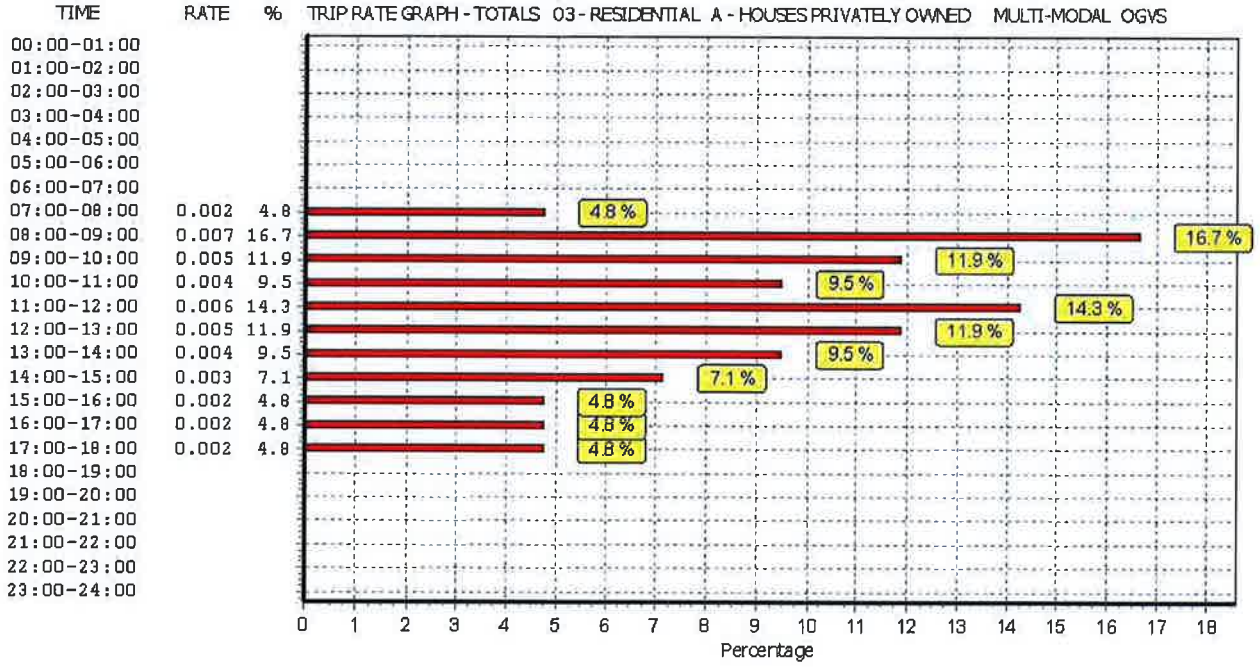
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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



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



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

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

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
08:00 - 09:00	61	55	0.000	0.022	61	55	0.000	0.022	61	55	0.000	0.044
09:00 - 10:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
10:00 - 11:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
11:00 - 12:00	**61**	**55**	**0.001**	**0.065**	**61**	**55**	**0.001**	**0.065**	**61**	**55**	**0.002**	**0.130**
12:00 - 13:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
13:00 - 14:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
14:00 - 15:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
15:00 - 16:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
16:00 - 17:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
17:00 - 18:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
18:00 - 19:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.001	0.087			0.001	0.087			0.002	0.174

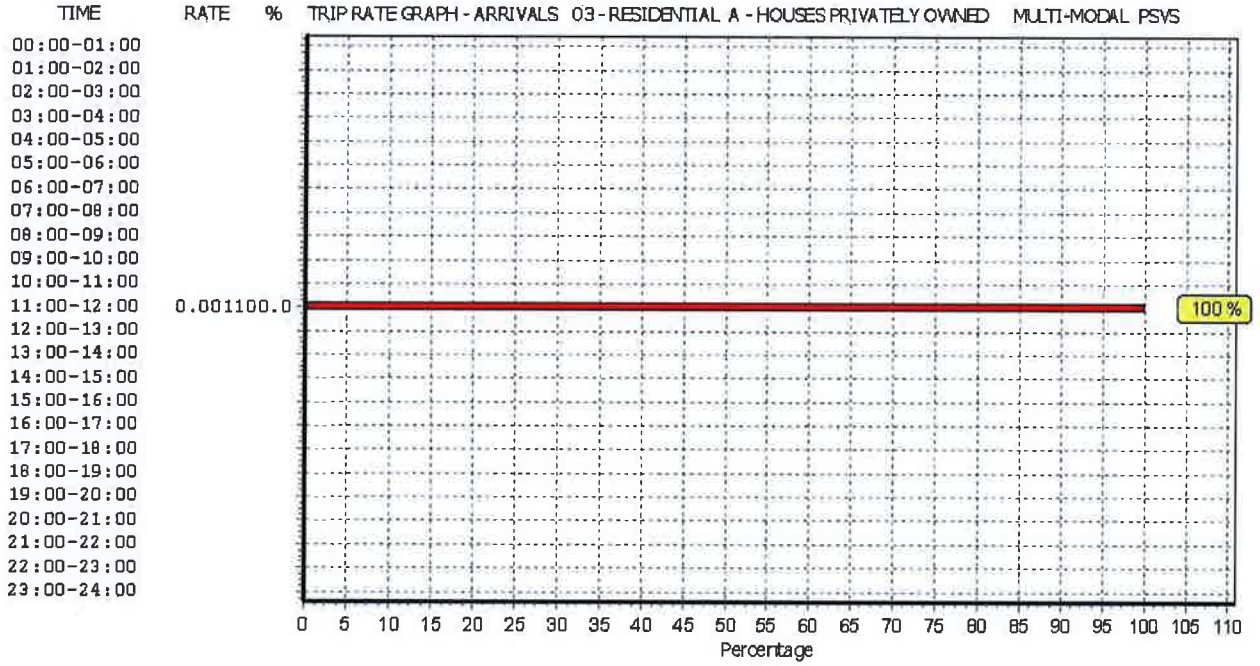
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

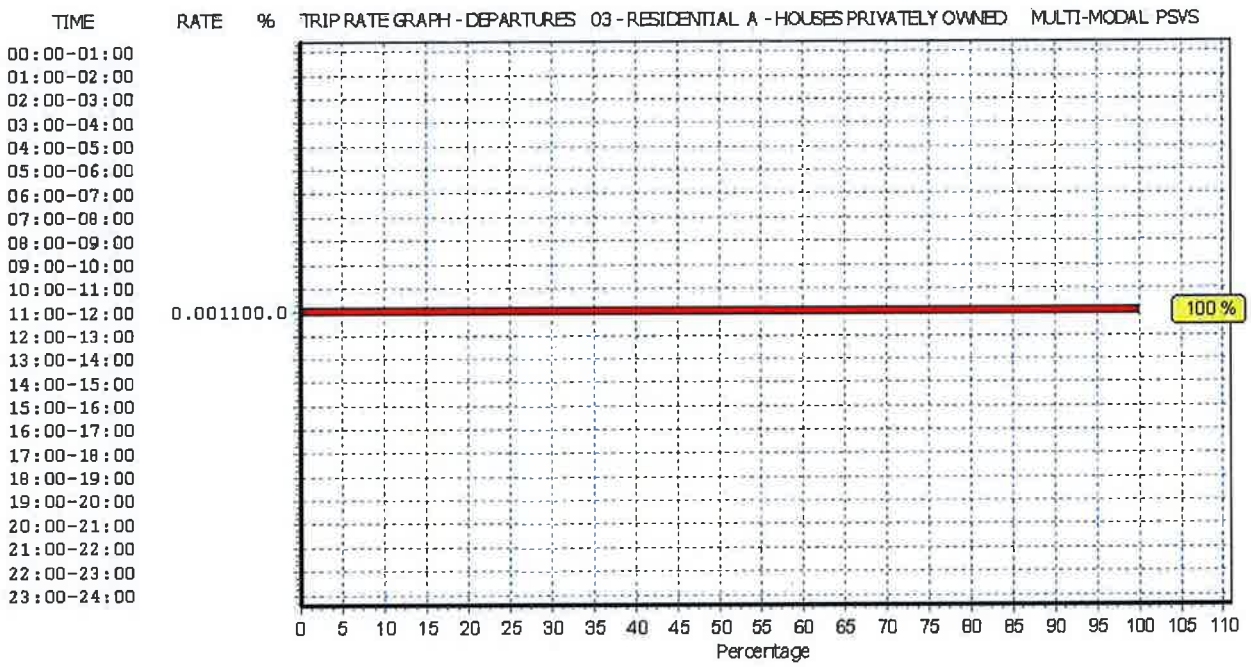
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

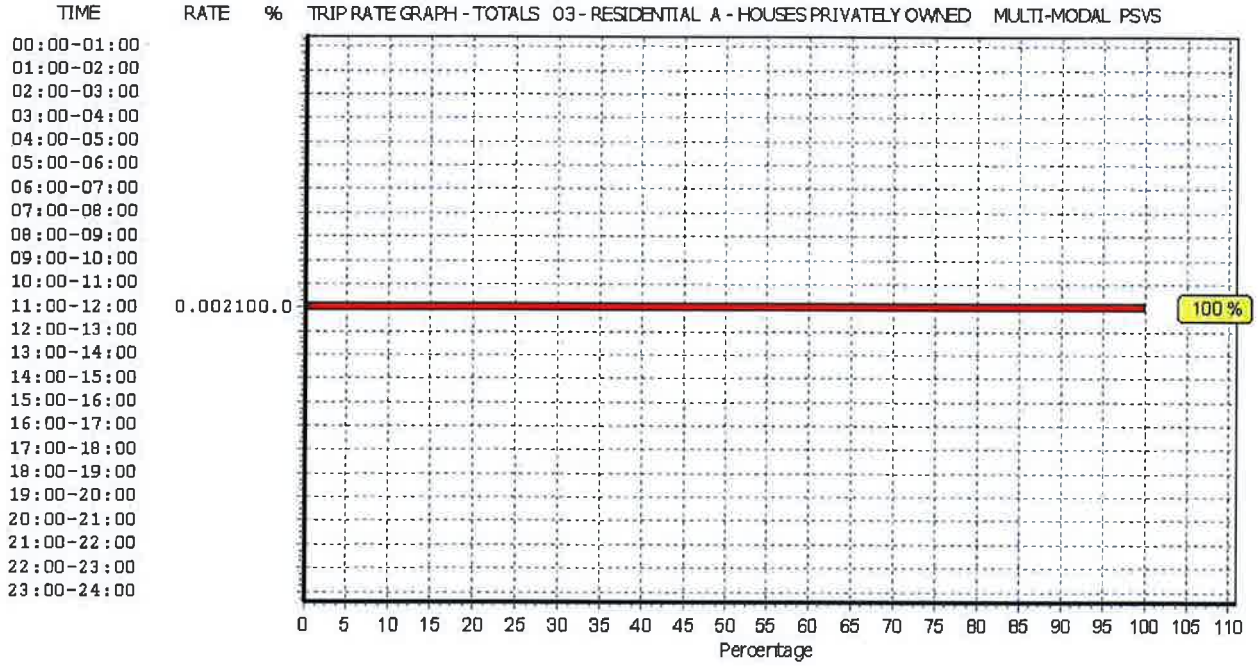
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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



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



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

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

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.004	0.282	**61**	**55**	**0.015**	**1.106**	61	55	0.019	1.388
08:00 - 09:00	61	55	0.002	0.152	61	55	0.015	1.106	61	55	0.017	1.258
09:00 - 10:00	61	55	0.001	0.108	61	55	0.004	0.304	61	55	0.005	0.412
10:00 - 11:00	61	55	0.003	0.238	61	55	0.008	0.564	61	55	0.011	0.802
11:00 - 12:00	61	55	0.003	0.238	61	55	0.003	0.195	61	55	0.006	0.433
12:00 - 13:00	61	55	0.006	0.434	61	55	0.004	0.325	61	55	0.010	0.759
13:00 - 14:00	61	55	0.004	0.325	61	55	0.003	0.217	61	55	0.007	0.542
14:00 - 15:00	61	55	0.005	0.390	61	55	0.006	0.412	61	55	0.011	0.802
15:00 - 16:00	61	55	0.014	0.997	61	55	0.005	0.347	61	55	0.019	1.344
16:00 - 17:00	61	55	0.012	0.889	61	55	0.004	0.304	61	55	0.016	1.193
17:00 - 18:00	**61**	**55**	**0.015**	**1.127**	61	55	0.008	0.585	**61**	**55**	**0.023**	**1.712**
18:00 - 19:00	61	55	0.009	0.672	61	55	0.005	0.390	61	55	0.014	1.062
19:00 - 20:00	1	7	0.000	0.000	1	7	0.000	0.000	1	7	0.000	0.000
20:00 - 21:00	1	7	0.000	0.000	1	7	0.000	0.000	1	7	0.000	0.000
21:00 - 22:00	1	7	0.000	0.000	1	7	0.000	0.000	1	7	0.000	0.000
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.078	5.852			0.080	5.855			0.158	11.707

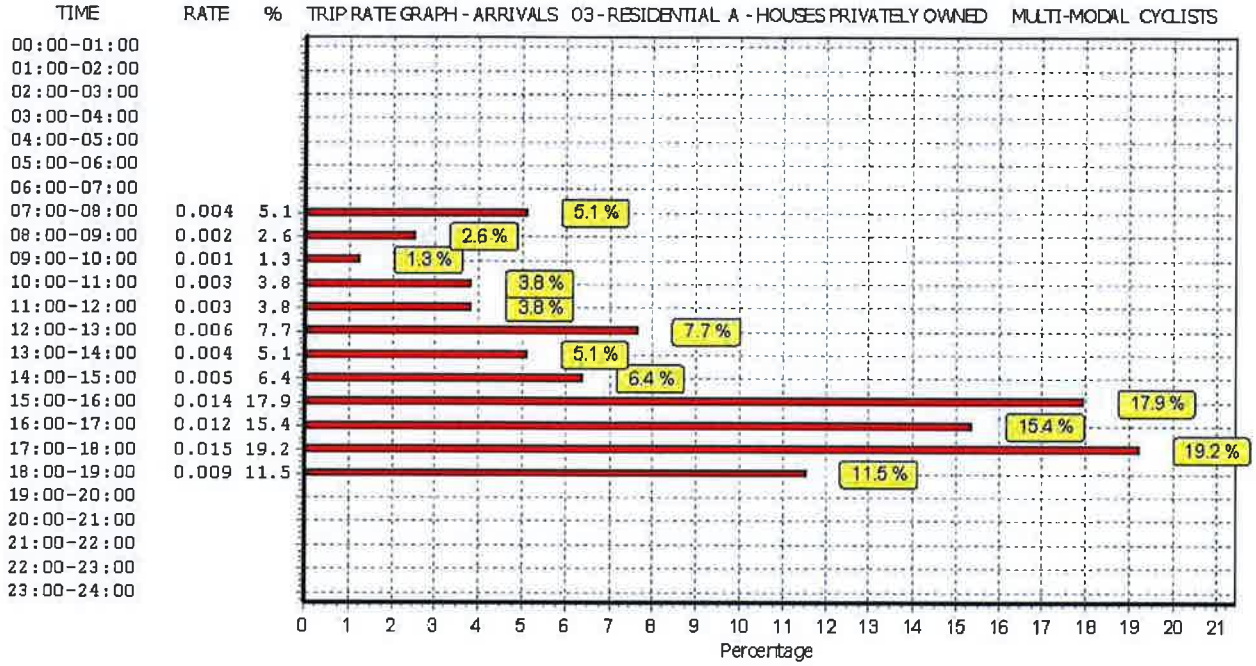
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

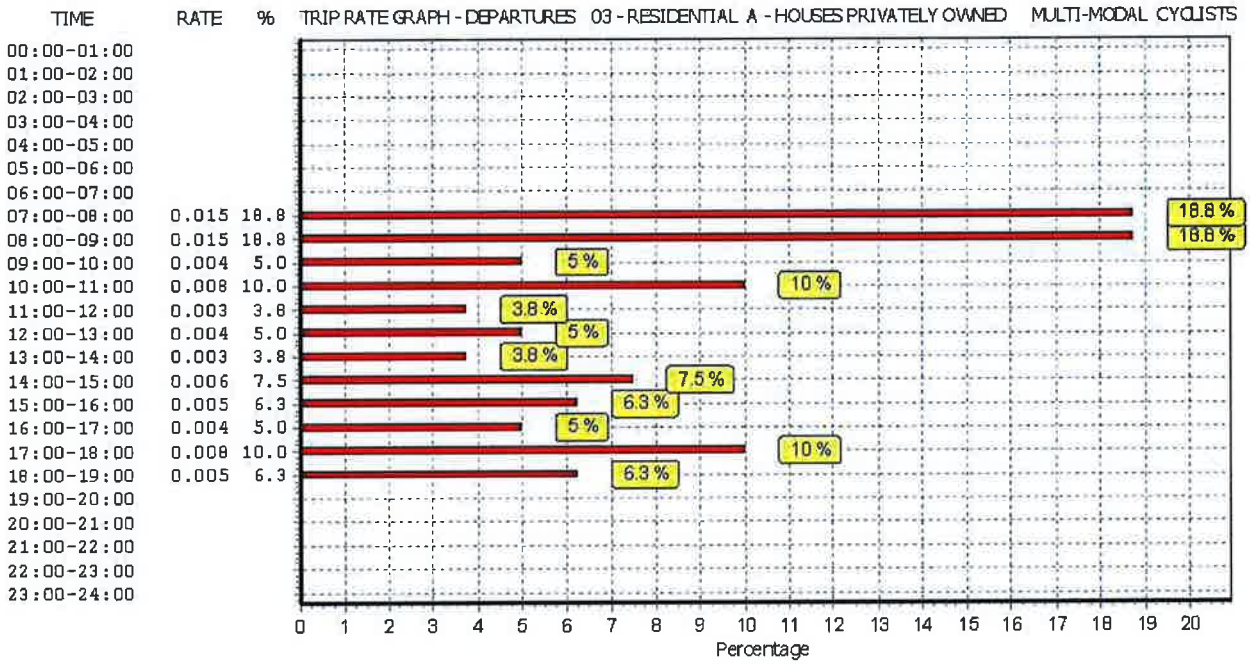
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

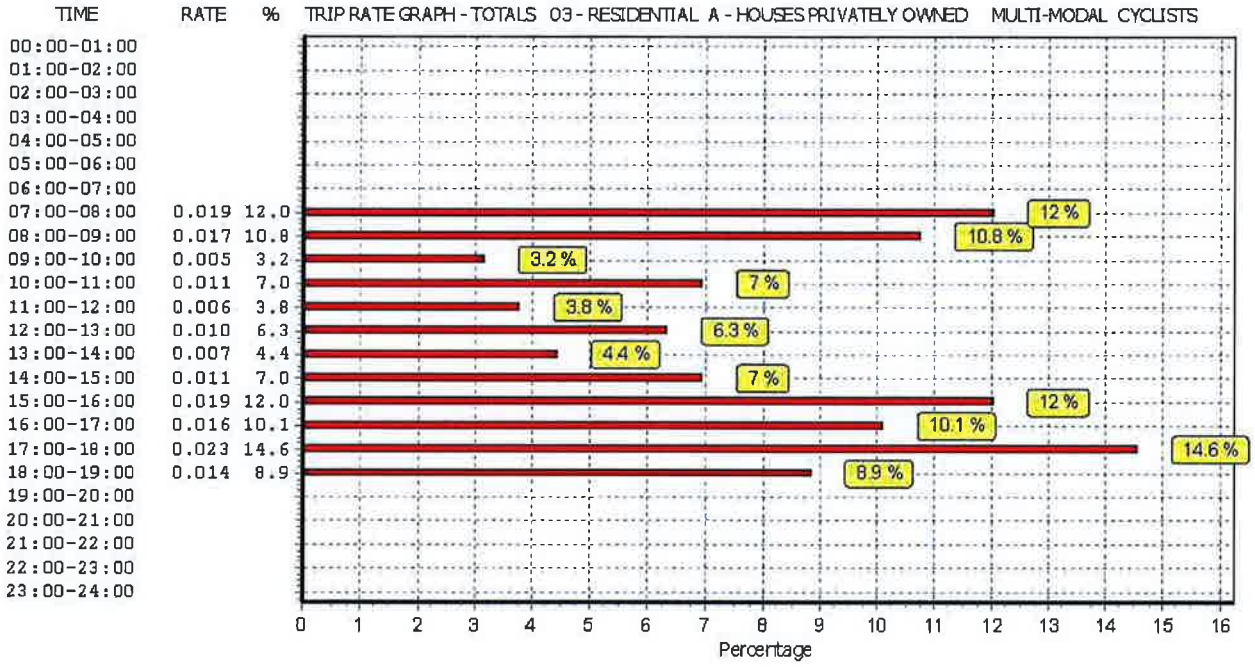
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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



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



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

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

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.074	5.420	61	55	0.304	22.158	61	55	0.378	27.578
08:00 - 09:00	61	55	0.178	12.987	**61**	**55**	**0.544**	**39.720**	**61**	**55**	**0.722**	**52.707**
09:00 - 10:00	61	55	0.171	12.488	61	55	0.240	17.497	61	55	0.411	29.985
10:00 - 11:00	61	55	0.159	11.578	61	55	0.200	14.570	61	55	0.359	26.148
11:00 - 12:00	61	55	0.176	12.857	61	55	0.187	13.637	61	55	0.363	26.494
12:00 - 13:00	61	55	0.203	14.808	61	55	0.196	14.309	61	55	0.399	29.117
13:00 - 14:00	61	55	0.212	15.480	61	55	0.214	15.589	61	55	0.426	31.069
14:00 - 15:00	61	55	0.217	15.805	61	55	0.235	17.128	61	55	0.452	32.933
15:00 - 16:00	61	55	0.407	29.725	61	55	0.253	18.494	61	55	0.660	48.219
16:00 - 17:00	61	55	0.402	29.334	61	55	0.241	17.605	61	55	0.643	46.939
17:00 - 18:00	**61**	**55**	**0.435**	**31.784**	61	55	0.260	18.993	61	55	0.695	50.777
18:00 - 19:00	61	55	0.309	22.548	61	55	0.232	16.955	61	55	0.541	39.503
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			2.943	214.814			3.106	226.655			6.049	441.469

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.

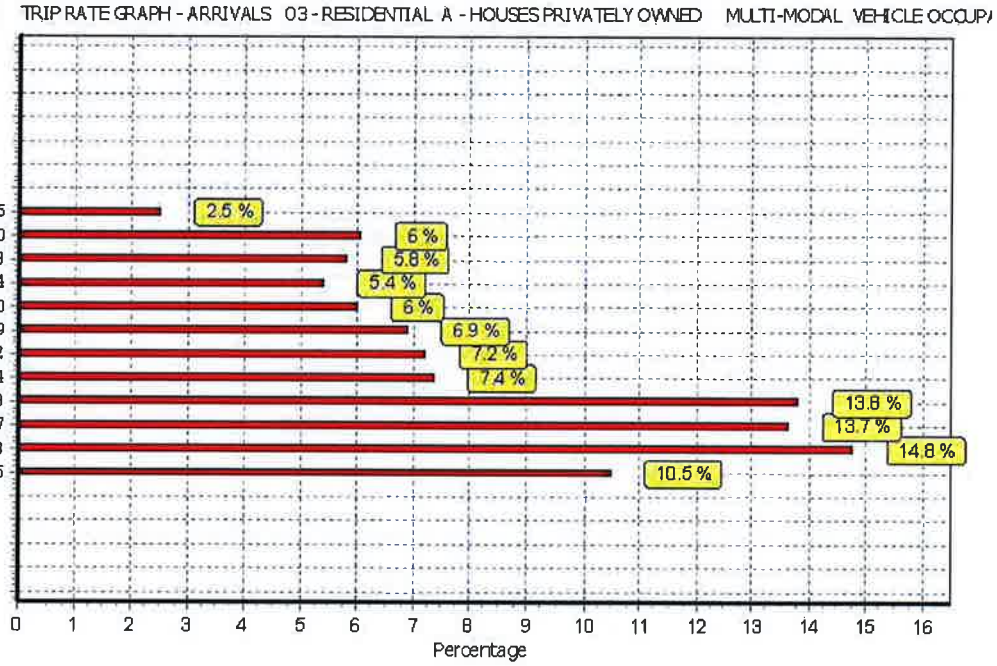
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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

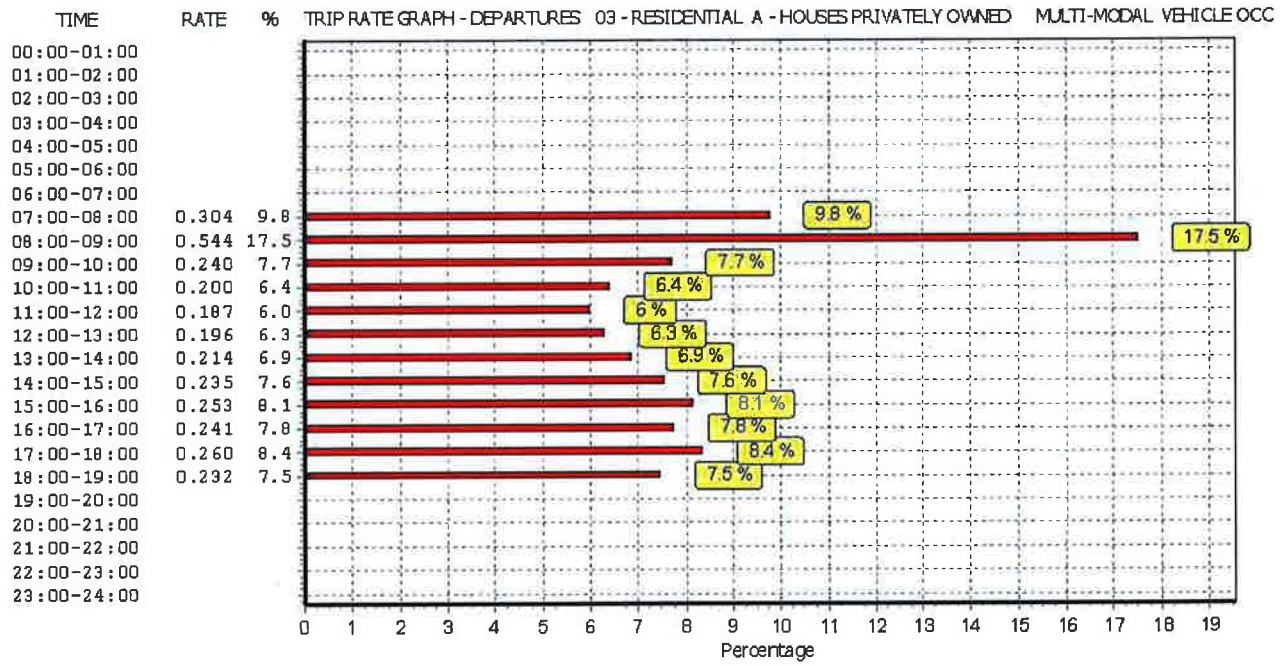
Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

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

TIME	RATE	%
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	0.074	2.5
08:00-09:00	0.178	6.0
09:00-10:00	0.171	5.8
10:00-11:00	0.159	5.4
11:00-12:00	0.176	6.0
12:00-13:00	0.203	6.9
13:00-14:00	0.212	7.2
14:00-15:00	0.217	7.4
15:00-16:00	0.407	13.8
16:00-17:00	0.402	13.7
17:00-18:00	0.435	14.8
18:00-19:00	0.309	10.5
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		

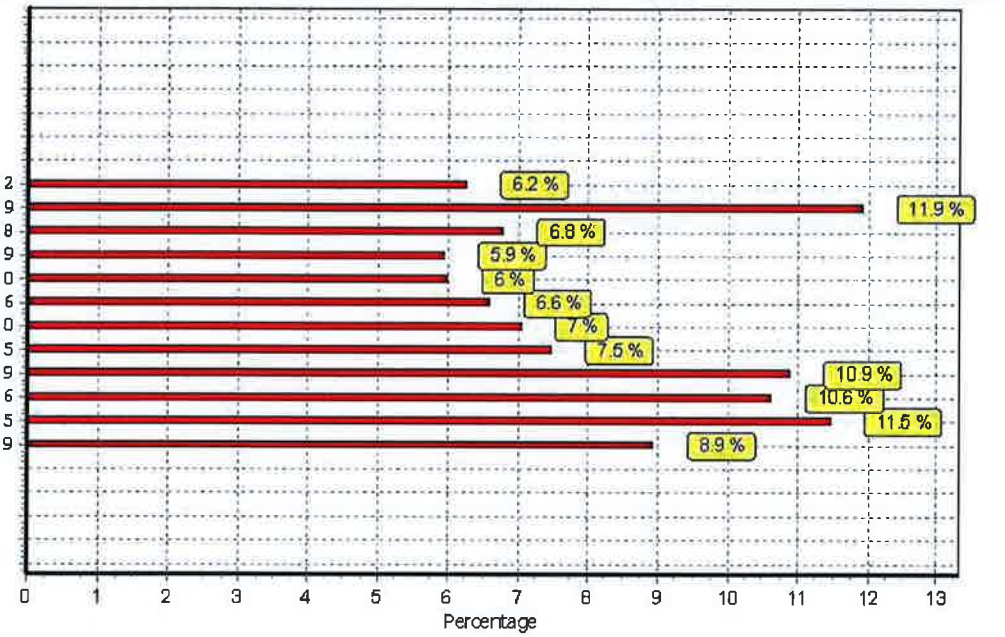


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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



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

TIME	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	0.378	6.2
08:00-09:00	0.722	11.9
09:00-10:00	0.411	6.8
10:00-11:00	0.359	5.9
11:00-12:00	0.363	6.0
12:00-13:00	0.399	6.6
13:00-14:00	0.426	7.0
14:00-15:00	0.452	7.5
15:00-16:00	0.660	10.9
16:00-17:00	0.643	10.6
17:00-18:00	0.695	11.5
18:00-19:00	0.541	8.9
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



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

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

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.025	1.800	61	55	0.062	4.553	61	55	0.087	6.353
08:00 - 09:00	61	55	0.047	3.447	**61**	**55**	**0.172**	**12.532**	61	55	0.219	15.979
09:00 - 10:00	61	55	0.047	3.426	61	55	0.064	4.661	61	55	0.111	8.087
10:00 - 11:00	61	55	0.045	3.317	61	55	0.061	4.488	61	55	0.106	7.805
11:00 - 12:00	61	55	0.045	3.296	61	55	0.042	3.079	61	55	0.087	6.375
12:00 - 13:00	61	55	0.049	3.556	61	55	0.040	2.927	61	55	0.089	6.483
13:00 - 14:00	61	55	0.045	3.274	61	55	0.055	4.011	61	55	0.100	7.285
14:00 - 15:00	61	55	0.056	4.076	61	55	0.061	4.445	61	55	0.117	8.521
15:00 - 16:00	**61**	**55**	**0.143**	**10.472**	61	55	0.077	5.594	**61**	**55**	**0.220**	**16.066**
16:00 - 17:00	61	55	0.104	7.588	61	55	0.060	4.358	61	55	0.164	11.946
17:00 - 18:00	61	55	0.094	6.895	61	55	0.052	3.794	61	55	0.146	10.689
18:00 - 19:00	61	55	0.067	4.878	61	55	0.047	3.426	61	55	0.114	8.304
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.767	56.025			0.793	57.868			1.560	113.893

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.

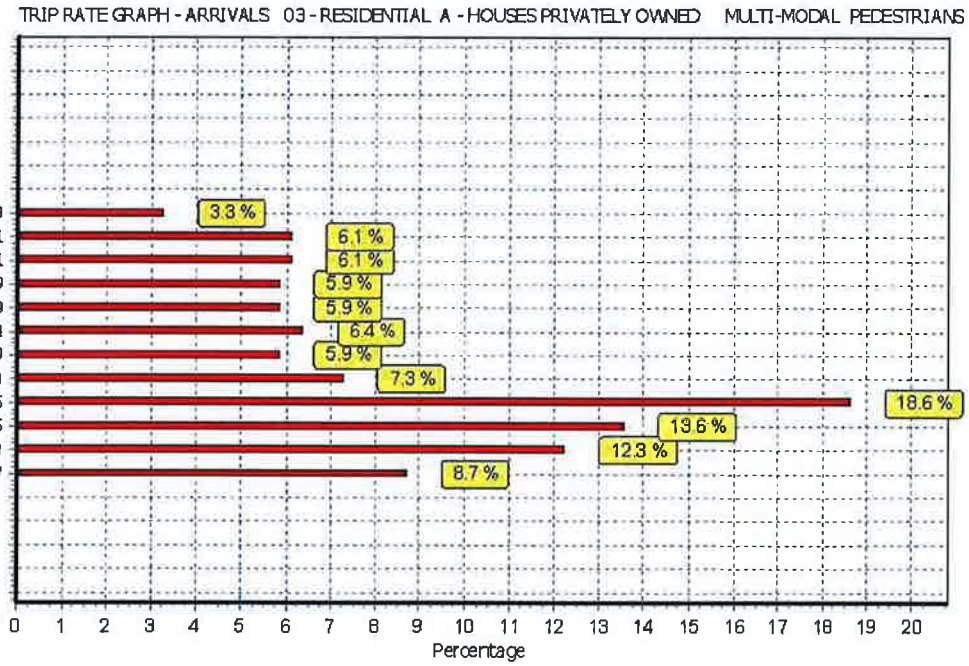
*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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

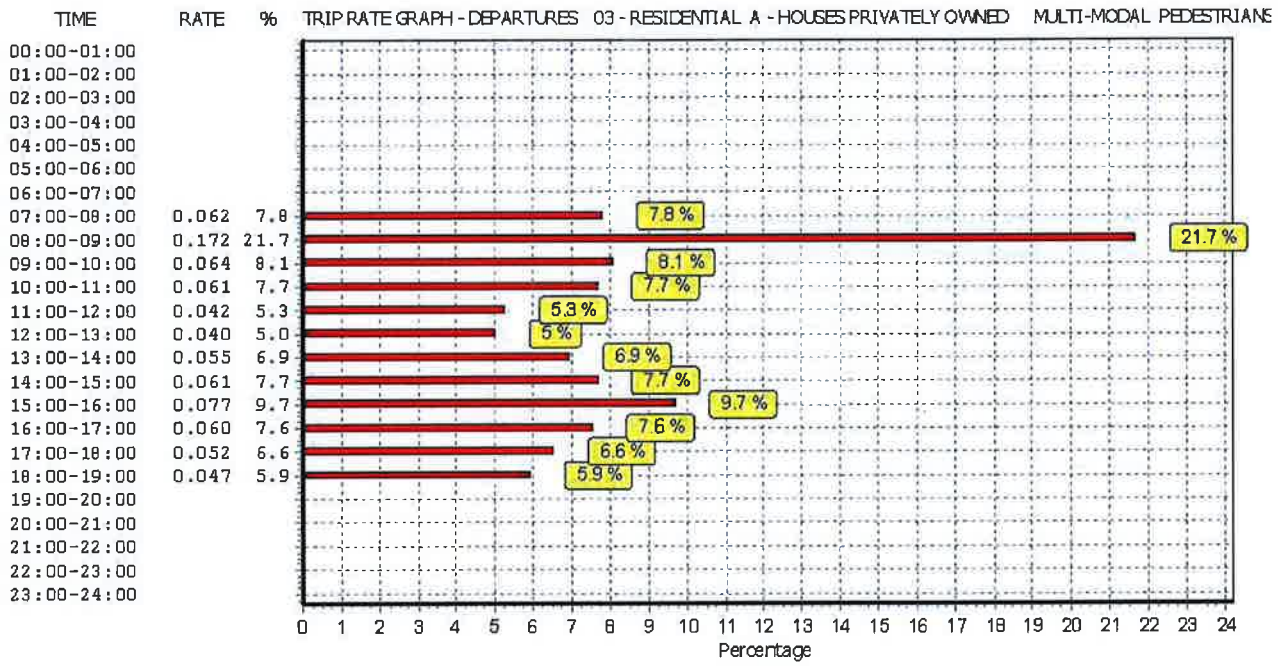
Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

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

TIME	RATE	%
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	0.025	3.3
08:00-09:00	0.047	6.1
09:00-10:00	0.047	6.1
10:00-11:00	0.045	5.9
11:00-12:00	0.045	5.9
12:00-13:00	0.049	6.4
13:00-14:00	0.045	5.9
14:00-15:00	0.056	7.3
15:00-16:00	0.143	18.6
16:00-17:00	0.104	13.6
17:00-18:00	0.094	12.3
18:00-19:00	0.067	8.7
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		

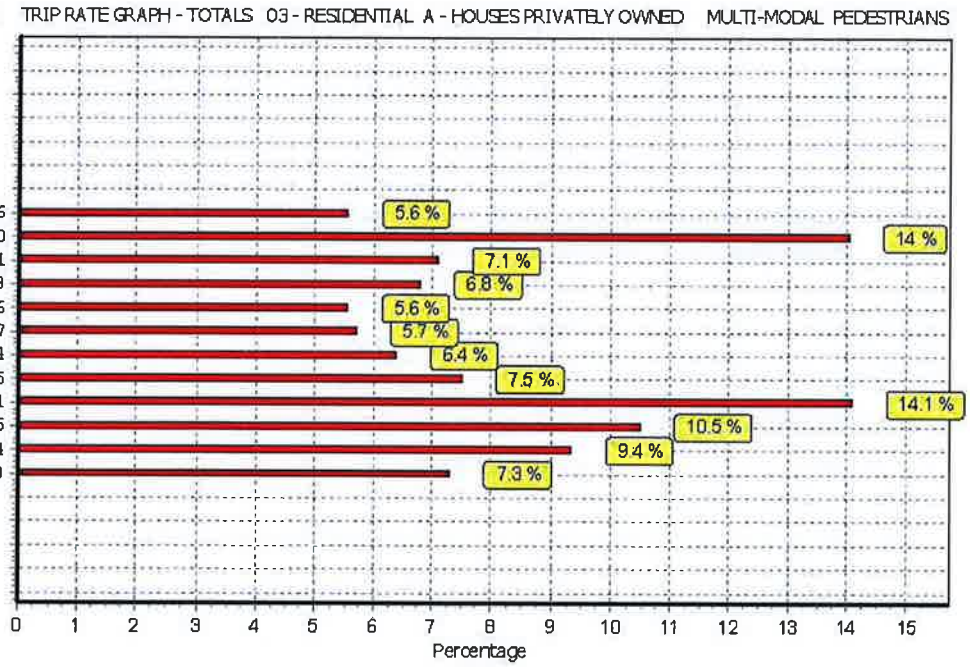


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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



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

TIME	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	0.087	5.6
08:00-09:00	0.219	14.0
09:00-10:00	0.111	7.1
10:00-11:00	0.106	6.8
11:00-12:00	0.087	5.6
12:00-13:00	0.089	5.7
13:00-14:00	0.100	6.4
14:00-15:00	0.117	7.5
15:00-16:00	0.220	14.1
16:00-17:00	0.164	10.5
17:00-18:00	0.146	9.4
18:00-19:00	0.114	7.3
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



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

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

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.000	0.022	61	55	0.005	0.369	61	55	0.005	0.391
08:00 - 09:00	61	55	0.001	0.087	**61**	**55**	**0.006**	**0.455**	61	55	0.007	0.542
09:00 - 10:00	61	55	0.001	0.108	61	55	0.006	0.412	61	55	0.007	0.520
10:00 - 11:00	61	55	0.002	0.173	61	55	0.004	0.282	61	55	0.006	0.455
11:00 - 12:00	61	55	0.003	0.195	61	55	0.004	0.260	61	55	0.007	0.455
12:00 - 13:00	61	55	0.005	0.390	61	55	0.005	0.369	61	55	0.010	0.759
13:00 - 14:00	61	55	0.004	0.304	61	55	0.001	0.108	61	55	0.005	0.412
14:00 - 15:00	61	55	0.004	0.260	61	55	0.003	0.238	61	55	0.007	0.498
15:00 - 16:00	61	55	0.006	0.455	61	55	0.003	0.238	61	55	0.009	0.693
16:00 - 17:00	**61**	**55**	**0.007**	**0.520**	61	55	0.004	0.304	**61**	**55**	**0.011**	**0.824**
17:00 - 18:00	61	55	0.007	0.520	61	55	0.002	0.152	61	55	0.009	0.672
18:00 - 19:00	61	55	0.005	0.390	61	55	0.000	0.000	61	55	0.005	0.390
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.045	3.424			0.043	3.187			0.088	6.611

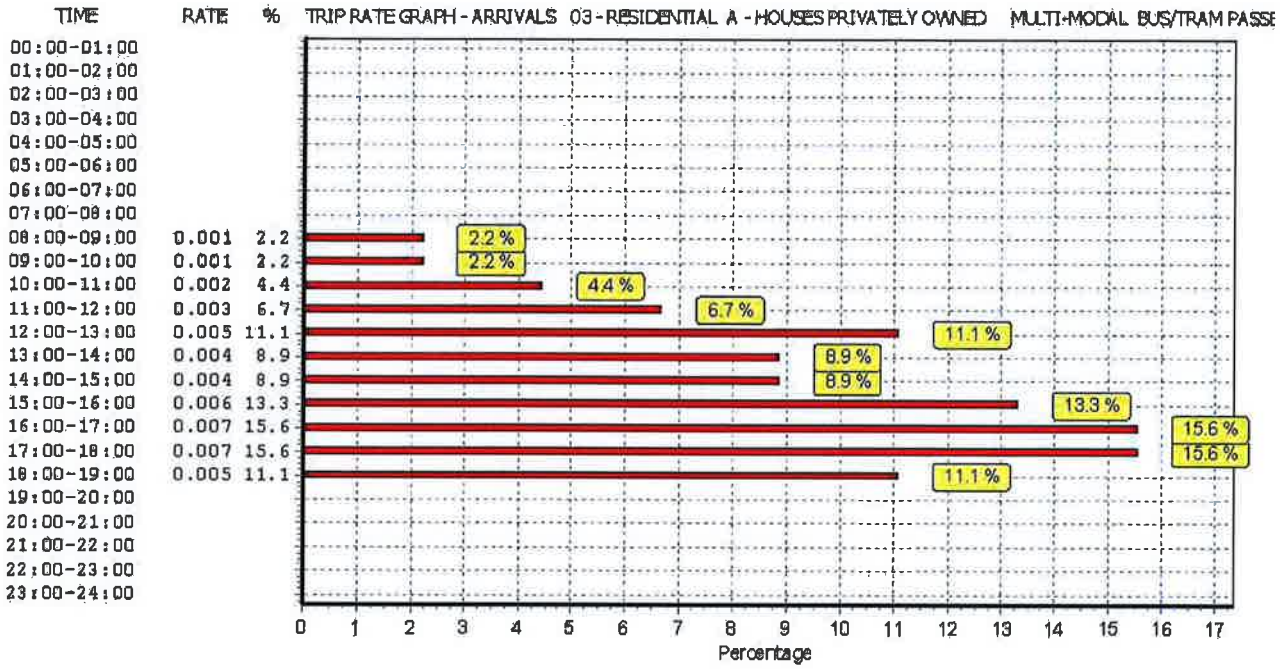
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

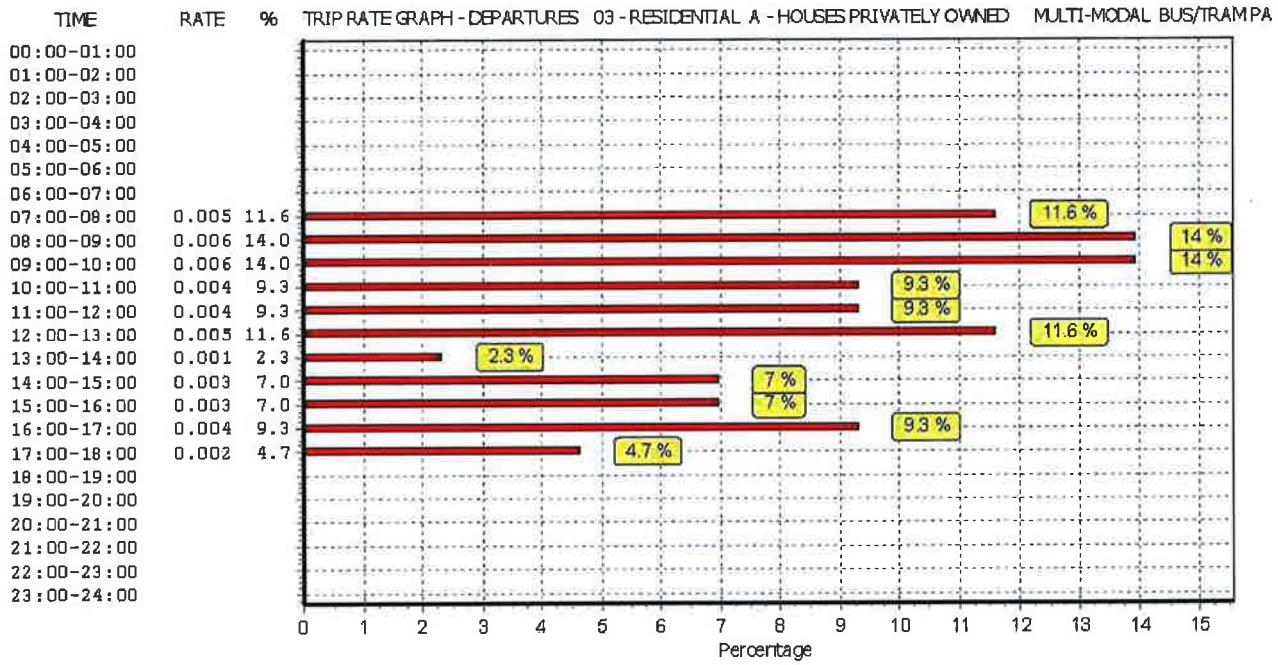
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

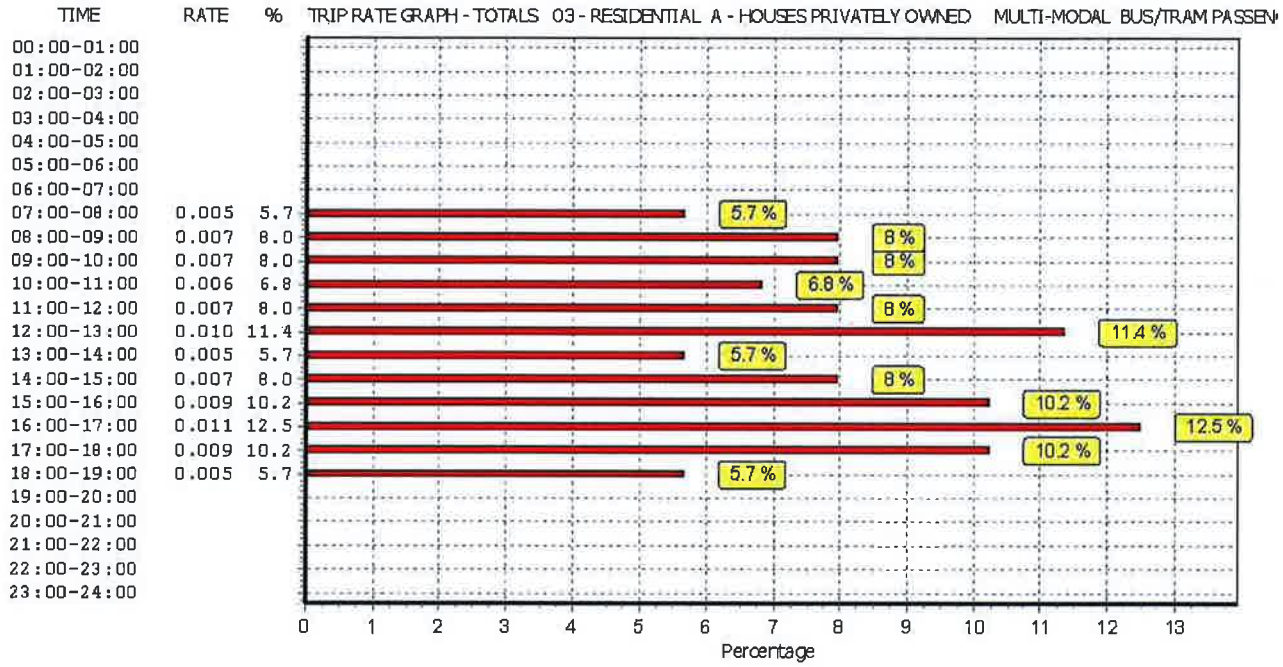
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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



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



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

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

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.000	0.000	**61**	**55**	**0.004**	**0.304**	**61**	**55**	**0.004**	**0.304**
08:00 - 09:00	61	55	0.000	0.000	61	55	0.002	0.130	61	55	0.002	0.130
09:00 - 10:00	61	55	0.000	0.000	61	55	0.001	0.087	61	55	0.001	0.087
10:00 - 11:00	61	55	0.000	0.000	61	55	0.000	0.022	61	55	0.000	0.022
11:00 - 12:00	61	55	0.000	0.000	61	55	0.000	0.022	61	55	0.000	0.022
12:00 - 13:00	61	55	0.000	0.000	61	55	0.001	0.043	61	55	0.001	0.043
13:00 - 14:00	61	55	0.000	0.022	61	55	0.000	0.000	61	55	0.000	0.022
14:00 - 15:00	61	55	0.000	0.022	61	55	0.000	0.022	61	55	0.000	0.044
15:00 - 16:00	61	55	0.000	0.022	61	55	0.001	0.065	61	55	0.001	0.087
16:00 - 17:00	61	55	0.000	0.022	61	55	0.000	0.000	61	55	0.000	0.022
17:00 - 18:00	**61**	**55**	**0.003**	**0.217**	61	55	0.001	0.043	61	55	0.004	0.260
18:00 - 19:00	61	55	0.002	0.173	61	55	0.000	0.000	61	55	0.002	0.173
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.005	0.478			0.010	0.738			0.015	1.216

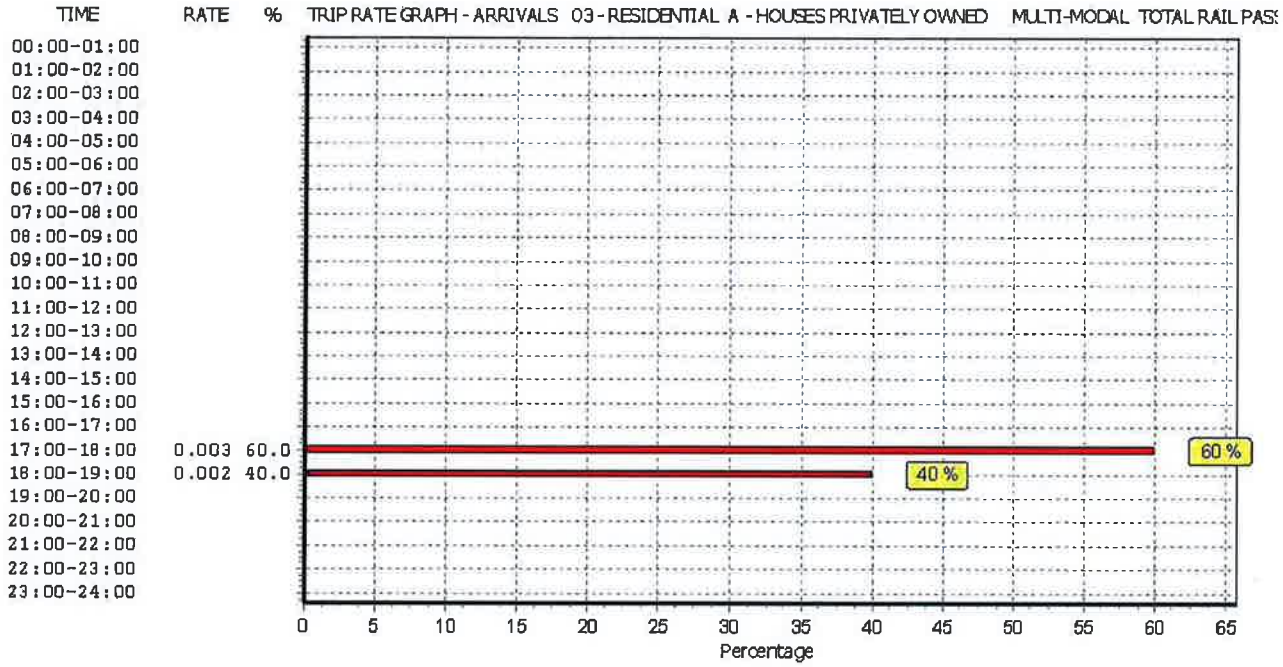
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

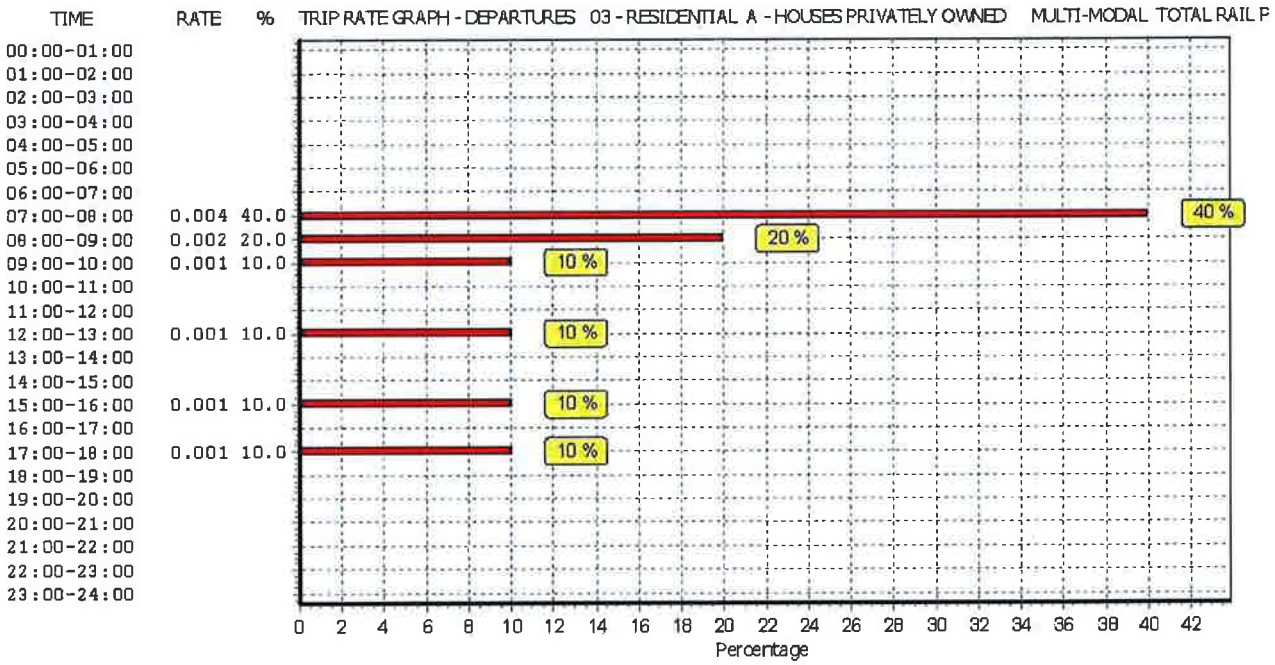
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

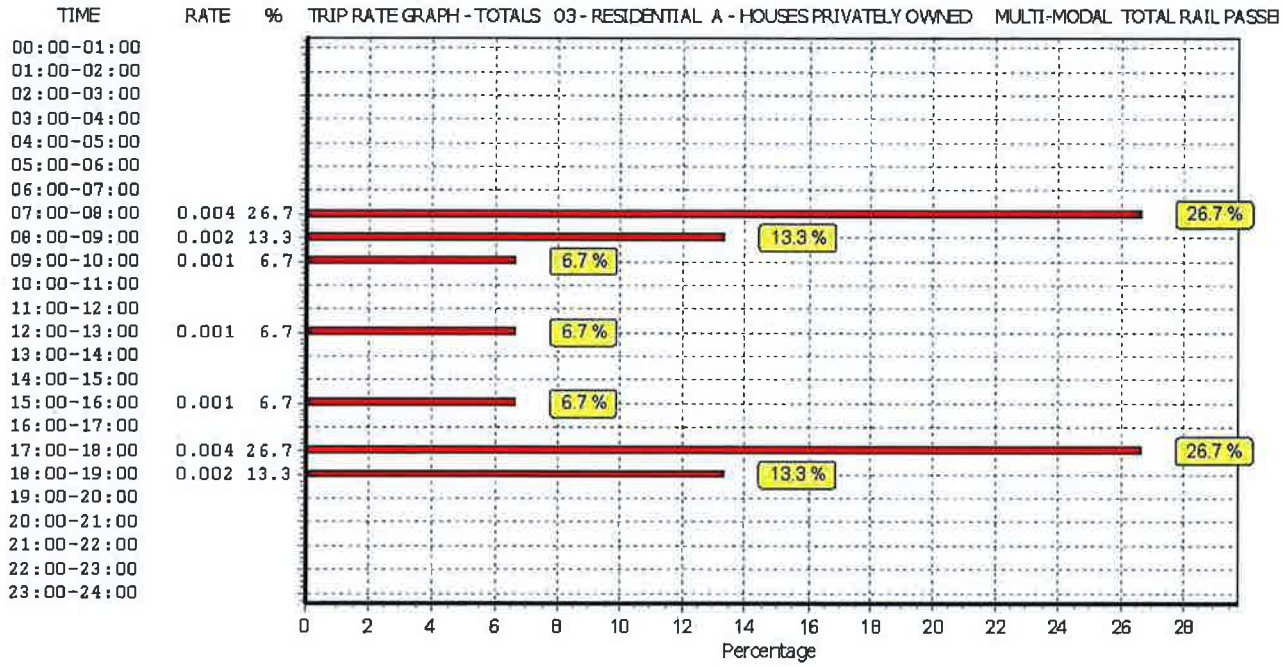
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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



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



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

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

MULTI-MODAL COACH PASSENGERS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
08:00 - 09:00	61	55	0.000	0.022	**61**	**55**	**0.001**	**0.087**	**61**	**55**	**0.001**	**0.109**
09:00 - 10:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
10:00 - 11:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
11:00 - 12:00	**61**	**55**	**0.001**	**0.087**	61	55	0.000	0.022	61	55	0.001	0.109
12:00 - 13:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
13:00 - 14:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
14:00 - 15:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
15:00 - 16:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
16:00 - 17:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
17:00 - 18:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
18:00 - 19:00	61	55	0.000	0.000	61	55	0.000	0.000	61	55	0.000	0.000
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.001	0.109			0.001	0.109			0.002	0.218

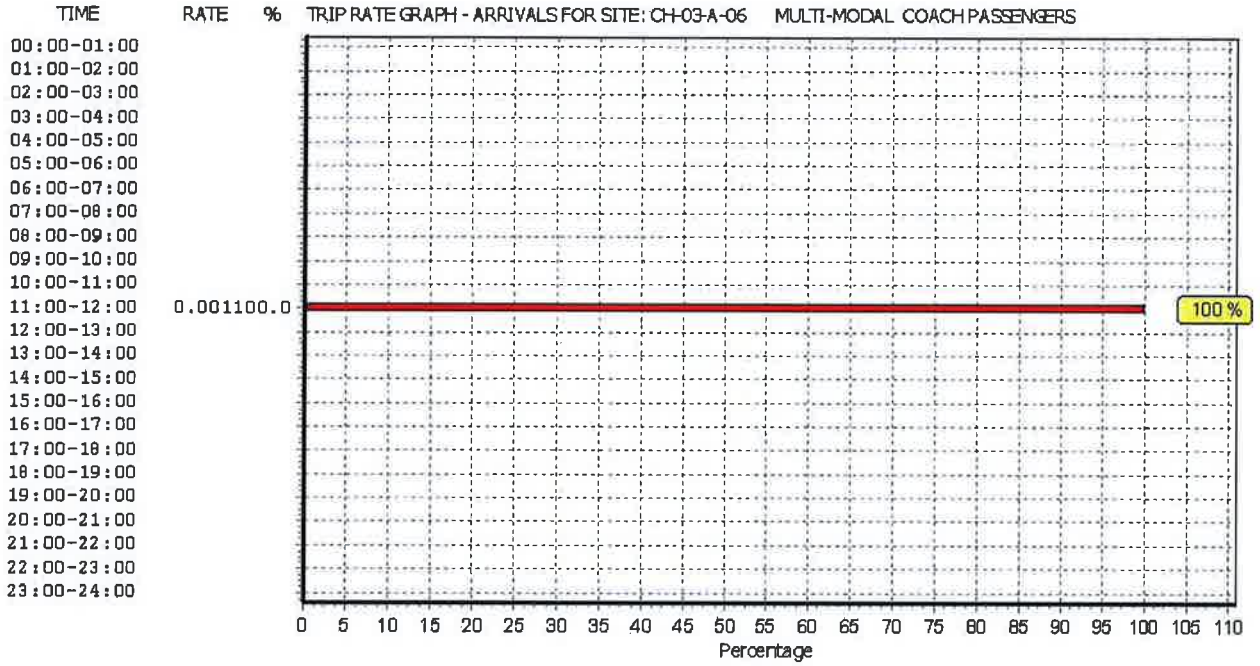
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

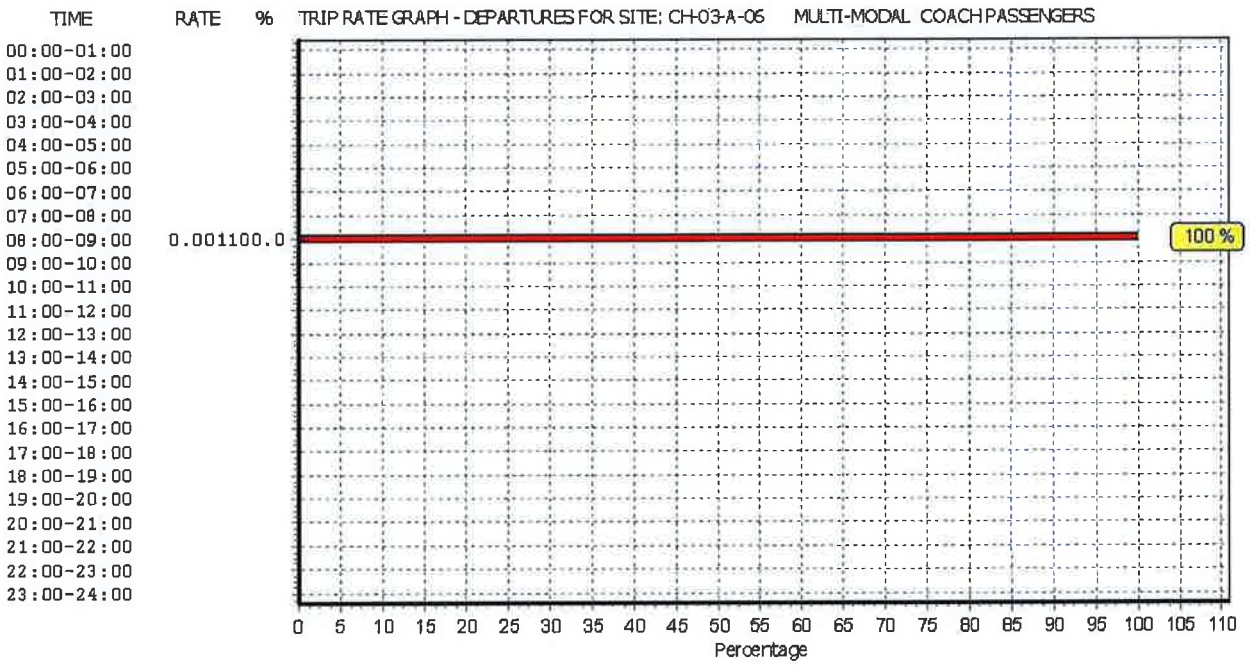
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

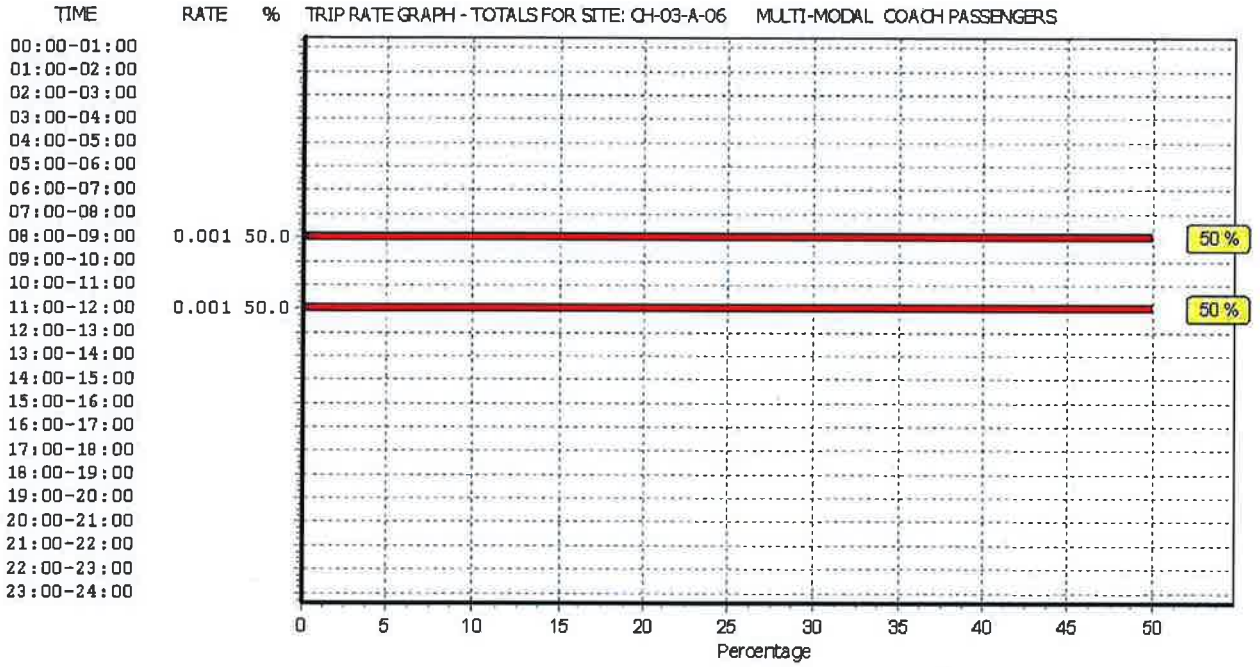
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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



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



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

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

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.000	0.022	**61**	**55**	**0.009**	**0.672**	61	55	0.009	0.694
08:00 - 09:00	61	55	0.001	0.108	61	55	0.009	0.672	61	55	0.010	0.780
09:00 - 10:00	61	55	0.001	0.108	61	55	0.007	0.499	61	55	0.008	0.607
10:00 - 11:00	61	55	0.002	0.173	61	55	0.004	0.304	61	55	0.006	0.477
11:00 - 12:00	61	55	0.004	0.282	61	55	0.004	0.304	61	55	0.008	0.586
12:00 - 13:00	61	55	0.005	0.390	61	55	0.006	0.412	61	55	0.011	0.802
13:00 - 14:00	61	55	0.004	0.325	61	55	0.001	0.108	61	55	0.005	0.433
14:00 - 15:00	61	55	0.004	0.282	61	55	0.004	0.260	61	55	0.008	0.542
15:00 - 16:00	61	55	0.007	0.477	61	55	0.004	0.304	61	55	0.011	0.781
16:00 - 17:00	61	55	0.007	0.542	61	55	0.004	0.304	61	55	0.011	0.846
17:00 - 18:00	**61**	**55**	**0.010**	**0.737**	61	55	0.003	0.195	**61**	**55**	**0.013**	**0.932**
18:00 - 19:00	61	55	0.008	0.564	61	55	0.000	0.000	61	55	0.008	0.564
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.053	4.010			0.055	4.034			0.108	8.044

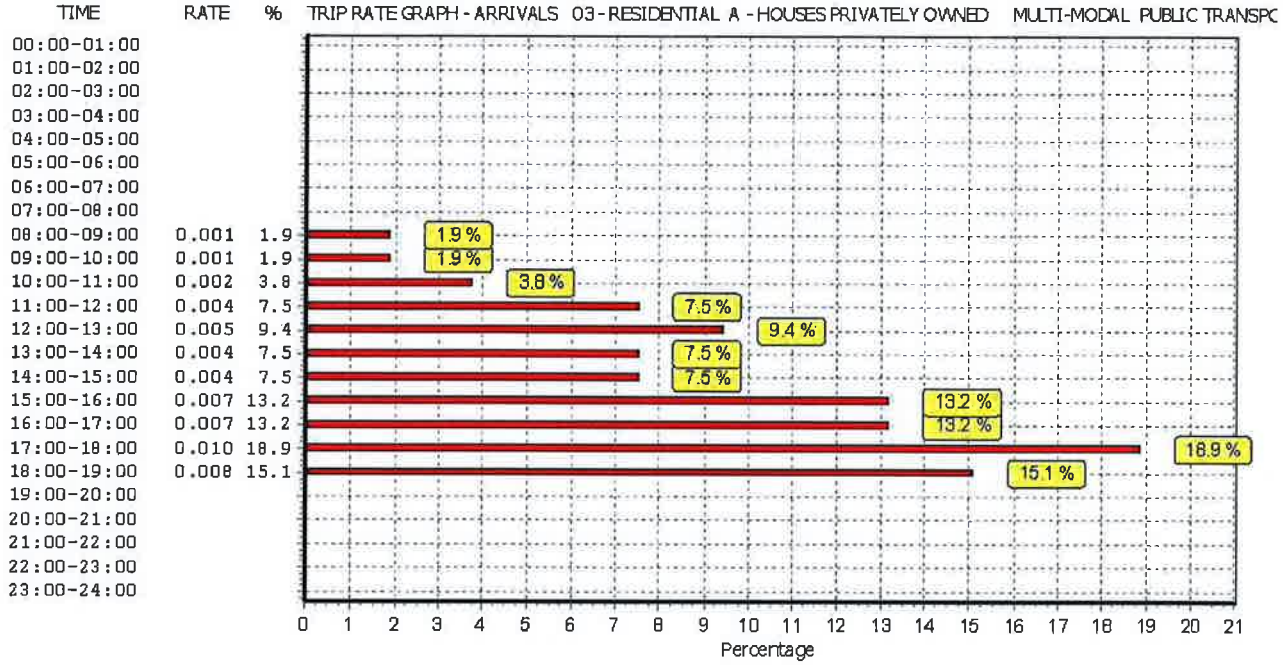
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

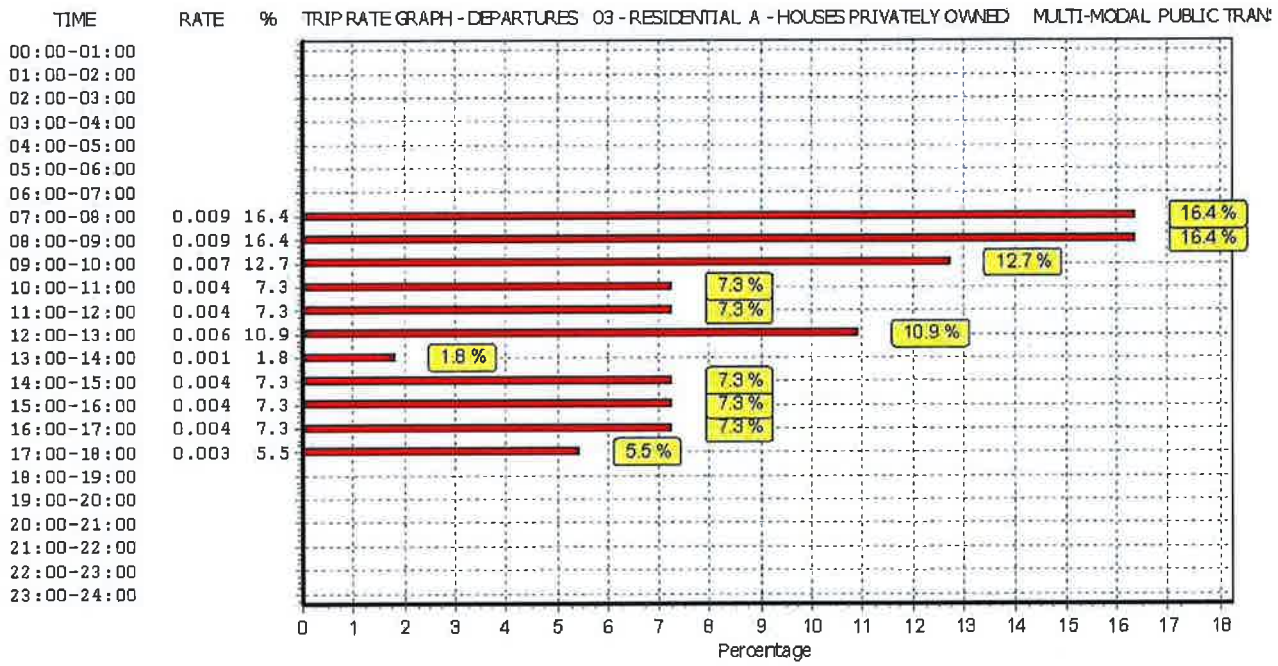
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

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

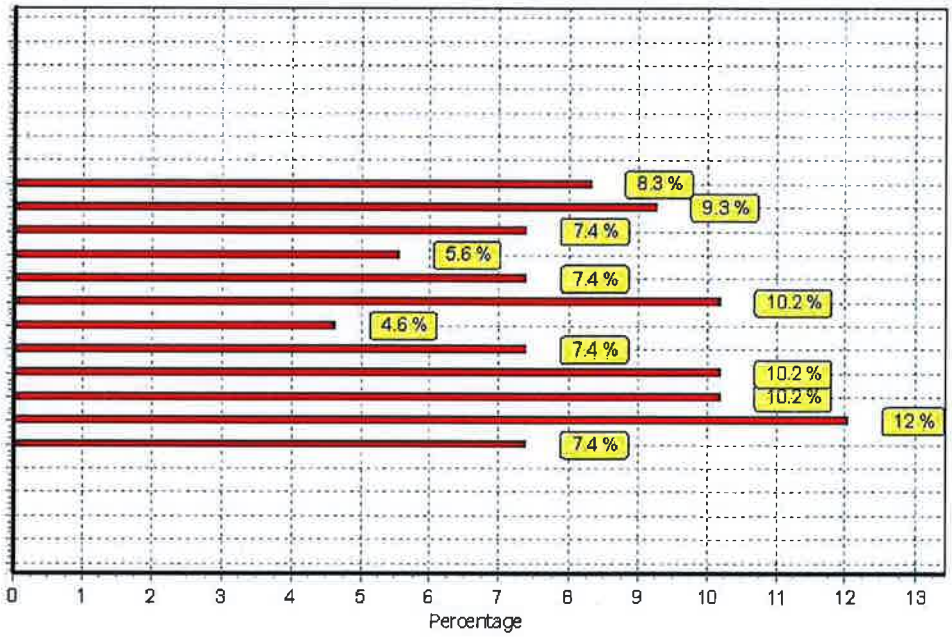


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through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



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

TIME	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	0.009	8.3
08:00-09:00	0.010	9.3
09:00-10:00	0.008	7.4
10:00-11:00	0.006	5.6
11:00-12:00	0.008	7.4
12:00-13:00	0.011	10.2
13:00-14:00	0.005	4.6
14:00-15:00	0.008	7.4
15:00-16:00	0.011	10.2
16:00-17:00	0.011	10.2
17:00-18:00	0.013	12.0
18:00-19:00	0.008	7.4
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



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

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

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 73 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	61	55	0.103	7.523	61	55	0.390	28.489	61	55	0.493	36.012
08:00 - 09:00	61	55	0.229	16.694	**61**	**55**	**0.740**	**54.029**	**61**	**55**	**0.969**	**70.723**
09:00 - 10:00	61	55	0.221	16.131	61	55	0.315	22.960	61	55	0.536	39.091
10:00 - 11:00	61	55	0.210	15.307	61	55	0.273	19.925	61	55	0.483	35.232
11:00 - 12:00	61	55	0.228	16.673	61	55	0.236	17.215	61	55	0.464	33.888
12:00 - 13:00	61	55	0.263	19.188	61	55	0.246	17.974	61	55	0.509	37.162
13:00 - 14:00	61	55	0.266	19.405	61	55	0.273	19.925	61	55	0.539	39.330
14:00 - 15:00	61	55	0.282	20.554	61	55	0.305	22.245	61	55	0.587	42.799
15:00 - 16:00	**61**	**55**	**0.571**	**41.671**	61	55	0.339	24.738	61	55	0.910	66.409
16:00 - 17:00	61	55	0.525	38.354	61	55	0.309	22.570	61	55	0.834	60.924
17:00 - 18:00	61	55	0.555	40.544	61	55	0.323	23.567	61	55	0.878	64.111
18:00 - 19:00	61	55	0.393	28.662	61	55	0.285	20.770	61	55	0.678	49.432
19:00 - 20:00	1	7	0.000	0.000	1	7	0.000	0.000	1	7	0.000	0.000
20:00 - 21:00	1	7	0.000	0.000	1	7	0.000	0.000	1	7	0.000	0.000
21:00 - 22:00	1	7	0.000	0.000	1	7	0.000	0.000	1	7	0.000	0.000
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			3.846	280.706			4.034	294.407			7.880	575.113

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.*

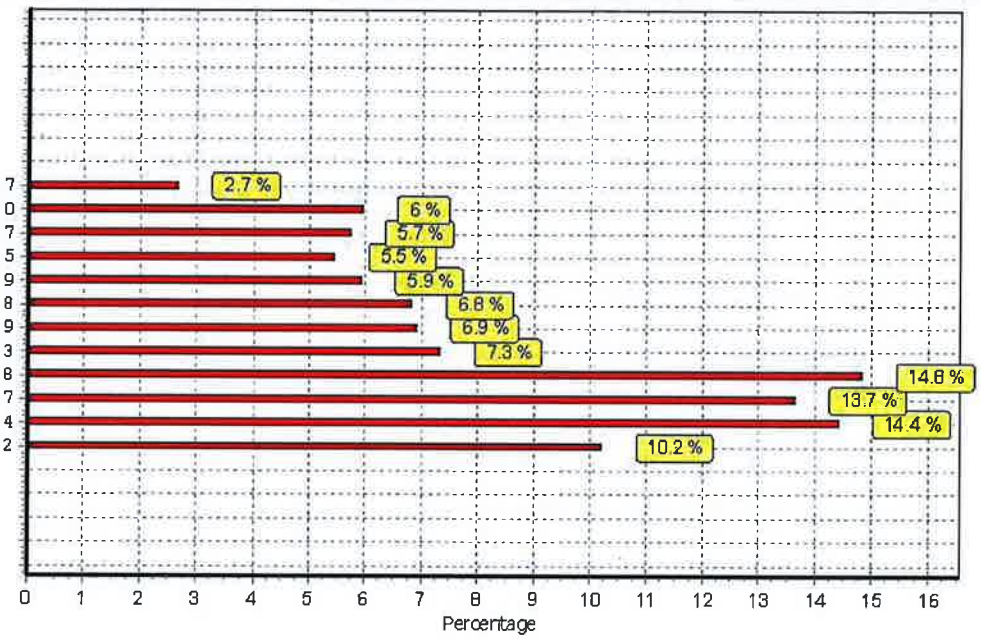
Parameter summary

Trip rate parameter range selected:	6 - 432 (units:)
Survey date date range:	01/01/08 - 12/11/15
Number of weekdays (Monday-Friday):	61
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

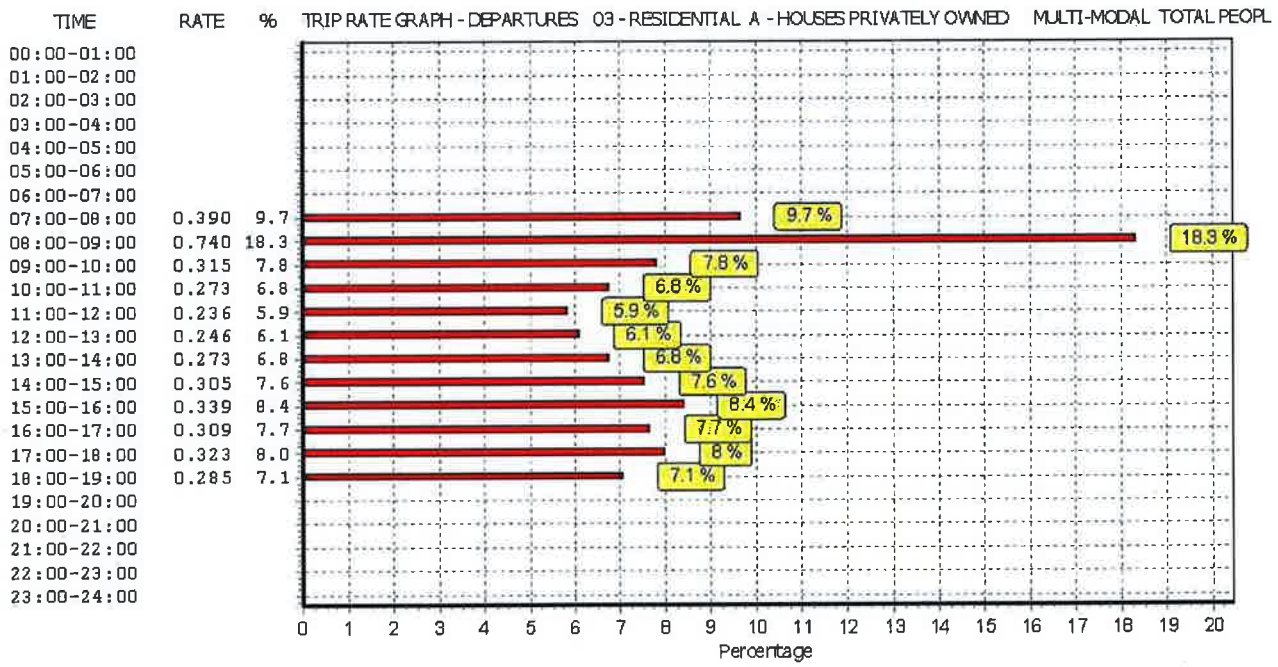
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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

TIME	RATE	%
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	0.103	2.7
08:00-09:00	0.229	6.0
09:00-10:00	0.221	5.7
10:00-11:00	0.210	5.5
11:00-12:00	0.228	5.9
12:00-13:00	0.263	6.8
13:00-14:00	0.266	6.9
14:00-15:00	0.282	7.3
15:00-16:00	0.571	14.8
16:00-17:00	0.525	13.7
17:00-18:00	0.555	14.4
18:00-19:00	0.393	10.2
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		

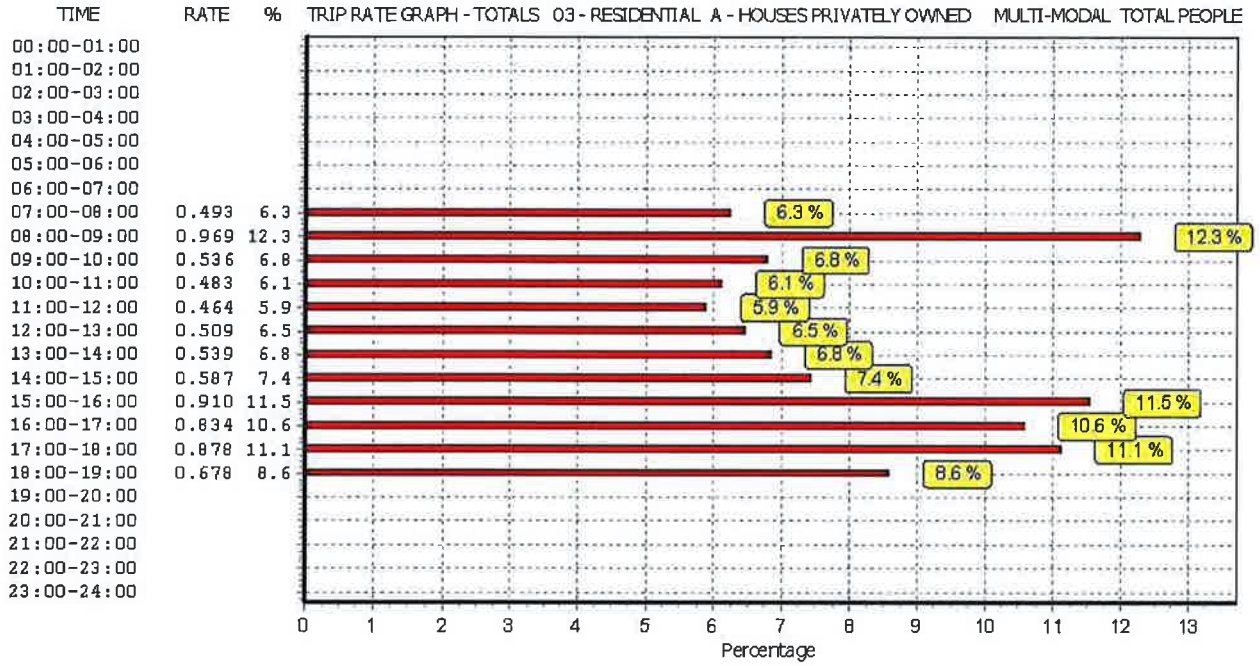
TRIP RATE GRAPH - ARRIVALS 03 - RESIDENTIAL A - HOUSES PRIVATELY OWNED MULTI-MODAL TOTAL PEOPLE



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



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



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

APPENDIX C

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []
© Copyright TRL Limited, 2017

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Proposed Access Ghost Island Junction.j9
Path: C:\Users\Authorised User\Desktop\Swardeston
Report generation date: 23/01/2017 17:40:01

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	[Lane Simulation] - 2017							
Arm A	0.0	0.00		A	0.0	0.00		A
Arm B	0.2	9.78		A	0.1	8.56		A
Arm C	0.0	0.62		A	0.1	0.45		A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

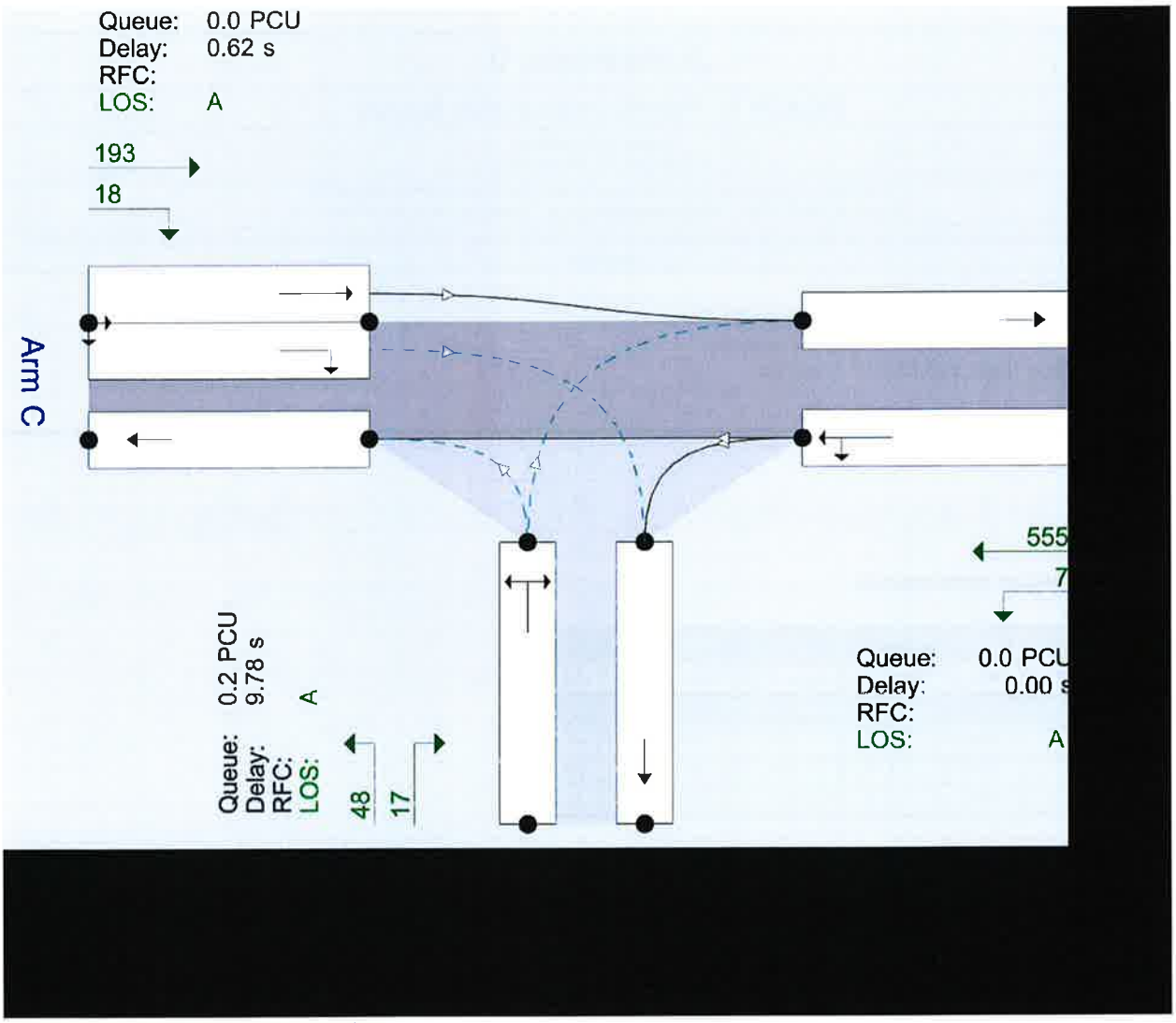
File summary

File Description

Title	Proposed Access/B1113 "Ghost Island" Junction
Location	Swardeston
Site number	
Date	18/01/2017
Version	
Status	(new file)
Identifier	
Client	Martin Church
Jobnumber	P17-1180
Enumerator	J874V4J\Authorised User
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Lane Simulation options

Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Use crossings quick response	Last run random seed	Last run number of trials	Last run time taken (s)
1.00	100000	100000	-1	3	1	✓	33820165	101	4.32

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017	AM	ONE HOUR	08:00	09:30	15	✓
D2	2017	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	✓	100.000	100.000

2017, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B1113 (S)		Major
B	Proposed Access		Minor
C	B1113 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.00		✓	3.00	155.0	✓	7.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	34	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	499	0.079	0.200	0.126	0.286
1	B-C	638	0.085	0.215	-	-
1	C-B	722	0.243	0.243	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
A	1 [Give-way line]	1	B,C		Infinity	0	99999
B	1 [Give-way line]	1	A,C		Infinity	0	99999
C	1 [Give-way line]	1	A	✓	7.00	0	99999
		2	B	✓	7.00	0	99999
	2	1	(A,B)		Infinity		

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A	B	C
A	1 [Give-way line]	1		✓	✓
B	1 [Give-way line]	1	✓		✓
C	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	562	100.000
B		ONE HOUR	✓	65	100.000
C		ONE HOUR	✓	211	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	7	555
	B	17	0	48
	C	193	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.00	0.0	A	512	767
B	9.78	0.2	A	60	90
C	0.62	0.0	A	193	290

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	416	104	416	156	0.0	0.0	0.000	A
B	50	12	49	15	0.0	0.1	7.597	A
C	155	39	155	449	0.0	0.0	0.492	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	508	127	508	188	0.0	0.0	0.000	A
B	58	14	58	21	0.1	0.1	8.334	A
C	189	47	189	546	0.0	0.0	0.505	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	615	154	615	236	0.0	0.0	0.000	A
B	75	19	75	31	0.1	0.2	9.368	A
C	237	59	237	661	0.0	0.0	0.624	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	607	152	607	233	0.0	0.0	0.000	A
B	70	17	71	29	0.2	0.1	9.784	A
C	235	59	235	651	0.0	0.0	0.578	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	503	126	503	189	0.0	0.0	0.000	A
B	59	15	59	21	0.1	0.1	8.684	A
C	187	47	187	539	0.0	0.0	0.542	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	421	105	421	157	0.0	0.0	0.000	A
B	50	12	50	19	0.1	0.1	8.141	A
C	157	39	157	452	0.0	0.0	0.498	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	416	416	0.0	0.0	0.000	A
	Exit	1	1		156	156	0.0	0.0	0.000	A
B	Entry	1	1	A,C	50	49	0.0	0.1	7.597	A
	Exit	1	1		15	15	0.0	0.0	0.000	A
C	Entry	1	1	A	143	143	0.0	0.0	0.000	A
			2	B	11	12	0.0	0.0	5.596	A
		2	1	(A,B)	155	155	0.0	0.0	0.000	A
	Exit	1	1		449	449	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	508	508	0.0	0.0	0.000	A
	Exit	1	1		188	188	0.0	0.0	0.000	A
B	Entry	1	1	A,C	58	58	0.1	0.1	8.334	A
	Exit	1	1		21	21	0.0	0.0	0.000	A
C	Entry	1	1	A	173	173	0.0	0.0	0.000	A
			2	B	15	15	0.0	0.0	5.989	A
		2	1	(A,B)	189	189	0.0	0.0	0.000	A
	Exit	1	1		546	546	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	615	615	0.0	0.0	0.000	A
	Exit	1	1		236	236	0.0	0.0	0.000	A
B	Entry	1	1	A,C	75	75	0.1	0.2	9.368	A
	Exit	1	1		31	31	0.0	0.0	0.000	A
C	Entry	1	1	A	215	215	0.0	0.0	0.000	A
			2	B	22	22	0.0	0.0	6.866	A
		2	1	(A,B)	237	237	0.0	0.0	0.000	A
	Exit	1	1		661	661	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	607	607	0.0	0.0	0.000	A
	Exit	1	1		233	233	0.0	0.0	0.000	A
B	Entry	1	1	A,C	70	71	0.2	0.1	9.784	A
	Exit	1	1		29	29	0.0	0.0	0.000	A
C	Entry	1	1	A	214	214	0.0	0.0	0.000	A
			2	B	21	21	0.0	0.0	6.363	A
		2	1	(A,B)	235	235	0.0	0.0	0.000	A
	Exit	1	1		651	651	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	503	503	0.0	0.0	0.000	A
	Exit	1	1		189	189	0.0	0.0	0.000	A
B	Entry	1	1	A,C	59	59	0.1	0.1	8.684	A
	Exit	1	1		21	21	0.0	0.0	0.000	A
C	Entry	1	1	A	173	173	0.0	0.0	0.000	A
			2	B	14	14	0.0	0.0	6.620	A
		2	1	(A,B)	187	187	0.0	0.0	0.000	A
	Exit	1	1		539	539	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	421	421	0.0	0.0	0.000	A
	Exit	1	1		157	157	0.0	0.0	0.000	A
B	Entry	1	1	A,C	50	50	0.1	0.1	8.141	A
	Exit	1	1		19	19	0.0	0.0	0.000	A
C	Entry	1	1	A	143	143	0.0	0.0	0.000	A
			2	B	14	14	0.0	0.0	5.840	A
		2	1	(A,B)	157	157	0.0	0.0	0.000	A
	Exit	1	1		452	452	0.0	0.0	0.000	A

2017, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2017	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	276	100.000
B		ONE HOUR	✓	33	100.000
C		ONE HOUR	✓	503	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	20	256
	B	11	0	22
	C	466	37	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.00	0.0	A	250	375
B	8.56	0.1	A	29	44
C	0.45	0.1	A	457	685

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	210	53	210	357	0.0	0.0	0.000	A
B	24	6	24	45	0.0	0.0	7.514	A
C	378	95	378	209	0.0	0.0	0.395	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	243	61	243	418	0.0	0.0	0.000	A
B	28	7	28	51	0.0	0.1	7.592	A
C	441	110	442	244	0.0	0.0	0.445	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	305	76	305	514	0.0	0.0	0.000	A
B	36	9	36	66	0.1	0.1	8.298	A
C	545	136	544	305	0.0	0.1	0.409	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	297	74	297	527	0.0	0.0	0.000	A
B	35	9	36	63	0.1	0.1	8.563	A
C	554	139	554	297	0.1	0.1	0.448	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	241	60	241	431	0.0	0.0	0.000	A
B	29	7	29	54	0.1	0.1	7.758	A
C	459	115	459	243	0.1	0.0	0.433	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	206	52	206	343	0.0	0.0	0.000	A
B	23	6	23	40	0.1	0.1	7.103	A
C	361	90	362	208	0.0	0.0	0.415	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	210	210	0.0	0.0	0.000	A
	Exit	1	1		357	357	0.0	0.0	0.000	A
B	Entry	1	1	A,C	24	24	0.0	0.0	7.514	A
	Exit	1	1		45	45	0.0	0.0	0.000	A
C	Entry	1	1	A	349	349	0.0	0.0	0.000	A
			2	B	29	29	0.0	0.0	5.370	A
		2	1	(A,B)	378	378	0.0	0.0	0.000	A
	Exit	1	1		209	209	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	243	243	0.0	0.0	0.000	A
	Exit	1	1		418	418	0.0	0.0	0.000	A
B	Entry	1	1	A,C	28	28	0.0	0.1	7.592	A
	Exit	1	1		51	51	0.0	0.0	0.000	A
C	Entry	1	1	A	409	409	0.0	0.0	0.000	A
			2	B	33	33	0.0	0.0	5.935	A
		2	1	(A,B)	441	441	0.0	0.0	0.000	A
	Exit	1	1		244	244	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	305	305	0.0	0.0	0.000	A
	Exit	1	1		514	514	0.0	0.0	0.000	A
B	Entry	1	1	A,C	36	36	0.1	0.1	8.298	A
	Exit	1	1		66	66	0.0	0.0	0.000	A
C	Entry	1	1	A	502	502	0.0	0.0	0.000	A
			2	B	43	43	0.0	0.1	5.646	A
		2	1	(A,B)	545	545	0.0	0.0	0.000	A
	Exit	1	1		305	305	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	297	297	0.0	0.0	0.000	A
	Exit	1	1		527	527	0.0	0.0	0.000	A
B	Entry	1	1	A,C	35	36	0.1	0.1	8.563	A
	Exit	1	1		63	63	0.0	0.0	0.000	A
C	Entry	1	1	A	514	514	0.0	0.0	0.000	A
			2	B	41	41	0.1	0.1	6.018	A
		2	1	(A,B)	554	554	0.0	0.0	0.000	A
	Exit	1	1		297	297	0.0	0.0	0.000	A

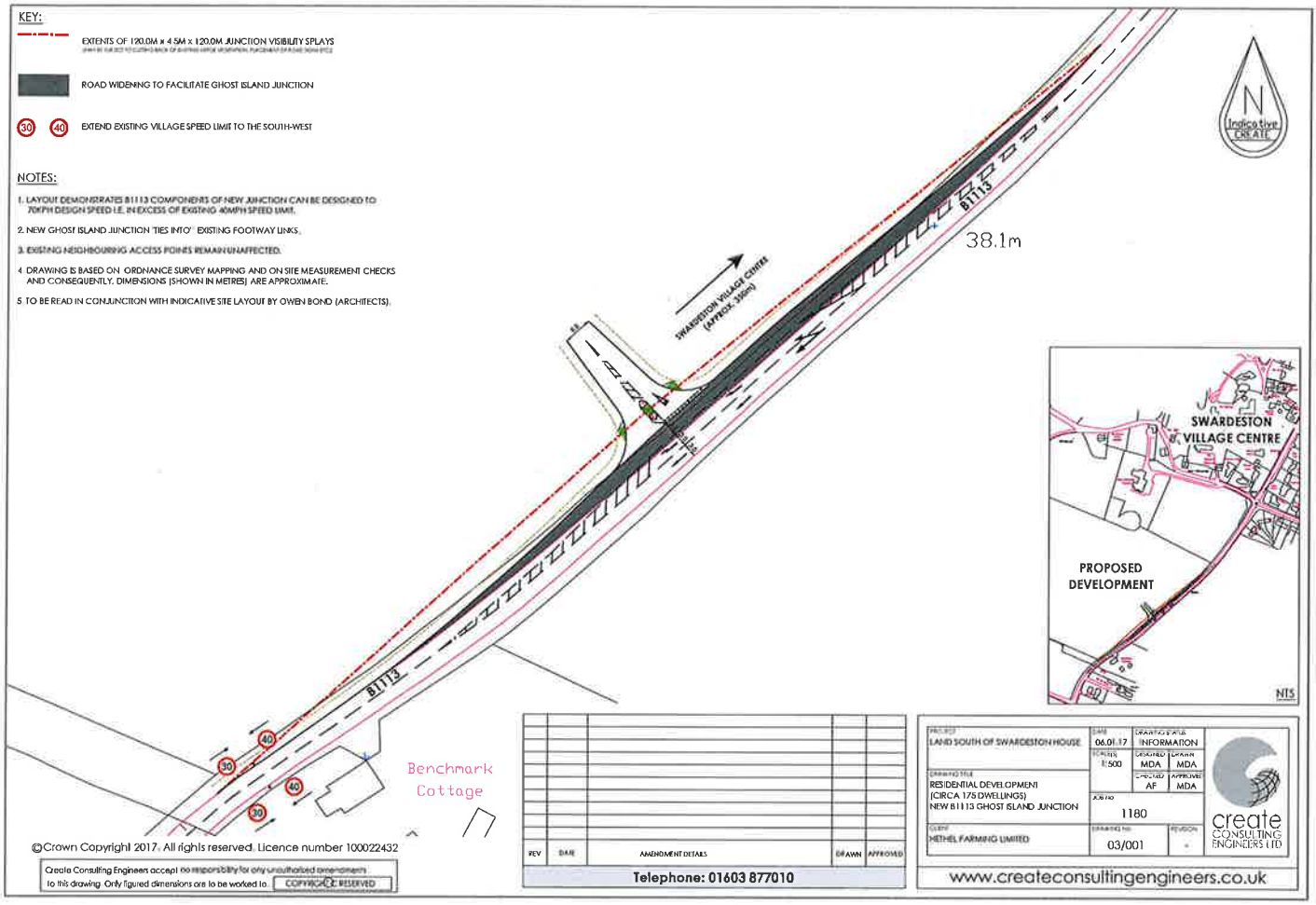
18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	241	241	0.0	0.0	0.000	A
	Exit	1	1		431	431	0.0	0.0	0.000	A
B	Entry	1	1	A,C	29	29	0.1	0.1	7.758	A
	Exit	1	1		54	54	0.0	0.0	0.000	A
C	Entry	1	1	A	421	421	0.0	0.0	0.000	A
			2	B	38	37	0.1	0.0	5.469	A
		2	1	(A,B)	459	459	0.0	0.0	0.000	A
	Exit	1	1		243	243	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B,C	206	206	0.0	0.0	0.000	A
	Exit	1	1		343	343	0.0	0.0	0.000	A
B	Entry	1	1	A,C	23	23	0.1	0.1	7.103	A
	Exit	1	1		40	40	0.0	0.0	0.000	A
C	Entry	1	1	A	336	336	0.0	0.0	0.000	A
			2	B	25	25	0.0	0.0	5.443	A
		2	1	(A,B)	361	361	0.0	0.0	0.000	A
	Exit	1	1		208	208	0.0	0.0	0.000	A

PLANS


KEY:
EXTENTS OF 120.0M x 4.5M x 120.0M JUNCTION VISIBILITY SPLAYS
ROAD WIDENING TO FACILITATE GHOST ISLAND JUNCTION
30 40 EXTEND EXISTING VILLAGE SPEED LIMIT TO THE SOUTH-WEST
NOTES:
1. LAYOUT DEMONSTRATES B1113 COMPONENTS OF NEW JUNCTION CAN BE DESIGNED TO 70KPH DESIGN SPEED I.E. IN EXCESS OF EXISTING 40MPH SPEED LIMIT.
2. NEW GHOST ISLAND JUNCTION 'TIES INTO' EXISTING FOOTWAY LINKS.
3. EXISTING NEIGHBOURING ACCESS POINTS REMAIN UNAFFECTED.
4. DRAWING IS BASED ON ORDNANCE SURVEY MAPPING AND ON SITE MEASUREMENT CHECKS AND CONSEQUENTLY, DIMENSIONS (SHOWN IN METRES) ARE APPROXIMATE.
5. TO BE READ IN CONJUNCTION WITH INDICATIVE SITE LAYOUT BY OWEN BOND (ARCHITECTS).
N
Indicative
CREATE
38.1m
B1113
SWARDESTON VILLAGE CENTRE (APPROX. 350m)
Benchmark Cottage
SWARDESTON VILLAGE CENTRE
PROPOSED DEVELOPMENT
NTS
©Crown Copyright 2017. All rights reserved. Licence number 100022432
Create Consulting Engineers accept no responsibility for any unauthorised amendments to this drawing. Only figured dimensions are to be worked to.
COPYRIGHT RESERVED
REV DATE AMENDMENT DETAILS DRAWN APPROVED
Telephone: 01603 877010
LAND SOUTH OF SWARDESTON HOUSE
DATE 06.01.17
DRAWING STATUS INFORMATION
SCALES 1:500
DESIGNED MDA
DRAWN MDA
CHECKED AF
APPROVED MDA
RESIDENTIAL DEVELOPMENT (CIRCA 175 DWELLINGS) NEW B1113 GHOST ISLAND JUNCTION
JOB NO 1180
CLIENT METHEL FARMING LIMITED
DRAWING NO 03/001
REVISION -
create CONSULTING ENGINEERS LTD
www.createconsultingengineers.co.uk
DO NOT SCALE ORIGINAL SHEET SIZE - A2 Landscape

A	Visibility splays added	SL	09/07/16
B	Secondary Access added	SL	22.11.16
C	Ref to Create Access drawing added	SL	15/05/17
D	Visibility splays removed	SL	15/08/17

North

client
-

project
Call for sites
Norwich Road
Swardeston

drawing
Site plan

date: June 27 | scale: 1:2500@A3 | drawn: SL

OWEN BOND ARCHITECTS

2016	PP16/032	001	D