Introduction

The Thames Valley Science Park has been the subject of a number of planning applications and consented developments. The Phase 1 development was consented in 2016 and was completed in 2018.

Consented Schemes

The supporting TA for the planning application utilised the trip rates shown in the table below for Research and Development, reproduced from the supporting documentation.

Table 1 ***Consented Schemes. Transport Assessment Trip Rate***

	AM Peak Hour (0800-0900)			PM Peak Hour (1700-1800)		
	In	Out	Two Way	In	Out	Two Way
Predicted TVSP Vehicular Trip Rates (vehs per 100 sqm GFA)	1.22	0.08	1.30	0.09	1.01	1.10
Predicted TVSP Vehicular trips (75,690 sqm)	923	61	984	68	764	833

These rates were further utilised to support the Phase 2 application of the Science Park, for which WBC have granted outline consent.

In November/December 2018 (26/11/2018 to 02/12/2018), the TV Science Park was the subject of a set of traffic surveys over 5 days, which provided the trip rates set out below. These surveys were for Travel Plan monitoring purposes and were also accepted as part of the consented Shinfield Studios application.

Table 2 ***Consented Schemes. Trip Rates Derived from Survey Data***

	AM Peak Hour (0800-0900)			PM Peak Hour (1700-1800)		
	In	Out	Two Way	In	Out	Two Way
Surveyed TVSP Vehicular Trip Rates (vehs per 100 sqm GFA)	1.07	0.08	1.15	0.06	0.87	0.93

As can be seen the actual surveyed results are lower than those which were previously used as a theoretical exercise in the previous forecast modelling.

The data suggests that the previously agreed R&D trip rates are slightly higher than those observed on site. Therefore there is scope to review the trip rates to be used in the latest modelling.

Cine Village Proposals

In addition to the science park consents, the original R&D rates have been utilised by WBC to determine the likely impact of the temporary and new Cine Village Scheme, in that the original rates

(1.3 per 100sqm in the AM Peak Hour) were used as comparison to the new rates based on surveys at existing film studios, as shown in the table below.

Table 3 ***Cine Village Trip Rates***

Surveyed Vehicular Trip Rates (Per 100sqm)	AM Peak Hour (0800-0900)			PM Peak Hour (1700-1800)		
	In	Out	Two Way	In	Out	Two Way
Shepperton Studios	0.25	0.08	0.33	0.08	0.32	0.40
Pinewood Studios	0.45	0.09	0.54	0.09	0.37	0.46

The Cine Village planning applications used the higher Pinewood Studios rates to define the trips generated by the film studio operation. These were compared to those previous used for the Science Park and it was shown that the new Cine Village would generate less trips than the consented R&D Science Park.

TRICS Review

WBC have undertaken a brief TRICS review using Business Parks as the defining land use, for sites surveyed between 2014 and 2019. This took into account 18 sites outside of London. This land use would include traditional B1 office as well as some R&D, as such the trip rates would be expected to be higher. Indeed the B1 rate in WSTM4 is 1.7 per 100sqm for the AM Peak Hour.

Table 4 ***B1 Office and R&D TRICS Trip Rates***

	AM Peak Hour (8-9)			PM Peak Hour (17-18)		
	In	Out	Two Way	In	Out	Two Way
B1 and R&D Rates	1.24	0.15	1.39	0.103	0.900	1.003

The range of sites captured in the WBC sift of sites includes two sites described as Science Park and Tech Park. If only these two sites are considered, the trip rates drop from those shown above to values which lie between the actual and forecast rates for TVSP, as per the table below.

The TRICS outputs are appended to this note.

Table 5 ***R&D TRICS Trip Rates***

	AM Peak Hour (8-9)			PM Peak Hour (17-18)		
	In	Out	Two Way	In	Out	Two Way
R&D Rates	1.138	0.118	1.256	0.054	0.803	0.857

Recommendation

The data suggests that a development with a higher level of traditional B1 content would support a higher trip rate than R&D or a Science/Tech Park. This is verified in that WBC have to date used the

lower R&D rates for Phase 1 and 2 of the TVSP and gone onto use the same data to validate the Cine Valley proposals.

Given that TVSP has been surveyed, then it offers the most realistic trip rates for the location and nature of the land use. To build in a level of robustness the surveyed data (presented in Table 2) has been averaged with the two TRICS database Science & Tech Park sites (trip rates data presented in Table 5) to establish an appropriate trip rate for the Hall Farm employment site, which is summarised in Table 6.

It is acknowledged that averaging Table 2 results with Table 5 results may not be mathematically correct, and the better approach would be to use individual site trip rates to derive the average. However, due to weighting applied within TRICS it is not possible to fully replicate the average trip rates produced by TRICS (Table 5) from individual site data and therefore a reliance is usually placed on TRICS to produce site averages.

Considering Table 5 trip rates (the average across R&D sites produced by TRICS) and Table 2 (November 2018 survey) trip rates are relatively similar, the impact of the method adopted will be negligible.

Table 6 ***Proposed Hall Farm R&D Trip Rates***

	AM Peak Hour (8-9)			PM Peak Hour (17-18)		
	In	Out	Two Way	Out	In	Two Way
Revised R&D Rates	1.104	0.099	1.203	0.057	0.837	0.894

Appendix A R&D TRICS Trip Rates. TRICS Outputs

Calculation Reference: AUDIT-706701-220526-0557

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : B - BUSINESS PARK
TOTAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days

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

Primary Filtering 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: 56520 to 142687 (units: sqm)
Range Selected by User: 975 to 142687 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 25/09/19

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:

Wednesday	1 days
Friday	1 days

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

Selected survey types:

Manual count	2 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

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:

Out of Town	1
No Sub Category	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.

LIST OF SITES relevant to selection parameters

1 CA-02-B-03 SCIENCE PARK CAMBRIDGESHIRE
MILTON ROAD
CAMBRIDGE

Edge of Town
No Sub Category
Total Gross floor area: 142687 sqm
Survey date: FRIDAY *06/10/17* *Survey Type: MANUAL*

2 WK-02-B-01 BUSINESS/TECH. PARK WARWICKSHIRE
GALLOWS HILL
WARWICK

Edge of Town
Out of Town
Total Gross floor area: 56520 sqm
Survey date: WEDNESDAY *25/09/19* *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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CA-02-B-02	Deselecting to filter for Science/Tech parks
CH-02-B-01	Deselecting to filter for Science/Tech parks
DV-02-B-01	Deselecting to filter for Science/Tech parks
EX-02-B-01	Deselecting to filter for Science/Tech parks
EX-02-B-02	Deselecting to filter for Science/Tech parks
GM-02-B-04	Deselecting to filter for Science/Tech parks
LE-02-B-01	Deselecting to filter for Science/Tech parks
LN-02-B-02	Deselecting to filter for Science/Tech parks
ST-02-B-04	Deselecting to filter for Science/Tech parks
TW-02-B-05	Deselecting to filter for Science/Tech parks
TW-02-B-06	Deselecting to filter for Science/Tech parks
WG-02-B-02	Deselecting to filter for Science/Tech parks
WM-02-B-03	Deselecting to filter for Science/Tech parks
WO-02-B-02	Deselecting to filter for Science/Tech parks
WY-02-B-02	Deselecting to filter for Science/Tech parks
WY-02-B-03	Deselecting to filter for Science/Tech parks

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	99604	0.308	2	99604	0.032	2	99604	0.340
07:30 - 08:00	2	99604	0.529	2	99604	0.063	2	99604	0.592
08:00 - 08:30	2	99604	0.651	2	99604	0.066	2	99604	0.717
08:30 - 09:00	2	99604	0.487	2	99604	0.052	2	99604	0.539
09:00 - 09:30	2	99604	0.259	2	99604	0.041	2	99604	0.300
09:30 - 10:00	2	99604	0.165	2	99604	0.037	2	99604	0.202
10:00 - 10:30	2	99604	0.061	2	99604	0.030	2	99604	0.091
10:30 - 11:00	2	99604	0.050	2	99604	0.028	2	99604	0.078
11:00 - 11:30	2	99604	0.044	2	99604	0.035	2	99604	0.079
11:30 - 12:00	2	99604	0.050	2	99604	0.051	2	99604	0.101
12:00 - 12:30	2	99604	0.065	2	99604	0.098	2	99604	0.163
12:30 - 13:00	2	99604	0.081	2	99604	0.093	2	99604	0.174
13:00 - 13:30	2	99604	0.097	2	99604	0.072	2	99604	0.169
13:30 - 14:00	2	99604	0.068	2	99604	0.050	2	99604	0.118
14:00 - 14:30	2	99604	0.053	2	99604	0.061	2	99604	0.114
14:30 - 15:00	2	99604	0.027	2	99604	0.090	2	99604	0.117
15:00 - 15:30	2	99604	0.028	2	99604	0.171	2	99604	0.199
15:30 - 16:00	2	99604	0.035	2	99604	0.212	2	99604	0.247
16:00 - 16:30	2	99604	0.027	2	99604	0.297	2	99604	0.324
16:30 - 17:00	2	99604	0.031	2	99604	0.299	2	99604	0.330
17:00 - 17:30	2	99604	0.027	2	99604	0.410	2	99604	0.437
17:30 - 18:00	2	99604	0.027	2	99604	0.393	2	99604	0.420
18:00 - 18:30	2	99604	0.019	2	99604	0.343	2	99604	0.362
18:30 - 19:00	2	99604	0.018	2	99604	0.256	2	99604	0.274
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			3.207			3.280			6.487

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:	56520 - 142687 (units: sqm)
Survey date date range:	01/01/14 - 25/09/19
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	16

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
07:30 - 08:00	2	99604	0.004	2	99604	0.004	2	99604	0.008
08:00 - 08:30	2	99604	0.005	2	99604	0.003	2	99604	0.008
08:30 - 09:00	2	99604	0.007	2	99604	0.006	2	99604	0.013
09:00 - 09:30	2	99604	0.008	2	99604	0.009	2	99604	0.017
09:30 - 10:00	2	99604	0.006	2	99604	0.005	2	99604	0.011
10:00 - 10:30	2	99604	0.002	2	99604	0.005	2	99604	0.007
10:30 - 11:00	2	99604	0.003	2	99604	0.002	2	99604	0.005
11:00 - 11:30	2	99604	0.002	2	99604	0.002	2	99604	0.004
11:30 - 12:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
12:00 - 12:30	2	99604	0.002	2	99604	0.002	2	99604	0.004
12:30 - 13:00	2	99604	0.002	2	99604	0.002	2	99604	0.004
13:00 - 13:30	2	99604	0.001	2	99604	0.002	2	99604	0.003
13:30 - 14:00	2	99604	0.001	2	99604	0.000	2	99604	0.001
14:00 - 14:30	2	99604	0.002	2	99604	0.001	2	99604	0.003
14:30 - 15:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
15:00 - 15:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
15:30 - 16:00	2	99604	0.001	2	99604	0.002	2	99604	0.003
16:00 - 16:30	2	99604	0.002	2	99604	0.002	2	99604	0.004
16:30 - 17:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
17:00 - 17:30	2	99604	0.002	2	99604	0.001	2	99604	0.003
17:30 - 18:00	2	99604	0.001	2	99604	0.002	2	99604	0.003
18:00 - 18:30	2	99604	0.003	2	99604	0.002	2	99604	0.005
18:30 - 19:00	2	99604	0.003	2	99604	0.002	2	99604	0.005
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.062			0.059			0.121

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.*

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	99604	0.002	2	99604	0.002	2	99604	0.004
07:30 - 08:00	2	99604	0.004	2	99604	0.004	2	99604	0.008
08:00 - 08:30	2	99604	0.000	2	99604	0.001	2	99604	0.001
08:30 - 09:00	2	99604	0.001	2	99604	0.000	2	99604	0.001
09:00 - 09:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
09:30 - 10:00	2	99604	0.001	2	99604	0.000	2	99604	0.001
10:00 - 10:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
10:30 - 11:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
11:00 - 11:30	2	99604	0.002	2	99604	0.001	2	99604	0.003
11:30 - 12:00	2	99604	0.000	2	99604	0.000	2	99604	0.000
12:00 - 12:30	2	99604	0.000	2	99604	0.000	2	99604	0.000
12:30 - 13:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
13:00 - 13:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
13:30 - 14:00	2	99604	0.000	2	99604	0.001	2	99604	0.001
14:00 - 14:30	2	99604	0.001	2	99604	0.000	2	99604	0.001
14:30 - 15:00	2	99604	0.001	2	99604	0.000	2	99604	0.001
15:00 - 15:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
15:30 - 16:00	2	99604	0.000	2	99604	0.000	2	99604	0.000
16:00 - 16:30	2	99604	0.001	2	99604	0.000	2	99604	0.001
16:30 - 17:00	2	99604	0.000	2	99604	0.000	2	99604	0.000
17:00 - 17:30	2	99604	0.000	2	99604	0.000	2	99604	0.000
17:30 - 18:00	2	99604	0.000	2	99604	0.001	2	99604	0.001
18:00 - 18:30	2	99604	0.000	2	99604	0.001	2	99604	0.001
18:30 - 19:00	2	99604	0.000	2	99604	0.001	2	99604	0.001
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.019			0.018			0.037

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.*

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
07:30 - 08:00	2	99604	0.002	2	99604	0.002	2	99604	0.004
08:00 - 08:30	2	99604	0.003	2	99604	0.003	2	99604	0.006
08:30 - 09:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
09:00 - 09:30	2	99604	0.002	2	99604	0.002	2	99604	0.004
09:30 - 10:00	2	99604	0.002	2	99604	0.001	2	99604	0.003
10:00 - 10:30	2	99604	0.002	2	99604	0.002	2	99604	0.004
10:30 - 11:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
11:00 - 11:30	2	99604	0.002	2	99604	0.001	2	99604	0.003
11:30 - 12:00	2	99604	0.001	2	99604	0.002	2	99604	0.003
12:00 - 12:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
12:30 - 13:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
13:00 - 13:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
13:30 - 14:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
14:00 - 14:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
14:30 - 15:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
15:00 - 15:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
15:30 - 16:00	2	99604	0.002	2	99604	0.001	2	99604	0.003
16:00 - 16:30	2	99604	0.001	2	99604	0.002	2	99604	0.003
16:30 - 17:00	2	99604	0.003	2	99604	0.002	2	99604	0.005
17:00 - 17:30	2	99604	0.002	2	99604	0.002	2	99604	0.004
17:30 - 18:00	2	99604	0.001	2	99604	0.002	2	99604	0.003
18:00 - 18:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
18:30 - 19:00	2	99604	0.001	2	99604	0.002	2	99604	0.003
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.035			0.035			0.070

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.*

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	99604	0.020	2	99604	0.003	2	99604	0.023
07:30 - 08:00	2	99604	0.047	2	99604	0.007	2	99604	0.054
08:00 - 08:30	2	99604	0.072	2	99604	0.010	2	99604	0.082
08:30 - 09:00	2	99604	0.076	2	99604	0.007	2	99604	0.083
09:00 - 09:30	2	99604	0.056	2	99604	0.008	2	99604	0.064
09:30 - 10:00	2	99604	0.043	2	99604	0.010	2	99604	0.053
10:00 - 10:30	2	99604	0.020	2	99604	0.010	2	99604	0.030
10:30 - 11:00	2	99604	0.022	2	99604	0.008	2	99604	0.030
11:00 - 11:30	2	99604	0.011	2	99604	0.006	2	99604	0.017
11:30 - 12:00	2	99604	0.012	2	99604	0.009	2	99604	0.021
12:00 - 12:30	2	99604	0.015	2	99604	0.015	2	99604	0.030
12:30 - 13:00	2	99604	0.012	2	99604	0.015	2	99604	0.027
13:00 - 13:30	2	99604	0.018	2	99604	0.017	2	99604	0.035
13:30 - 14:00	2	99604	0.014	2	99604	0.011	2	99604	0.025
14:00 - 14:30	2	99604	0.009	2	99604	0.009	2	99604	0.018
14:30 - 15:00	2	99604	0.008	2	99604	0.013	2	99604	0.021
15:00 - 15:30	2	99604	0.015	2	99604	0.024	2	99604	0.039
15:30 - 16:00	2	99604	0.010	2	99604	0.017	2	99604	0.027
16:00 - 16:30	2	99604	0.011	2	99604	0.035	2	99604	0.046
16:30 - 17:00	2	99604	0.013	2	99604	0.050	2	99604	0.063
17:00 - 17:30	2	99604	0.013	2	99604	0.067	2	99604	0.080
17:30 - 18:00	2	99604	0.010	2	99604	0.056	2	99604	0.066
18:00 - 18:30	2	99604	0.013	2	99604	0.047	2	99604	0.060
18:30 - 19:00	2	99604	0.007	2	99604	0.031	2	99604	0.038
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.547			0.485			1.032

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.*

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
CARS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	99604	0.295	2	99604	0.024	2	99604	0.319
07:30 - 08:00	2	99604	0.507	2	99604	0.049	2	99604	0.556
08:00 - 08:30	2	99604	0.631	2	99604	0.054	2	99604	0.685
08:30 - 09:00	2	99604	0.471	2	99604	0.042	2	99604	0.513
09:00 - 09:30	2	99604	0.242	2	99604	0.028	2	99604	0.270
09:30 - 10:00	2	99604	0.151	2	99604	0.028	2	99604	0.179
10:00 - 10:30	2	99604	0.048	2	99604	0.018	2	99604	0.066
10:30 - 11:00	2	99604	0.040	2	99604	0.020	2	99604	0.060
11:00 - 11:30	2	99604	0.032	2	99604	0.026	2	99604	0.058
11:30 - 12:00	2	99604	0.043	2	99604	0.042	2	99604	0.085
12:00 - 12:30	2	99604	0.056	2	99604	0.092	2	99604	0.148
12:30 - 13:00	2	99604	0.071	2	99604	0.084	2	99604	0.155
13:00 - 13:30	2	99604	0.088	2	99604	0.064	2	99604	0.152
13:30 - 14:00	2	99604	0.063	2	99604	0.044	2	99604	0.107
14:00 - 14:30	2	99604	0.046	2	99604	0.056	2	99604	0.102
14:30 - 15:00	2	99604	0.019	2	99604	0.080	2	99604	0.099
15:00 - 15:30	2	99604	0.022	2	99604	0.158	2	99604	0.180
15:30 - 16:00	2	99604	0.028	2	99604	0.206	2	99604	0.234
16:00 - 16:30	2	99604	0.021	2	99604	0.288	2	99604	0.309
16:30 - 17:00	2	99604	0.025	2	99604	0.289	2	99604	0.314
17:00 - 17:30	2	99604	0.021	2	99604	0.400	2	99604	0.421
17:30 - 18:00	2	99604	0.022	2	99604	0.380	2	99604	0.402
18:00 - 18:30	2	99604	0.016	2	99604	0.335	2	99604	0.351
18:30 - 19:00	2	99604	0.014	2	99604	0.247	2	99604	0.261
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			2.972			3.054			6.026

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.*

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	99604	0.007	2	99604	0.004	2	99604	0.011
07:30 - 08:00	2	99604	0.009	2	99604	0.003	2	99604	0.012
08:00 - 08:30	2	99604	0.008	2	99604	0.005	2	99604	0.013
08:30 - 09:00	2	99604	0.007	2	99604	0.004	2	99604	0.011
09:00 - 09:30	2	99604	0.004	2	99604	0.002	2	99604	0.006
09:30 - 10:00	2	99604	0.005	2	99604	0.004	2	99604	0.009
10:00 - 10:30	2	99604	0.007	2	99604	0.005	2	99604	0.012
10:30 - 11:00	2	99604	0.006	2	99604	0.005	2	99604	0.011
11:00 - 11:30	2	99604	0.008	2	99604	0.006	2	99604	0.014
11:30 - 12:00	2	99604	0.005	2	99604	0.005	2	99604	0.010
12:00 - 12:30	2	99604	0.007	2	99604	0.004	2	99604	0.011
12:30 - 13:00	2	99604	0.005	2	99604	0.006	2	99604	0.011
13:00 - 13:30	2	99604	0.006	2	99604	0.004	2	99604	0.010
13:30 - 14:00	2	99604	0.005	2	99604	0.005	2	99604	0.010
14:00 - 14:30	2	99604	0.004	2	99604	0.003	2	99604	0.007
14:30 - 15:00	2	99604	0.005	2	99604	0.008	2	99604	0.013
15:00 - 15:30	2	99604	0.003	2	99604	0.009	2	99604	0.012
15:30 - 16:00	2	99604	0.005	2	99604	0.004	2	99604	0.009
16:00 - 16:30	2	99604	0.003	2	99604	0.005	2	99604	0.008
16:30 - 17:00	2	99604	0.002	2	99604	0.006	2	99604	0.008
17:00 - 17:30	2	99604	0.002	2	99604	0.003	2	99604	0.005
17:30 - 18:00	2	99604	0.003	2	99604	0.005	2	99604	0.008
18:00 - 18:30	2	99604	0.000	2	99604	0.004	2	99604	0.004
18:30 - 19:00	2	99604	0.001	2	99604	0.005	2	99604	0.006
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.117			0.114			0.231

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.*

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MOTOR CYCLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	99604	0.003	2	99604	0.001	2	99604	0.004
07:30 - 08:00	2	99604	0.004	2	99604	0.002	2	99604	0.006
08:00 - 08:30	2	99604	0.005	2	99604	0.001	2	99604	0.006
08:30 - 09:00	2	99604	0.001	2	99604	0.000	2	99604	0.001
09:00 - 09:30	2	99604	0.002	2	99604	0.001	2	99604	0.003
09:30 - 10:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
10:00 - 10:30	2	99604	0.002	2	99604	0.000	2	99604	0.002
10:30 - 11:00	2	99604	0.001	2	99604	0.000	2	99604	0.001
11:00 - 11:30	2	99604	0.001	2	99604	0.000	2	99604	0.001
11:30 - 12:00	2	99604	0.001	2	99604	0.002	2	99604	0.003
12:00 - 12:30	2	99604	0.001	2	99604	0.000	2	99604	0.001
12:30 - 13:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
13:00 - 13:30	2	99604	0.001	2	99604	0.001	2	99604	0.002
13:30 - 14:00	2	99604	0.000	2	99604	0.001	2	99604	0.001
14:00 - 14:30	2	99604	0.001	2	99604	0.000	2	99604	0.001
14:30 - 15:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
15:00 - 15:30	2	99604	0.002	2	99604	0.002	2	99604	0.004
15:30 - 16:00	2	99604	0.001	2	99604	0.001	2	99604	0.002
16:00 - 16:30	2	99604	0.001	2	99604	0.002	2	99604	0.003
16:30 - 17:00	2	99604	0.000	2	99604	0.001	2	99604	0.001
17:00 - 17:30	2	99604	0.001	2	99604	0.005	2	99604	0.006
17:30 - 18:00	2	99604	0.000	2	99604	0.004	2	99604	0.004
18:00 - 18:30	2	99604	0.000	2	99604	0.001	2	99604	0.001
18:30 - 19:00	2	99604	0.001	2	99604	0.000	2	99604	0.001
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.032			0.028			0.060

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.*