



**GARRARD HOUSE, 30 GARRARD
STREET, READING RG1 1NR**

Proposed Residential Development

**Transport Statement
On behalf of Titan Property
Developments**

September 2015

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Project: Garrard House, 30 Garrard Street, Reading RG1 1NR
Proposed Residential Development

Client: Titan Property Developments

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1 INTRODUCTION

1.1 Crosby Transport Planning Limited is instructed by Titan Property Developments to prepare this Transport Statement in respect of development proposals at Garrard House, 30 Garrard Street, Reading RG1 1LG.

1.2 Garrard House presently comprises 4,430sqm gross internal area (GIA) of B1a office use with 12 associated surface level car parking spaces. An application (planning reference number 141277/OPA) for notification of prior approval to convert the office use to 83 residential units under Class J of the current permitted development rights was approved on 3 October 2014 by Reading Borough Council.

1.3 This report accompanies a detailed planning application for the development of an additional 20 residential units on the existing fourth floor and across two new floors at levels five and six. Alterations at ground floor level to accommodate cycle parking and bin store arrangements are also proposed.

1.4 This report has been prepared with due regard to the National Planning Policy Framework Planning Practice Guidance '*Travel plans, transport assessments and statements in decision-taking*' and relevant local planning policy.

Scope of Report

1.5 This Transport Statement considers the traffic and transport implications of the proposed development and is set out as follows:-

- Section 2 describes the site location and the surrounding highway network;
- Section 3 describes the accessibility of the development site by non-car modes of travel;
- Section 4 provides details of the development proposals, including car parking;

- Section 5 provides an analysis of the likely travel generation of the proposed development and considers the resulting impact on travel modes; and
- Section 6 provides a summary and conclusion to the report.

2 SITE LOCATION AND SURROUNDING HIGHWAY NETWORK

Site Location and Use

- 2.1 The application site is situated within the town centre of Reading, as illustrated in **Figure 1** below.



Figure 1: Site Location

- 2.2** The main train station and bus interchange for central Reading are located within a 100 metre walk to the northeast. This area is presently undergoing development as part of the Reading Station Area redevelopment proposals which include a new pedestrian area and public realm improvements. The site is located directly south of the NCP-operated Garrard Street car park and a B1a office building known as Thames Tower. Residential development and a Novotel hotel back onto the southern boundary of the site.
- 2.3** The site is situated on the southern side of Garrard Street, between the junctions with Merchant's Place to the west and Station Road to the east. Vehicular access into the site is from Garrard Street via a private access road alongside the eastern flank of the building which also provides vehicular access to the rear of the Novotel hotel and adjacent resident development.
- 2.4** At its western end, Garrard Street forms a three-arm priority junction with Greyfriars Road which in turn provides vehicular access to the A329 via Friar Street or Tudor Road.
- 2.5** At the eastern end of Garrard Street, vehicular access is permitted eastbound only onto Station Road, for buses, bicycles and wheelchair accessible taxis only.
- 2.6** Along the frontage of the site, Garrard Street is two-way, with a mixture of on-street pay & display parking bays and taxi bays. Where parking bays are not present, there are double yellow line 'at any time' waiting restrictions along both sides of Garrard Street.

- 2.7** The development is located to the south and east of the 'Station Hill' development that received planning consent for an outline scheme (planning application reference 130436) incorporating a mixed use development of office retail and residential uses in December 2013. Where relevant, reference is made to information and assumptions contained with the Station Hill Transport Assessment prepared by Peter Brett Associates, dated March 2013, to help inform matters in relation to the proposals at Garrard House.
- 2.8** The Station Hill Transport Assessment included a comprehensive review of Personal Injury Accident Data (PIA) between 2007 and 2012. The review concluded that there were no specific accident patterns in the surrounding area which included Garrard Street.
- 2.9** No additional review of PIA data has been undertaken within this report given that only a short time has passed since the review and the ongoing station upgrade works and public realm improvements in the area may make any records void. Furthermore, it will be demonstrated that the overall residential scheme will generate noticeably less person movements compared to the previous office use.

3 ACCESSIBILITY BY NON-CAR MODES

Walking

- 3.1** The site is located within an established built-up, town centre location surrounded by a variety of retail, commercial and residential properties and therefore benefits from extensive pedestrian infrastructure in the locality. There are few barriers to walking, with footways, cycleway/footways, dropped kerbs, signalised crossings and adequate street lighting along Garrard Street and Merchant's Place.
- 3.2** At its eastern end, Garrard Street connects through to Station Road where an at-grade pedestrian crossing with dropped kerbs and tactile paving is provided. From Garrard Street, pedestrians wishing to walk directly to the train station are able to remain on the western side of Station Road and continue northbound to Station Hill and cross directly at the frontage of the station.
- 3.3** Assuming a standard walking speed of 1.2m/s, most town centre amenities and shops are within a 10 minute walk of the site.

Cycling

- 3.4** There are a number of cycle routes in the surrounding area which form part of a network of cycle routes within Reading town centre. An extract of the Reading cycle route map is provided below at **Figure 2**.



Figure 2: Central Reading Cycle Routes (extract from Travel Reading Live website March 2015)

3.5 It can be seen that Station Road is identified as a one-way, on-road cycle route which leads to the junction with Station Hill and Blagrove Street/Forbury Road at the frontage of the train station and main bus interchange. Blagrove Street/Forbury Road is identified as an on-road cycle route that is traffic-calmed which connects with cycle route facilities to the east, north and south. From the train station, the University of Reading is identified as being within a 10 minute cycle journey, Thames Valley Park a 12 minute journey, Hills Meadow a 3 minute journey and Thames Valley Park a 12 minute journey.

- 3.6** 'ReadyBike' hire facilities and publicly-available cycle parking stands are provided at the frontage of the train station and at a number of locations within the vicinity of the bus interchange.

Bus Services

- 3.7** A number of bus stops and stands are located along the western side of Station Road between Friar Street to the south and the train station to the north. Additional stops are located at the frontage of the train station along both sides of Blagrove Street/Forbury Road. All these stops, which presently form the main bus interchange for central Reading, are located within a 100 metre walk distance of the application site.
- 3.8** A map illustrating the locations of the town centre bus stops is contained within **Appendix A**.
- 3.9** It can be seen that due to the proximity of the site to Reading's main bus interchange, there are numerous bus services stopping within the vicinity of the site. Approximately 100 buses per hour serve the main bus interchange facilities during the peak hours.
- 3.10** Bus services include a mix of premier, Park & Ride, community and out of Reading routes serving local destinations within the Reading urban area as well as destinations further afield including Bracknell, Wokingham, Aldershot, Newbury, Henley-on-Thames and High Wycombe. In addition, 'Rail-Air' provides a frequent coach service to and from Heathrow Airport.

Rail Services

- 3.11** The application site is located within a 100 metre walk distance of Reading Rail Station, which is recognised as a key regional transport hub. Rail services from Reading station are operated by First Great Western, South West Trains and Cross Country Trains and provide frequent connections to the regional and national rail network.
- 3.12** First Great Western operates services to destinations including London Paddington, Didcot Parkway, Maidenhead, Swindon, Oxford, Banbury, Bristol, Taunton, Exeter and further destinations within the southwest of England.
- 3.13** South West Trains operate services to destinations including London Waterloo, Ascot, Basingstoke, Winchester, Eastleigh, Fareham, Woking, Clapham Junction, Southampton and Portsmouth.
- 3.14** Cross Country Trains operate services to destinations including Guildford, Southampton, Bournemouth, Oxford, Coventry, Birmingham, Manchester, York, the North of England and Scotland.

4 DEVELOPMENT PROPOSALS

4.1 The development proposals comprise a total of 20 new residential units at Garrard House provided on the existing fourth floor and across two new floors at levels five and six. Alterations at ground floor level to accommodate cycle parking and bin store arrangements are also proposed.

4.2 The proposed schedule of accommodation is set out below, alongside the schedule for the approved permitted development scheme.

	Existing Permitted Development	New Build	Total
1-Bed Units	74	14	88
2-Bed Units	9	5	14
3-Bed Units	0	1	1
Total	83	20	103

Table 4.1: Proposed Schedule of Accommodation

Car Parking

4.3 The application site presently contains surface level car parking for 12 cars to the rear of the building, accessed from Garrard Street.

4.4 Recommended car parking standards are contained within the Reading Parking Standards and Design SPD, adopted October 2011. For residential developments located within Zone 1, the recommended parking standard is 0.5 spaces/unit for 1-2 bed flats and 1 space/unit for 3 bed flats. The SPD also states that *“should a developer require fewer spaces than are set out here then there would need to be a demonstration, to the Highway Authority’s satisfaction, that there would be no detriment to highway safety as a result.”*

- 4.5** In this case, detriment to highway safety can be considered to be unsafe car parking on the highway network. In this regard, due to the central location, the highway authority has already put measures in place to prevent unsafe parking in the form of double yellow line 'at any time' parking and waiting restrictions. Therefore, there are considered to be no unsafe on-street parking opportunities with the town centre.
- 4.6** Furthermore, as the site is located outside of any of the permit zones, no residents would be issued with parking permits.
- 4.7** Therefore, as the development site is within such an accessible location, there would be a strong presumption against driving to the site. Consequently the development location is regarded as being entirely suitable for a low or even car-free scheme.
- 4.8** Indeed, for the permitted development application for 83 units (planning reference 141277/OPA), Reading Borough Council's Transport department confirmed that *"although the proposal does not provide parking in line with the Council's adopted standards, there is no potential for any on street parking to occur and the site is located outside of a residents parking area."* There were consequently no grounds for objection.
- 4.9** To promote cycle parking (see paragraphs 4.10 to 4.13) and to improve circulation arrangements behind the building, the development proposals will reduce the number of car parking spaces from 12 to 8 on site. Given the above, it is considered that this reduction in car parking would be entirely acceptable on policy grounds and would lead to no adverse effects on the surrounding highway network.

Cycle Parking

- 4.10** With reference to Reading Borough Council's *'Revised Parking Standards and Design Supplementary Planning Document'*, adopted in October 2011, the minimum cycle parking standard is 0.5spaces/unit for 1-2 bed flats and 1 space/unit for 3 bed flats, which can be in the form of individual secure facilities or a communal cycle parking area. For the overall scheme of 103 units, this equates to a minimum provision of 52 cycle parking spaces.
- 4.11** Presently there are no dedicated cycle parking areas in evidence on site. As part of the Permitted Development scheme, two secure cycle stores were proposed at ground floor level within the building which would be accessible from the rear car park.
- 4.12** The development proposals include the provision of a sheltered and secure communal cycle parking storage area, also at ground floor level. The area would result in the loss of two car parking spaces, to be replaced by two-tier cycle parking that can accommodate a minimum of 52 bicycles, thereby meeting the minimum cycle parking standards for the total number of units across the site.
- 4.13** An additional four sheltered cycle parking spaces in the form of two Sheffield Stands are proposed alongside the main build entrance for short term / visitor parking.

Refuse Collections

- 4.14** A bin storage and collection area is located externally alongside the eastern flank of the building. Refuse vehicles servicing the previous office use, as well as other adjacent developments, would utilise the private access road by reversing off Garrard Street, collecting the refuse and then departing westbound along Garrard Street.

- 4.15** For the Permitted Development scheme, a bin store is located within the building, with bins to be wheeled to the bin collection area by the management company in advance of collection.
- 4.16** For the proposed development, an enlarged bin store is proposed within the building at ground floor level. A wider access to the rear car park will facilitate the movement of bins to and from the collection area. The refuse collection arrangements would therefore remain largely the same as for the Permitted Development scheme.

5 DEVELOPMENT TRIP GENERATION

5.1 This section considers the likely number of vehicle and person trips by all modes of travel that will be associated with the proposed development.

Vehicle Trip Assessment

5.2 As part of the Permitted Development application for 83 units, data from the TRICS database was used to provide an indication of the likely change in vehicle trip movements generated by the site by utilising data most closely representative of the existing and proposed uses. The data demonstrated that the number of vehicle movements generated would be significantly reduced as a result of the change in use.

5.3 With the addition of 20 residential units, the increase in vehicle trips would be minimal and would remain significantly below the level of traffic to and from the previous office use. This is illustrated in Table 5.1 below which shows the predicted trip generation of the proposed development compared to the previous office and permitted residential uses, utilising the TRICS data from the Permitted Development application.

	B1(a) Office Use (4,430sqm)			Permitted Residential Use (83 units)			Proposed Residential Use (20 units)		
	Arr	Dep	Two- way	Arr	Dep	Two- way	Arr	Dep	Two- way
AM Peak Hour (08:00-09:00hrs)	24	6	30	1	2	3	0	1	1
PM Peak Hour (17:00-18:00hrs)	4	20	24	2	0	2	1	0	1
Daily (0700-1900hrs)	128	121	249	12	12	24	3	3	6

Table 5.1: Summary of TRICS Analysis (total vehicle movements)

- 5.4 The total number of trips generated by the proposed development would therefore be low and would have a negligible impact upon the local highway network.

Person Trip Generation

- 5.5 In terms of peak hour person trip movements for the proposed 20 new units, the TRICS data derived for the Permitted Development application has been assessed in terms of multi-modal movements.
- 5.6 The results of the multi-modal TRICS analysis are summarised below in Table 5.2, with the multi-modal residential TRICS output data contained in full in **Appendix B**.

Mode	AM Peak Hour (08:00-09:00)			PM Peak Hour (17:00-18:00)		
	Arr	Dep	Two-way	Arr	Dep	Two-way
Vehicles	0	1	1	1	0	1
Total Persons	1	9	10	13	4	17
Pedestrians	0	5	5	8	3	11
Public Transport	0	3	3	4	0	4
Cycle	0	0	0	0	0	0
Vehicle Occupants	0	1	1	1	0	1

Table 5.2: Summary of TRICS Analysis (total person movements)

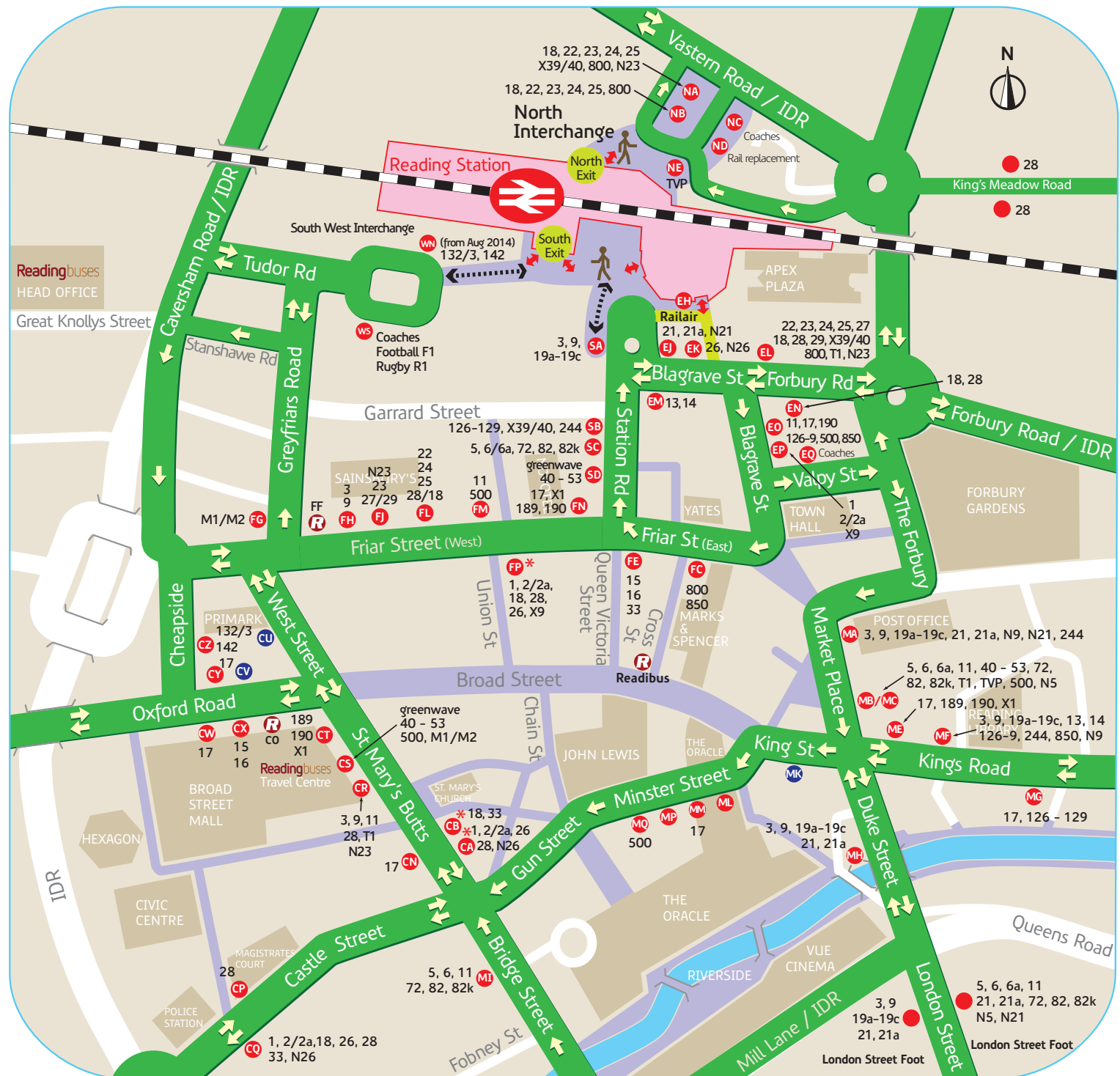
- 5.7 The results show that the residential development would generate between 10-17 person trip movements during the peak hours, which equates to an average of less than one peak hour movement per flat.
- 5.8 The total number of person movements generated by the development would therefore be low and given the level of public transport services and infrastructure in the locality, would clearly have a statistically insignificant impact upon the local transport network.

6 SUMMARY AND CONCLUSIONS

- 6.1** Crosby Transport Planning Limited has been instructed by Titan Properties to prepare this Transport Statement in respect of development proposals for 20 additional residential units at Garrard House, Garrard Street, Reading RG1 1NR.
- 6.2** Section 2 described the site location as being within the Reading town centre located within the proximity retail, commercial and residential development.
- 6.3** Section 3 described the accessibility of the development site by non-car modes of travel and advised that there are few barriers to walking and cycling, with extensive pedestrian and cycle infrastructure in the vicinity of the site. The site is within a 100 metre walk from Reading train station and the central bus interchange, providing services to numerous regional and national destinations.
- 6.4** Section 4 provided details of the development proposals from which it was demonstrated that the proposed level of car parking would be entirely appropriate for the overall residential scheme and would not cause detriment to the local highway network by virtue of the on-street parking and waiting restrictions that are in place on the surrounding roads. Secure and sheltered cycle parking will be provided in accordance with local standards. The refuse collection arrangements that are proposed for the Permitted Development scheme will remain largely unchanged for the proposed development.
- 6.5** Section 5 considered the likely vehicular trip generation levels of the proposed development compared to the previous office use and permitted development use and concluded that the change in traffic flow would be negligible and would have a negligible impact upon the local transport network.
- 6.6** The development would therefore not give rise to any adverse transport impacts and is considered an entirely appropriate form of development in transport terms.

APPENDIX A: Reading Town Centre Bus Stop Map

Bus stops in Central Reading from July 2014



Not to scale

APPENDIX B: TRICS Output – Multi Modal C3 Residential

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : C - FLATS PRIVATELY OWNED
MULTI-MODAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	HK HACKNEY	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	2 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:	9 to 154 (units:)
Range Selected by User:	6 to 530 (units:)

Public Transport Provision:

Selection by:	Include all surveys
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Date Range:	01/01/06 to 03/06/14
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This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	1 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Town Centre	3
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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:

Built-Up Zone	3
---------------	---

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

Filtering Stage 3 selection:

Use Class:

C3

3 days

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

Population within 1 mile:

25,001 to 50,000

2 days

50,001 to 100,000

1 days

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

Population within 5 miles:

500,001 or More

3 days

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

Car ownership within 5 miles:

0.5 or Less

1 days

0.6 to 1.0

2 days

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

Travel Plan:

No

3 days

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

LIST OF SITES relevant to selection parameters

1	GM-03-C-02	BLOCK OF FLATS		GREATER MANCHESTER
		WHITWORTH STREET W.		
		MANCHESTER		
		Town Centre		
		Built-Up Zone		
		Total Number of dwellings:	154	
		Survey date: THURSDAY	13/10/11	Survey Type: MANUAL
2	GM-03-C-03	BLOCK OF FLATS		GREATER MANCHESTER
		FAIRFIELD STREET		
		MANCHESTER		
		Town Centre		
		Built-Up Zone		
		Total Number of dwellings:	20	
		Survey date: FRIDAY	14/10/11	Survey Type: MANUAL
3	HK-03-C-02	BLOCK OF FLATS		HACKNEY
		HOXTON		
		SHOREDITCH		
		Town Centre		
		Built-Up Zone		
		Total Number of dwellings:	9	
		Survey date: TUESDAY	11/11/08	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/C - FLATS PRIVATELY OWNED

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	61	0.000	3	61	0.011	3	61	0.011
08:00 - 09:00	3	61	0.011	3	61	0.027	3	61	0.038
09:00 - 10:00	3	61	0.005	3	61	0.016	3	61	0.021
10:00 - 11:00	3	61	0.016	3	61	0.016	3	61	0.032
11:00 - 12:00	3	61	0.016	3	61	0.005	3	61	0.021
12:00 - 13:00	3	61	0.011	3	61	0.016	3	61	0.027
13:00 - 14:00	3	61	0.016	3	61	0.022	3	61	0.038
14:00 - 15:00	3	61	0.016	3	61	0.016	3	61	0.032
15:00 - 16:00	3	61	0.011	3	61	0.011	3	61	0.022
16:00 - 17:00	3	61	0.011	3	61	0.005	3	61	0.016
17:00 - 18:00	3	61	0.022	3	61	0.000	3	61	0.022
18:00 - 19:00	3	61	0.011	3	61	0.005	3	61	0.016
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.146			0.150			0.296

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: 9 - 154 (units:)
 Survey date range: 01/01/06 - 03/06/14
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	61	0.000	3	61	0.005	3	61	0.005
08:00 - 09:00	3	61	0.000	3	61	0.011	3	61	0.011
09:00 - 10:00	3	61	0.005	3	61	0.011	3	61	0.016
10:00 - 11:00	3	61	0.000	3	61	0.000	3	61	0.000
11:00 - 12:00	3	61	0.000	3	61	0.000	3	61	0.000
12:00 - 13:00	3	61	0.000	3	61	0.016	3	61	0.016
13:00 - 14:00	3	61	0.000	3	61	0.000	3	61	0.000
14:00 - 15:00	3	61	0.000	3	61	0.000	3	61	0.000
15:00 - 16:00	3	61	0.000	3	61	0.000	3	61	0.000
16:00 - 17:00	3	61	0.000	3	61	0.000	3	61	0.000
17:00 - 18:00	3	61	0.022	3	61	0.000	3	61	0.022
18:00 - 19:00	3	61	0.005	3	61	0.000	3	61	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.043			0.075

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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	61	0.000	3	61	0.016	3	61	0.016
08:00 - 09:00	3	61	0.016	3	61	0.033	3	61	0.049
09:00 - 10:00	3	61	0.005	3	61	0.022	3	61	0.027
10:00 - 11:00	3	61	0.022	3	61	0.022	3	61	0.044
11:00 - 12:00	3	61	0.016	3	61	0.005	3	61	0.021
12:00 - 13:00	3	61	0.011	3	61	0.016	3	61	0.027
13:00 - 14:00	3	61	0.016	3	61	0.022	3	61	0.038
14:00 - 15:00	3	61	0.033	3	61	0.022	3	61	0.055
15:00 - 16:00	3	61	0.011	3	61	0.011	3	61	0.022
16:00 - 17:00	3	61	0.011	3	61	0.005	3	61	0.016
17:00 - 18:00	3	61	0.027	3	61	0.000	3	61	0.027
18:00 - 19:00	3	61	0.011	3	61	0.011	3	61	0.022
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.179			0.185			0.364

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: 9 - 154 (units:)
 Survey date range: 01/01/06 - 03/06/14
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	61	0.000	3	61	0.044	3	61	0.044
08:00 - 09:00	3	61	0.016	3	61	0.262	3	61	0.278
09:00 - 10:00	3	61	0.022	3	61	0.213	3	61	0.235
10:00 - 11:00	3	61	0.066	3	61	0.066	3	61	0.132
11:00 - 12:00	3	61	0.098	3	61	0.137	3	61	0.235
12:00 - 13:00	3	61	0.191	3	61	0.186	3	61	0.377
13:00 - 14:00	3	61	0.180	3	61	0.126	3	61	0.306
14:00 - 15:00	3	61	0.148	3	61	0.109	3	61	0.257
15:00 - 16:00	3	61	0.142	3	61	0.131	3	61	0.273
16:00 - 17:00	3	61	0.295	3	61	0.290	3	61	0.585
17:00 - 18:00	3	61	0.393	3	61	0.164	3	61	0.557
18:00 - 19:00	3	61	0.191	3	61	0.005	3	61	0.196
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		1.742			1.733			3.475	

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: 9 - 154 (units:)
 Survey date range: 01/01/06 - 03/06/14
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

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

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	61	0.000	3	61	0.066	3	61	0.066
08:00 - 09:00	3	61	0.005	3	61	0.142	3	61	0.147
09:00 - 10:00	3	61	0.011	3	61	0.060	3	61	0.071
10:00 - 11:00	3	61	0.005	3	61	0.027	3	61	0.032
11:00 - 12:00	3	61	0.016	3	61	0.027	3	61	0.043
12:00 - 13:00	3	61	0.011	3	61	0.060	3	61	0.071
13:00 - 14:00	3	61	0.011	3	61	0.022	3	61	0.033
14:00 - 15:00	3	61	0.033	3	61	0.005	3	61	0.038
15:00 - 16:00	3	61	0.098	3	61	0.027	3	61	0.125
16:00 - 17:00	3	61	0.071	3	61	0.049	3	61	0.120
17:00 - 18:00	3	61	0.202	3	61	0.016	3	61	0.218
18:00 - 19:00	3	61	0.060	3	61	0.000	3	61	0.060
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.523			0.501			1.024

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: 9 - 154 (units:)
 Survey date range: 01/01/06 - 03/06/14
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	61	0.000	3	61	0.131	3	61	0.131
08:00 - 09:00	3	61	0.038	3	61	0.448	3	61	0.486
09:00 - 10:00	3	61	0.044	3	61	0.306	3	61	0.350
10:00 - 11:00	3	61	0.093	3	61	0.115	3	61	0.208
11:00 - 12:00	3	61	0.131	3	61	0.169	3	61	0.300
12:00 - 13:00	3	61	0.213	3	61	0.279	3	61	0.492
13:00 - 14:00	3	61	0.208	3	61	0.169	3	61	0.377
14:00 - 15:00	3	61	0.213	3	61	0.137	3	61	0.350
15:00 - 16:00	3	61	0.251	3	61	0.169	3	61	0.420
16:00 - 17:00	3	61	0.377	3	61	0.344	3	61	0.721
17:00 - 18:00	3	61	0.645	3	61	0.180	3	61	0.825
18:00 - 19:00	3	61	0.268	3	61	0.016	3	61	0.284
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		2.481			2.463			4.944	

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: 9 - 154 (units:)
 Survey date range: 01/01/06 - 03/06/14
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

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