Addendum -additional to previous versions transport assessment & framework travel plan

Technical note

Project:	Sully Sports & Social Club	То:	VoG
Subject:	TA & FTP Addendum	From:	Atkins
Date:	1 Jun 2016	cc:	St Modwen & GVA

Introduction

This Technical Note has been produced by Atkins Transportation with regard to the proposed Sully Sports and Social Club (SS&SC) development. It provides an Addendum to the Transport Assessment (TA) and Framework Travel Plan (FTP) that have previously been submitted in support of the planning application. It considers minor revisions that have been made to the development proposal, the Planning Committee report for the nearby Cog Road development and transport planning comments received from the Vale of Glamorgan (VoG) regarding the application, particularly the TA Audit undertaken by Capita on their behalf dated March 2016.

Revisions to the Development Proposal

The development masterplan that was submitted for planning (included in the TA and FTP) has been revised. The revised development masterplan is included in **Appendix A**. The changes to the development proposal are summarised as follows:

- 1. A slight expansion in the residential area but with the proposed number of dwellings unchanged at up to 200 units;
- 2. A reconfiguration of the sports pitches;
- 3. A slight reduction in the size of the club house;
- 4. Repositioning of the social club and bowls area; and
- 5. Replacement of the food retail unit with a gym (approximately 465m² gross floor area).

The alterations listed 1 - 4 will not affect the off-site impacts of the development proposal as considered in the TA and FTP. The replacement of the food retail unit with a gym is expected to result in a reduction in the number of trips generated by the development and thereby the impact of the site. The convenience store AM and PM peak hour trips that were included in the TA are provided in **Table 1**.

Vahielos	AM	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
Venicies	Arrivals	Departures	Two Way	Arrivals	Departures	Two-Way	
Primary trips (40%)	14	14	28	17	16	34	
Pass-by trips (30%)	11	10	21	13	12	25	
Linked trips (30%)	11	10	21	13	12	25	
Total trips	36	34	69	43	41	84	

Table 1 - Convenience Store Weekday Peak Hour Vehicular Trips Contained in TA

* Minor discrepancies in figures due to rounding issues

The total estimated trip attraction associated with the gym has been calculated using the TRICS database, selecting the same general criteria as was used in the TA. Land use 07 – Leisure /K – Fitness Club (private) has been selected and only sites located in the UK excluding Greater London have been included. The anticipated trip generation for a gym (based on a 465m² floor area) is summarised for the AM and PM peak hours in **Table 2**. The full TRICS output is included in **Appendix B**.

Table 2 – Gym	Weekday	Peak Hour	Vehicular	Trip	Generation
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Vahialaa	AM	Peak 08:00-0	9:00	PM Peak 17:00-18:00			
venicies	Arrivals	Departures	Two Way	Arrivals	Departures	Two-Way	
Trip rate (per 100m ²)	0.818	0.804	1.622	2.262	1.756	4.018	
Total trips	4	4	8	11	8	19	

The figures in Table 2 show that a gym would be expected to generate fewer vehicular trips than a convenience store. As set out in the TA, not all convenience store trips were expected to be new to the local highway network with a proportion being pass-by or linked trips. Similarly, it is entirely likely that a high proportion of trips to the gym will be linked with the other site uses given the sports facilities located on-site. However, even if all gym trips are assumed to be new to the highway network the analysis suggests that the facility would result in 20 fewer trips on the local highway network in the AM peak and 15 fewer in the PM peak compared to the convenience store. The TA can therefore be considered to provide a robust analysis of the off-site highway impacts associated with the proposed development.

The Cog Road Development

The nearby Cog Road development for 350 houses was approved at a Planning Committee held on the 12th May 2016. The associated Planning Committee report that was compiled by the VoG planning case officer made the following statements regarding transport in Sully in general:

- 'It is considered that the village is relatively well served [by public transport]. There are regular bus services to Cardiff, Penarth and Barry and a number of bus stops along South Road and through the village.'
- 'It is acknowledged that the village does not have a train station, however, Sully is located close to a number of other settlements that are well served in terms of rail links. In addition to considering the range of options available in the settlement itself (transport and other services), it is also relevant to consider the proximity of other settlements and the transport options/services located there.'
- 'The road network is not prohibitive to cycling and there are good pedestrian links throughout the village.'
- 'It is considered that the existing settlement is sufficiently sustainable to accommodate additional residential development.'

The committee report confirmed that the following obligations would need to be met by the Cog Road development:

- Contribution of £2,000 per dwelling (equating to £700,000 for 350 dwellings) towards off-site sustainable transport infrastructure;
- Contribution of £24,000 towards an improved layout of the 'McDonalds Roundabout', based on a 12% impact;
- Widening works to the Cog Road arm of the Cog Road / South Road junction.

The Cog Road development was considered as a committed development scheme in the Atkins TA, which incorporated traffic associated with the development in the analysis work but did not account for the improvement measures that will be funded by the scheme.

Notably the committee report considered that the 'substantial' sustainable transport contribution provided by the Cog Road development might reasonably be assumed to have an impact in terms of modal choice. The committee report considered it relevant to note that any such shift would decrease the number of private vehicle trips and partially mitigate against capacity issues. This has not been factored into the traffic analysis undertaken either for Cog Road or SS&SC.

VoG Transport Planning Comments

Framework Travel Plan

Comments on the Framework Travel Plan (FTP) were received from VoG in November 2015. The response suggested that the sustainable transport infrastructure in Sully could be improved in terms of off-road cycle paths, crossings and bus services. It is noted that the committee report for the Cog Road development concluded that Sully is already well served by buses, is located close to a number of other settlements with rail links, that the road network is not prohibitive to cycling and has good pedestrian links throughout. Nonetheless the SS&SC development will provide an off-site sustainable transport contribution (on the basis of Supplementary Planning Guidance) of £2,000 per dwelling, which equates to £400,000 for 200 dwellings. The nearby Cog Road development has also committed to an off-site sustainable contribution of £2,000 per dwelling, equating to £700,000 for 350 dwellings. The Sully area will therefore receive off-site sustainable transport improvements of up to £1.1 million.

The FTP response also made comments with reference to the structure and content of a full Travel Plan. These should be considered when submitting a full Travel Plan for the scheme.

Transport Assessment

The Capita TA Audit concluded that the SS&SC TA produced by Atkins was generally robust referring only a small number of points back to the VoG for their consideration. The Audit considered that 'generally the pedestrian and cycle links in the area appear satisfactory' and noted that 'the site is adequately served by bus services that use bus stops located within easy walking distance.' It stated 'that there are no highway design issues to mitigate as a result of the additional development traffic, the collisions [in the personal injury accident record] being predominantly caused by driver error.' It concluded that the development trip rates and distribution used in the assessment had been calculated in a robust manor.

The points that were referred back to the VoG are considered in the remainder of this section. The Capita statement is provided first in italics followed by the Atkins response.

'A Learner Travel Wales/Active Travel Wales (2013) Act assessment has not been undertaken, particularly to Sully Primary School in Burnham Avenue (Learner Travel) and this needs to be considered by the VoG as to their requirements.'

The Learner Travel Wales Measure (2008) and the Active Travel Wales (2013) Act place duties on Welsh Ministers and on Local Authorities. They are not normally required in the assessment of development proposals and as a consequence were not requested by the VoG at the scoping stage or undertaken for the nearby Cog Road development scheme.

A Learner Travel Wales assessment would show that the main routes to Sully Primary School from the site are either via South Road and Burnham Avenue, or via a short section of South Road, then Clevedon Avenue and Smithies Avenue. The two routes are broadly equidistant and do not traverse across South Road. In line with the Learner Travel Wales guidance both routes provide continuous footways between the development site and the school and only require the crossing of relatively quiet residential side streets. The guidance states that roads with an hourly two-way vehicular flow of 240 movements or less are considered safe to cross. The roads that it is necessary to cross between the site and the school are expected to have much lower traffic flows than this; for example recorded traffic data shows that Clevedon Avenue currently experiences less than 50 two-way vehicular movements during the AM peak hour.

In addition, it is noted that Capita concluded in their review that there were no inherent highway safety issues on the local highway network.

'There is concern that Beach Road, which has no lighting and no footways along its length, will attract increased pedestrian and cycle use from the site to the beach, two pubs/ restaurant and the coastal walk to Penarth. Similarly, the provision of a small retail unit within the site is likely to attract pedestrians from the caravan site in Swanbridge. As the south-eastern pedestrian access to the site is to be retained it should be considered to provide a series of measures to increase safety between the pedestrian access and the beach e.g. a reduction from the national speed limit to 30/20mph, pedestrian refuges and traffic calming.'

It is noted that the development proposal no longer includes a retail unit that would act as an attractor from the caravan site. The cost of providing improvements to the pedestrian environment at the southern end of Beach Road could be met through the VoG Supplementary Planning Guidance (SPG) on Planning Obligations. This will provide a contribution towards off-site sustainable transport measures of £2,000 per new dwelling (a total contribution of £400,000 for the SS&SC development based on 200 dwellings).

'The result of the corrected percentage impact at the A4231 Barry Docks Link Road/B4267 Sully Moors Road/A4055 Cardiff Road roundabout shows that the 3% threshold is exceeded by 0.07%. The VoG will have to consider if this warrants the junction to be assessed.'

There is no definitive guidance as to whether the percentage impact at a junction should be calculated on the basis of the traffic flow at the whole junction or by comparison to the most impacted arm. It is noted that for the Cog Road development the VoG applied the figure for the most impacted arm and in this regard we accept the revised 3.07% impact figure suggested by Capita.

It is understood the VoG have a design of an improved layout of the Cardiff Road / Sully Road roundabout (known as the 'McDonalds Roundabout'), with scheme costs estimated at £200,000. For Cog Road the developer and the VoG have agreed a contribution to these scheme costs via a section 106 agreement. The level of contribution has been calculated on the basis of the proportional increase in traffic on the arm most impacted by the development, for Cog Road this results in a 12% contribution. It is therefore considered that any contribution required from the SS&SC development would similarly be commensurate to the proportional increase in traffic by the arm most impacted.

As the VoG has already developed an improvement scheme for the junction, it is considered that there would be no merit in undertaking a junction capacity assessment particularly given that the impact associated with the SS&SC development is so low.

'There may be opportunities to increase the flare on Cog Road or it may be considered that use of the spur acts as a flare to some degree. It should be noted that queues of 5/6 vehicles (approximately 32m) on Cog Road will block cars from turning left into the spur as would happen in both the opening year 2023 and future year 2028. The VoG should consider whether the Developer should remodel the South Road/Cog Road junction with an increase flare on Cog Road to provide nil-detriment.'

The modelling results provided in the TA showed that the Cog Road arm of the junction with South Road would operate above capacity in the AM peak hour during the Opening and Forecast Years with or without the SS&SC development. The modelling has used the 'one hour' profile, which assumes a peak in traffic flow within the peak hour. This is the most robust traffic profile that can be used and offers something of a worst case in terms of output results.

As noted there is a spur from Cog Road to South Road that provides a bypass of the Cog Road / South Road junction. It is not possible to include this in the junction modelling. As a consequence the junction analysis is considered to be overly robust; the spur would offer relief and effectively provide additional flare length at the junction. Use of the bypass spur is likely to increase if queueing occurs, particular for left turners, where it is likely to offer a less congested alternative.

As well as the junction relief provided by the left turn spur, the following additional reasons explain why it is not considered necessary to remodel the junction with an increase in flare length on Cog Road:

- The SS&SC impact at the junction is low, with just two additional vehicles predicted to use the Cog Road arm of the junction in either direction during the AM peak hour.
- The junction is forecast to operate over-capacity primarily due to the addition of traffic associated with the Cog Road development, which achieves access from Cog Road, and the application of background traffic growth of nearly 20%.
- By including traffic from two developments in Sully totalling 550 dwellings and background traffic growth of nearly 20% the analysis includes a significant amount of double counting. The majority of the background traffic growth is likely to be accounted for by the two housing developments. The TA showed that if background traffic growth were not included the Cog Road / South Road junction would be expected to operate within capacity following the addition of traffic associated with both Cog Road and SS&SC.
- The Cog Road development, which has a sizeable impact at the junction, has already agreed to provide junction improvements in the form of widening the Cog Road entry, as secured by condition;
- The committee report for Cog Road concluded that the substantial sustainable transport contribution would be likely to result in mode shift which 'would decrease the number of private vehicle trips and partially mitigate against capacity issues'. The SS&SC development will make a similarly substantial sustainable transport contribution which may be expected to mitigate capacity issues, particularly given the low impact the development has at the junction.

Conclusion

This Technical Note has been produced by Atkins Transportation as an Addendum to the Transport Assessment (TA) and Framework Travel Plan (FTP) that were submitted for the Sully Sports & Social Club (SS&SC) site development. It has shown that:

• Minor revisions to the development proposed will result in a lower transport impact than the development composition that was considered in the TA and FTP.

- A summary of the committee report for the nearby Cog Road development revealed that the Vale of Glamorgan (VoG) consider that Sully is 'sufficiently sustainable to accommodate additional residential development.'
- The TA Audit undertaken by Capita considered that the TA produced by Atkins was generally robust referring only a small number of points back to the VoG for their consideration. In response to these points the Technical Note has shown that:
 - A Learner Travel Wales assessment is not normally required in the assessment of a proposed development, but would show that the route from the development site to the nearest primary school is in line with guidelines providing a continuous footway and requiring that only relatively quiet side roads need to be crossed.
 - A contribution of £2,000 per dwelling (equating to £400,000 for 200 dwellings) will be provided towards off-site sustainable transport infrastructure and can be used to improve pedestrian and cycling facilities in Sully.
 - The impact of the development on the 'McDonalds Roundabout' is low at 3.07%. It is understood that an improved layout of the junction has been proposed by the VoG and that any developer contribution towards this would be based on the level of impact.
 - The Cog Road / South Road junction is shown to be over-capacity in the AM peak hour. However, minor mitigation should not be required for the following reasons:
 - The SS&SC development impact is low, with just two additional vehicles using Cog Road in either direction during the AM peak hour;
 - The modelling has not included a spur to the north that provides a bypass of the junction and would provide relief particularly if congestion occurred;
 - The modelling has included the Cog Road and SS&SC developments (totalling 550 dwellings) plus 20% background traffic growth. This includes a significant amount of double counting. The TA showed that if 20% background traffic growth were not applied the junction would operate within capacity in all scenarios considered;
 - The Cog Road development, which has a sizeable impact at the junction, will
 provide improvements in the form of widening the Cog Road arm of the junction;
 - The substantial sustainable transport contribution provided both by SS&SC and Cog Road is likely to result in mode shift away from the private car, which will already mitigate impacts at the junction.

Appendix A. Revised Development Masterplan



Access

- 1: Vehicular access from South Road to residential area 2: Re-used vehicular access to retained library 3: Vehicular access to Sully Sports and Leisure Club and retail car parking

- 4: Existing bus stops on South Road
- (excluding residential provision)
- 6: Emergency vehicular access from Beach Road to caravan park and sports pitches
- 7: Public Right of Way access from Beach Road to coastal footpath alongside caravan park
- 8. Public Right of Way access from coastal footpath alongside housing to west
- 9: Distinctive street hierarchy, incorporating a vehicular loop, designed to encourage a low speed environment and promote walking and cycling

10: Direct footpath from South Road to coastal path Development

- 11: Medium density housing development to create body of the residential area
- 12: Single-storey gym building
- 13a:Existing Sully indoor bowls clubhouse
- function room and sports bar
- 14: New touring caravan park with 46 spaces and toilet block
- 15: Dwellings providing a positive face to the secured boundary of the sports pitches
- 16: Low density housing towards the western and southern boundaries to soften the visual impact
- 17: Retained library
- Landscape
- Area of Play (LEAP) and new planting
- 20: Relocated outdoor bowling green and pavilion
- 21: Grass rugby pitch (94x66m) within terraced sports grounds layout
- 22: All weather floodlit pitch (100x66m) with fencing and floodlights
- 23: Floodlit training area with scrum machine
- 24: Retained hedge alongside Beach Road
- 25: Extended area of replacement planting
- 26: Two grass football/rugby pitches (100x64m, 100/89x64m)
- 27: Landscape edge (20m+ from cliffs) to coast alongside retained Public Right of Way
- 28: New and retained planting along western boundary within green corridor

B Reconfigured sports area and additional residential area to NE MD 20/05/16 A Planning issue JL 08/07/15 Amendments Date

Job No/Drawing No 13162/3008 B cale Date Drawn 1:2500 06/15 MD @ A3 All Dimensions to be checked on site



5: Car parking (238 spaces including alongside eastern hedgerow) for sports club use

13b:New single-storey Sully Sports and Leisure Clubhouse incorporating changing rooms, with a

18: Pocket park as focus for residential area acting as a gateway space, with Local Equipped

19: Landscaped edge to South Road with new and retained planting enhancing gateway to village

Updated for client sign off

Job Title Sully VOG - St Modwen Drawina Title Illustrative Masterplan



Appendix B. TRICS Output Data – Fitness Club

TRICS 7.3.1 280316 B17.33	(C) 2016 TRICS Consortium L	td	Friday 27/05/16
Fitness Club			Page 1
Atkins Transport Planning Lo	ongcross Court, Newport Road	Cardiff	Licence No: 803402

Calculation Reference: AUDIT-803402-160527-0550

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use	:	07 - LEISURE
Category	:	K - FITNESS CLUB (PRIVATE)
MUĽTÍ -	MOI	DAL VEHICLES

Selec	cted re	gions and areas:	
06	WES	T MIDLANDS	
	SH	SHROPSHIRE	1 days
07	YOR	KSHIRE & NORTH LINCOLNSHIRE	-
	WY	WEST YORKSHIRE	1 days
09	NOR	2TH	-
	СВ	CUMBRIA	1 days

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

Filtering Stage 2 selection:

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

Parameter:	Gross floor area
Actual Range:	650 to 4500 (units: sqm)
Range Selected by User:	650 to 13856 (units: sqm)

Public Transport Provision: Selection by:

Include all surveys

Date Range: 01/01/08 to 10/06/14

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
Wednesday	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 undertaking using machines.

Selected Locations:	
Edge of Town	2
Free Standing (PPS6 Out of Town)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:	
Industrial Zone	1
Residential Zone	1
Out of Town	1

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.

CS 7.3.1 280316 B17. ess Club	33 (C) 2016 TRICS Consortium Ltd	Friday 27/05/16 Page 2
ns Transport Planning	Longcross Court, Newport Road Cardiff	Licence No: 803402
Filtering Stage 3	selection:	
Use Class:		
A1	1 days	
D2	2 days	
This data displays the has been used for t	he number of surveys per Use Class classification within the selected set. The Use his purpose, which can be found within the Library module of TRICS®.	Classes Order 2005
Population within 1	<u>mile:</u>	
5,001 to 10,000	1 days	
10,001 to 15,000	1 days	
20,001 to 25,000	1 days	
This data displays th	he number of selected surveys within stated 1-mile radii of population.	
Population within 5	miles:	
5,001 to 25,000	1 days	
75,001 to 100,000	1 days	
500,001 or More	1 days	
This data displays t	he number of selected surveys within stated 5-mile radii of population.	
Car ownership with	in 5 miles:	
0.6 to 1.0	1 days	
1.1 to 1.5	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:	
Yes	1 days
No	2 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.

TRICS 7.3.1 280316 B17.33 (C) 2016 TRICS Consc Fitness Club	ortium Ltd		Friday 27/05/16 Page 3
Atkins Transport Planning Longcross Court, Newport	Road Cardiff		Licence No: 803402
LIST OF SITES relevant to selection parameters	-		
1 CB-07-K-01 FITNESS CLUB COWPER ROAD GILWILLY IND. ESTATE		CUMBRIA	
PENRITH Edge of Town Industrial Zone			
Total Gross floor area: Survey date: TUESDAY	650 sqm 10/06/14	Survey Type: MANUAL	
2 SH-07-K-01 FITNESS, TENNIS SUNDORNE ROAD	S & LEISURE	SHROPSHIRE	
SHREWSBURY Edge of Town Residential Zone Total Cross floor area:	4500 sam		
Survey date: WEDNESDAY 3 WY-07-K-01 FITNESS FIRST	21/05/14	Survey Type: MANUAL WEST YORKSHI RE	
REDCOTE LANE BURLEY LEEDS			
Free Standing (PPS6 Out of Town) Out of Town			
Total Gross floor area: Survey date: FRIDAY	1570 sqm 11/06/10	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.

Atkins Transport Planning Longcross Court, Newport Road Cardiff

TRIP RATE for Land Use 07 - LEISURE/K - FITNESS CLUB (PRIVATE) MULTI-MODAL VEHICLES Calculation factor: 100 sqm Estimated TRIP rate value per 465 SQM shown in shaded columns BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS					
	No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated
Time Range	Days	GFA	Rate	Trip Rate	Days	GFA	Rate	Trip Rate	Days	GFA	Rate	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	1	1570	0.000	0.000	1	1570	0.000	0.000	1	1570	0.000	0.000
06:00 - 07:00	3	2240	1.146	5.328	3	2240	0.119	0.554	3	2240	1.265	5.882
07:00 - 08:00	3	2240	0.625	2.906	3	2240	0.833	3.875	3	2240	1.458	6.781
08:00 - 09:00	3	2240	0.818	3.806	3	2240	0.804	3.737	3	2240	1.622	7.543
09:00 - 10:00	3	2240	2.039	9.480	3	2240	0.610	2.837	3	2240	2.649	12.317
10:00 - 11:00	3	2240	1.146	5.328	3	2240	0.997	4.636	3	2240	2.143	9.964
11:00 - 12:00	3	2240	0.774	3.598	3	2240	1.592	7.404	3	2240	2.366	11.002
12:00 - 13:00	3	2240	0.789	3.667	3	2240	0.923	4.290	3	2240	1.712	7.957
13:00 - 14:00	3	2240	0.625	2.906	3	2240	0.938	4.359	3	2240	1.563	7.265
14:00 - 15:00	3	2240	1.027	4.775	3	2240	0.789	3.667	3	2240	1.816	8.442
15:00 - 16:00	3	2240	1.577	7.335	3	2240	1.176	5.467	3	2240	2.753	12.802
16:00 - 17:00	3	2240	2.054	9.549	3	2240	1.414	6.574	3	2240	3.468	16.123
17:00 - 18:00	3	2240	2.262	10.518	3	2240	1.756	8.165	3	2240	4.018	18.683
18:00 - 19:00	3	2240	1.488	6.920	3	2240	1.949	9.065	3	2240	3.437	15.985
19:00 - 20:00	3	2240	1.012	4.705	3	2240	1.830	8.511	3	2240	2.842	13.216
20:00 - 21:00	3	2240	0.357	1.661	3	2240	1.354	6.297	3	2240	1.711	7.958
21:00 - 22:00	3	2240	0.060	0.277	3	2240	0.476	2.214	3	2240	0.536	2.491
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			17.799	82.759			17.560	81.652			35.359	164.411

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:	650 - 4500 (units: sqm)
Survey date date range:	01/01/08 - 10/06/14
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.