



Civil Engineers & Transport Planners

24 Stone Street

Service
Management Plan

August 2023

231707/SMP/MS/RS/01



Civil Engineers & Transport Planners

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1 INTRODUCTION AND SCOPE OF REPORT

1.1 General

1.1.1 Lanmor Consulting Ltd has been commissioned to provide a Delivery and Servicing Management Plan (DSMP) for the proposed development at 24 Stone Street, Gravesend, Kent, DA11 ONP.

1.1.2 Within this DSMP, detailed consideration will be given to the management of service vehicle trips to and from the proposed development in order to minimise the impact on the surrounding public highway networks.

1.1.3 This plan will also demonstrate that the proposed development accords with the key planning policies in regard to deliveries and servicing, present the proposed servicing provisions on site comprising of site management and predictions of all servicing vehicles and refuse vehicle trip generations, the objectives of the DSMP and what measures and initiatives will be implemented to increase the efficiency of servicing for the application site.

1.2 Site Description

1.2.1 The site is located in Gravesend, Kent the site has been cleared and is currently unoccupied, the site lies to the rear of 5 buildings facing onto Stone Street, numbers 20-24. There is currently no vehicular or pedestrian access to the site as it is private property. The area surrounding the site is mainly commercial and industrial as it is located in Gravesend town centre, with the train station directly to the west. Figure 1.1 below shows the location of the site.

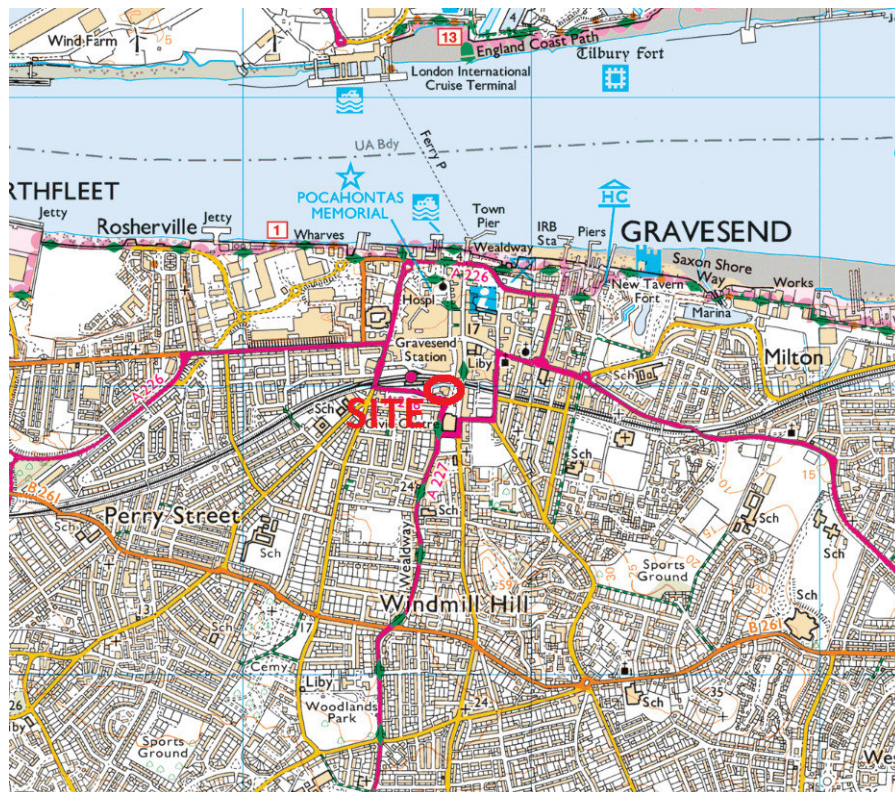


Figure 1.1 – Site Location

1.3 Development Proposals

- 1.3.1 The development proposals involve the construction of a 5-storey building comprising of 1 commercial/retail unit on the ground floor of the building, 2 offices at first floor and 14 self-contained residential dwellings. The proposed layout for the site is included in Appendix A as drawing 5232/D.10/E

2 RELEVANT PLANNING POLICIES

2.1 Kent County Council Design Guide

Emergency Service & Refuse Vehicles

2.1.1 'Consideration should be given in new development to the size and type of vehicles that need access and – for emergency service vehicles – the provision of 'standing' space.

2.1.2 Waste collection and recycling points should normally not be more than 25 metres from the edge of the carriageway, with a preference to locate them as close as possible to the publicly-maintained road for convenient collection.

2.1.3 Access for fire appliances must be considered at the initial design stage. The Fire Brigade must be able to manoeuvre its equipment and appliances to suitable positions adjacent to any premises and, in the case of dwellings, suitable access maintained for fire-fighting to within 45 metres of all dwellings.'

Freight Traffic

2.1.4 The Development Planning Team within KCC comment on the highway and transportation implications of planning applications to recommend acceptance, modification or raise objection. When assessing planning applications such as housing or industrial applications KCC can recommend that planning conditions are added to planning consents or make sure legally binding agreements are entered into by developers which can include mitigation measures for freight movements. These conditions/agreements can be used for the construction and or operational phases of the site. Such conditions are made to minimise any impact on the physical road network as well as surrounding properties.

2.1.5 As far as is reasonably practicable, developments generating freight movements should be located where there is easy access to the strategic road network, having regard for the preferred freight routeing. When planning applications for developments are submitted, their accesses are assessed for road junction widths and visibility suitable for deliveries and collections by HGVs.

2.1.6 During the construction phase of any development a legal agreement or condition can be used to secure a Construction Management Plan that designates lorry routes that construction traffic is obliged to use.

2.1.7 Construction Logistics Plans are another tool used to manage deliveries to construction sites for example by consolidating materials into fewer lorry loads or more appropriate vehicles for a certain location.

Construction Management Plan

2.1.8 A plan put in place to help developers to minimise the impact of their construction on the surrounding community both for the construction onsite and the transport arrangements servicing the site.

2.2 Local Policies - Gravesham Borough Council

Gravesham Local Plan: Policy 9.5 – Residential Intensification through Sub-Division and Conversion

- 9.5.6 - It is also essential that sufficient space is provided within the dwellings to meet modern living standards and that sufficient private, useable amenity space and adequate refuse storage facilities are provided for the residents of new developments. Core Strategy Policy CS19 and associated supplementary guidance will apply.

Gravesham Local Plan Core Strategy: Policy CS19 – Development Designed Principles

- New development will be located, designed and constructed to:
 - safeguard the amenity, including privacy, daylight and sunlight, of its occupants and those of neighbouring properties and land;
 - avoid adverse environmental impacts from pollution, including noise, air, odour and light pollution, and land contamination; and

- not pose an unacceptable risk or harm to the water environment, including the quality and/or quantity of ground waters, surface waters, wetlands and coastal water systems;
- Car parking will be well related to the development it serves;
- New development will incorporate appropriate facilities for the storage and recycling of waste.

3 SERVICING AND REFUSE COLLECTION PROPOSALS

3.1 Delivery and Servicing Strategy

3.1.1 This chapter details the delivery and servicing activity for the development. The level of servicing activity has been forecast from TRICS data for similar developments.

3.1.2 All servicing to the site and refuse collections will take place off Athboy Road from the lay-by directly north of the development. For both the commercial units and residential dwellings the refuse storage area is located on the right of the development, which is easily accessible on collection days via Athboy Road.

3.1.3 While it is difficult to dictate to residents the type and frequency of deliveries to the residential part of the development, deliveries to the commercial uses will be controlled by the management team.

3.2 Residential Deliveries Trip Generation

3.2.1 The site will generate servicing vehicle trips and to estimate the total servicing trips, the TRICS database has been used to assess similar sites. It not possible to identify the service trips from the database, the heavy & light goods vehicle movements have been added together to give an indication of the service trips to the site.

3.2.2 The summary of the results is tabulated below which shows the morning and evening peak hour servicing trips for the proposed 14 residential units. Each servicing trip will account for two vehicle movements on the highway network (one inbound and one outbound trip). The TRICS output is included in Appendix B.

3.2.3 The TRICS data shows the dwelling will generate very few heavy goods trips over the course of the day, a maximum of 0.1 trip per day in the morning peak. The peak in delivery movements however occurs mid between 12.00-1.00pm when 0.44 arrivals and 0.26 departures could occur.

	Trip Rates (per dwelling) LGVS / HGVS		Total Movements (14 dwellings) LGVS / HGVS	
	Arrivals	Departures	Arrivals	Departures
Weekday Morning (08:00 – 09:00)	0.013 / 0.006	0.013 / 0.006	0 / 0	0 / 0
Weekday Evening (17:00 – 18:00)	0.019 / 0.000	0.000 / 0.000	0 / 0	0 / 0
Daily Total	0.159 / 0.012	0.147 / 0.012	2 / 0	2 / 0

Table 3.1 - Proposed Residential Servicing Trips (14 Units)

3.2.4 Residents will be encouraged by the developer's management team to arrange for as many deliveries as possible after 10:00. The majority of deliveries will be delivered directly to the foyer and therefore the delivery time will be minimal. Refuse collection will be from the bin store to the north of the site, these will be undertaken by the local authority contractor so residents will have no control over the time or day of collection.

3.3 Commercial Servicing Trip Generation

3.3.1 The development is expected to generate delivery servicing movements relating to the proposed office and retail uses at the site. The peak hours for servicing vehicle movement are considered unlikely to coincide with the peak highway network operational hours. The table below provides a breakdown of the servicing profile during the peak rush hours and total daily movements, the full data is provided in Appendix B.

3.3.2 The proposed office use will generate minimal delivery trips up to 2 per day, the majority will be light goods vehicles. The retail unit has the potential to generate more trips but again the majority will be light good movements.

	Trip Rates (per 100sqm) Retail / Office		Retail Total Movements (456sqm)		Office Total Movements (265sqm)	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Weekday Morning (08:00 – 09:00)	2.124 / 0.479	2.362 / 0.119	2.124	2.362	0.479	0.119
Weekday Evening (17:00 – 18:00)	0.068 / 0.000	0.068 / 0.000	1.892	1.418	0.000	0.119
Daily Total	7.189 / 0.676	7.146 / 0.676	32.781	32.585	1.791	1.7914

Table 3.2 - Proposed Commercial Servicing Trips

3.3.3 The above shows that the number of service vehicles attending the site over the course of a day. The above assessment is considered an overestimation of the situation that will occur as it is unlikely the retail use will need 6-7 deliveries per day. However, for the benefit of this assessment the higher / worst case scenario has been considered.

3.3.4 It is proposed that all commercial servicing trip generation will be undertaken during standard commercial working hours. The team will ensure they take place after 10:00am to prevent conflicts with commuting traffic.

3.4 Refuse

3.4.1 Commercial waste which would be generated by the proposed development would be stored in the refuse storage area on the ground floor in the dedicated bin store. The store has direct access onto the footway of Athboy Road which will allow kerbside collection of waste.

3.4.2 Refuse from the commercial units will be collected once a week, the site team will ensure that the collection take place during the off-peak periods. On collection days the refuse workers will be able to access the bin store and wheel out the waste to the waiting refuse vehicle on Athboy Road.

3.4.3 The residential refuse collection will be undertaken by the local authority's contractor, therefore it is not possible for the residents to dictate the day and timing of collections. However, given the aims of this SMP is to minimise the impact of servicing it is assumed that the local authority will arrange to have the refuse also collect after 10.00am.

3.4.4 The residents will have a general waste, recycling and possibly a green waste collection, therefore there will be one or two collection visits per week. They will be made from kerbside as per the commercial units, the operatives will be able to pull the bins from the bin store to the collection vehicle.

3.5 Fire Servicing

3.5.1 The proposed buildings will be accessible from the adjacent pavement so fire appliances can reach the building to fight a fire from the roads to the north and south as well as from the station car park to the west.

3.6 Vehicle Type Mix

3.6.1 Vehicles sizes to the commercial unit can be controlled by selecting suppliers that that use suitable vehicles that meet the above aims. The majority of deliveries the commercial uses will be via transit type vans, 7.5-ton panel vans and the occasional rigid vehicle.

3.6.2 Controlling deliveries to the residential flats cannot be controlled but the type of vehicles delivering to the development or timing, the type of deliveries is likely to consist of the following:

- 3.5 tonne panel van/grocery delivery lorries;
- Refuse Vehicles (local authority and private); and
- Two Axle Pantehcon

4 SERVICING MANAGEMENT PLAN OBJECTIVES

4.1 Objectives

4.1.1 Service Management Plans developed through the planning process seek to support sustainable development.

4.1.2 This Delivery and Servicing Management Plan will therefore seek to achieve the following objectives:

- Demonstrate that goods and services can be delivered, and waste removed, in a safe, efficient and environmentally-friendly way;
- Identify deliveries that could be reduced, re-timed or even consolidated, particularly during busy periods;
- Improve the reliability of deliveries to the site;
- Reduce the operating costs of building occupants and freight companies; and
- Reduce the impact of freight activity on local residents and the environment.

5 SERVICING MANAGEMENT PLAN MEASURES

5.1 Introduction

5.1.1 This section outlines the overarching measures and initiatives included within the Servicing Management Plan which are applicable to the development site. This Servicing Management Plan will specifically aim to ensure that servicing of the development can be carried out efficiently, whilst minimising any effects on the local highway network, residents and commercial occupiers within and surrounding the site, and the environment.

5.1.2 The proposed management measures and initiatives have been grouped into the following areas: Design; Procurement Strategy; Operational Efficiency; Waste Management; and Road Trip Reduction. Each one of these is considered below.

5.2 Design

5.2.1 Good design can minimise disturbance for residents at or travelling to the site and the impact of servicing upon the surrounding highway network. Design related measures implemented as part of the development proposals are set out in turn below.

5.3 Servicing Facilities

5.3.1 The proposed development has been designed to ensure that servicing activities can be undertaken from the lay-by directly outside the property to ensure that traffic flows on the surrounding highway network are unaffected by the operation of the site.

5.4 Procurement Strategy

5.4.1 Procurement process should demonstrate an awareness of all vehicle activity associated with the site, its impacts and appropriate measures to reduce it. This will be reviewed by site team, and they will ensure that only approved delivery companies that comply with the above requirements are appointed to service the development.

Freight Operator Recognition Scheme

- 5.4.2 Whilst it's not possible to dictate how residents have deliveries made to their property, they will be encouraged to contract suppliers registered with a best practice scheme, such as the Freight Operator Recognition Scheme (FORS). Full details of the benefits associated with FORS are detailed earlier within this document.

Consolidation of Suppliers

- 5.4.3 Occupiers of the site will be made aware of the benefits associated with consolidating deliveries and will therefore be encouraged to co-ordinate deliveries in instances where common suppliers are used.

Staff Training Requirements and Responsibilities

- 5.4.4 The appointed site team will be responsible for providing funding and time resources for all of their team to receive appropriate training relating to the processes and procedures in operation on the development site. On-going training requirements will be identified through annual Personal Development Reviews (or equivalent internal review process).

5.5 Operational Efficiency

Delivery Restrictions and Enforcement

- 5.5.1 Peak hour deliveries will be discouraged through consultation with occupiers of the buildings by the site team. Residents will be encouraged by the team to arrange for as many deliveries as possible after 10:00am.

5.6 Road Trip Reduction

Encouraging Deliveries by Sustainable Modes

- 5.6.1 The occupiers of the site will be encouraged to use suppliers who are affiliated to the Freight Operator Recognition Scheme and operating green fleets complying with the emission standards. Workplace occupiers will also be encouraged to publicise sustainable 'best practice' measures via the Freight Information Portal. In so doing this measure will contribute towards encouraging more maintenance contractors to use electric vehicles.

Enforcement

- 5.6.2 The contents of this Delivery and Servicing Management Plan have been prepared in order to inform the planning authority of the developer's intent for the planning application for this site. Therefore, it must be complied with unless otherwise agreed in writing with the planning authority.

6 MONITORING AND REVIEW PROCESS

6.1 Review

6.1.1 The intention is that the measures set out above will be reviewed and updated regularly. A formal review will be undertaken after 3 months of commencement and annual reviews thereafter.

6.2 Monitoring

6.2.1 As part of the ongoing management review the following will be monitored;

- The level of service vehicles
- The uptake of combining deliveries.
- The number of delivers occurring during peak periods.
- Complaints / abuse of management plan.

6.2.2 Formal reviews will be completed with staff on an annual basis, the results of the monitoring reviews will be provided to the team to see if additional measures need to made to achieve the aims of this plan.

APPENDIX A

5232/D.10/E – Proposed Site Plan

Project No.	Dwg. No.	Rev.
5232	D1.10	E

APPENDIX B

TRICS Outputs

Calculation Reference: AUDIT-162301-230825-0808

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON	
IS	ISLINGTON	2 days
KI	KINGSTON	1 days
SK	SOUTHWARK	1 days
WF	WALTHAM FOREST	3 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: No of Dwellings
 Actual Range: 6 to 42 (units:)
 Range Selected by User: 6 to 50 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 09/06/22

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

Selected survey days:

Monday	2 days
Tuesday	3 days
Wednesday	1 days
Thursday	1 days

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

Selected survey types:

Manual count	7 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:

Edge of Town Centre	7
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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:

Residential Zone	5
Built-Up Zone	2

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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	6 days - Selected
Servicing vehicles Excluded	1 days - Selected

Secondary Filtering selection:

Use Class:

C3 7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

25,001 to 50,000 4 days

50,001 to 100,000 1 days

100,001 or More 2 days

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

Population within 5 miles:

500,001 or More 7 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 3 days

0.6 to 1.0 3 days

1.1 to 1.5 1 days

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

Travel Plan:

Yes 1 days

No 6 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.

PTAL Rating:

2 Poor 1 days

4 Good 3 days

6a Excellent 2 days

6b (High) Excellent 1 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions Yes At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1	IS-03-C-05 LEVER STREET FINSBURY	BLOCK OF FLATS	ISLINGTON
	Edge of Town Centre Built-Up Zone Total No of Dwellings:	15	
	Survey date: WEDNESDAY	29/06/16	Survey Type: MANUAL
2	IS-03-C-06 CALEDONIAN ROAD HOLLOWAY	BLOCK OF FLATS	ISLINGTON
	Edge of Town Centre Residential Zone Total No of Dwellings:	14	
	Survey date: MONDAY	27/06/16	Survey Type: MANUAL
3	KI-03-C-03 PORTSMOUTH ROAD SURBITON	BLOCK OF FLATS	KINGSTON
	Edge of Town Centre Residential Zone Total No of Dwellings:	20	
	Survey date: MONDAY	11/07/16	Survey Type: MANUAL
4	SK-03-C-02 LAMB WALK BERMONDSEY	BLOCK OF FLATS	SOUTHWARK
	Edge of Town Centre Built-Up Zone Total No of Dwellings:	29	
	Survey date: THURSDAY	23/04/15	Survey Type: MANUAL
5	WF-03-C-02 GROSVENOR ROAD WANSTEAD	BLOCKS OF FLATS	WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:	28	
	Survey date: TUESDAY	25/05/21	Survey Type: MANUAL
6	WF-03-C-04 GROSVENOR ROAD WANSTEAD	BLOCKS OF FLATS	WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:	42	
	Survey date: TUESDAY	25/05/21	Survey Type: MANUAL
7	WF-03-C-05 NEW WANSTEAD WANSTEAD	BLOCK OF FLATS	WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:	6	
	Survey date: TUESDAY	25/05/21	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 OGVS
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	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	7	22	0.000	7	22	0.000	7	22	0.000
08:00 - 09:00	7	22	0.000	7	22	0.000	7	22	0.000
09:00 - 10:00	7	22	0.006	7	22	0.006	7	22	0.012
10:00 - 11:00	7	22	0.000	7	22	0.000	7	22	0.000
11:00 - 12:00	7	22	0.000	7	22	0.000	7	22	0.000
12:00 - 13:00	7	22	0.006	7	22	0.000	7	22	0.006
13:00 - 14:00	7	22	0.000	7	22	0.006	7	22	0.006
14:00 - 15:00	7	22	0.000	7	22	0.000	7	22	0.000
15:00 - 16:00	7	22	0.000	7	22	0.000	7	22	0.000
16:00 - 17:00	7	22	0.000	7	22	0.000	7	22	0.000
17:00 - 18:00	7	22	0.000	7	22	0.000	7	22	0.000
18:00 - 19:00	7	22	0.000	7	22	0.000	7	22	0.000
19:00 - 20:00	7	22	0.000	7	22	0.000	7	22	0.000
20:00 - 21:00	7	22	0.000	7	22	0.000	7	22	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.012			0.024

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.

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

MULTI-MODAL LGVS

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	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	7	22	0.006	7	22	0.000	7	22	0.006
08:00 - 09:00	7	22	0.013	7	22	0.013	7	22	0.026
09:00 - 10:00	7	22	0.013	7	22	0.019	7	22	0.032
10:00 - 11:00	7	22	0.019	7	22	0.013	7	22	0.032
11:00 - 12:00	7	22	0.006	7	22	0.006	7	22	0.012
12:00 - 13:00	7	22	0.032	7	22	0.019	7	22	0.051
13:00 - 14:00	7	22	0.026	7	22	0.026	7	22	0.052
14:00 - 15:00	7	22	0.006	7	22	0.019	7	22	0.025
15:00 - 16:00	7	22	0.000	7	22	0.006	7	22	0.006
16:00 - 17:00	7	22	0.006	7	22	0.013	7	22	0.019
17:00 - 18:00	7	22	0.019	7	22	0.000	7	22	0.019
18:00 - 19:00	7	22	0.013	7	22	0.013	7	22	0.026
19:00 - 20:00	7	22	0.000	7	22	0.000	7	22	0.000
20:00 - 21:00	7	22	0.000	7	22	0.000	7	22	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.159			0.147			0.306

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.

Calculation Reference: AUDIT-162301-230825-0820

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : 0 - CONVENIENCE STORE
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
BN	BARNET	1 days
HG	HARINGEY	2 days
KN	KENSINGTON AND CHELSEA	1 days
WE	WESTMINSTER	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: 240 to 550 (units: sqm)
 Range Selected by User: 120 to 795 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 06/09/22

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

Selected survey days:

Monday	1 days
Tuesday	2 days
Thursday	1 days
Saturday	1 days

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

Selected survey types:

Manual count	5 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	5
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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	2
High Street	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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	2 days - Selected
Servicing vehicles Excluded	3 days - Selected

Secondary Filtering selection:

Use Class:

E(a) 5 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

25,001 to 50,000 1 days

50,001 to 100,000 3 days

100,001 or More 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 5 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 4 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.

Petrol filling station:

Included in the survey count 0 days

Excluded from count or no filling station 5 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No 5 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.

PTAL Rating:

4 Good 1 days

6a Excellent 1 days

6b (High) Excellent 3 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	BN-01-O-01 HIGH ROAD NORTH FINCHLEY	TESCO EXPRESS		BARNET
	Town Centre High Street			
	Total Gross floor area:	300 sqm		
	Survey date: TUESDAY	07/06/22	Survey Type: MANUAL	
2	HG-01-O-01 HIGH ROAD WOOD GREEN	SAINSBURY'S LOCAL		HARINGEY
	Town Centre High Street			
	Total Gross floor area:	540 sqm		
	Survey date: SATURDAY	11/06/22	Survey Type: MANUAL	
3	HG-01-O-02 HIGH ROAD WOOD GREEN	TESCO EXPRESS		HARINGEY
	Town Centre High Street			
	Total Gross floor area:	240 sqm		
	Survey date: THURSDAY	09/06/22	Survey Type: MANUAL	
4	KN-01-O-01 QUEENSWAY BAYSWATER	SAINSBURY'S LOCAL		KENSINGTON AND CHELSEA
	Town Centre Built-Up Zone			
	Total Gross floor area:	300 sqm		
	Survey date: MONDAY	22/06/15	Survey Type: MANUAL	
5	WE-01-O-01 MORTIMER STREET FITZROVIA	SAINSBURY'S LOCAL		WESTMINSTER
	Town Centre Built-Up Zone			
	Total Gross floor area:	550 sqm		
	Survey date: TUESDAY	23/06/15	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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	270	0.000	2	270	0.000	2	270	0.000
06:00 - 07:00	3	360	0.185	3	360	0.000	3	360	0.185
07:00 - 08:00	5	386	0.104	5	386	0.155	5	386	0.259
08:00 - 09:00	5	386	0.000	5	386	0.052	5	386	0.052
09:00 - 10:00	5	386	0.104	5	386	0.052	5	386	0.156
10:00 - 11:00	5	386	0.207	5	386	0.207	5	386	0.414
11:00 - 12:00	5	386	0.052	5	386	0.052	5	386	0.104
12:00 - 13:00	5	386	0.000	5	386	0.052	5	386	0.052
13:00 - 14:00	5	386	0.000	5	386	0.000	5	386	0.000
14:00 - 15:00	5	386	0.000	5	386	0.000	5	386	0.000
15:00 - 16:00	5	386	0.000	5	386	0.000	5	386	0.000
16:00 - 17:00	5	386	0.052	5	386	0.052	5	386	0.104
17:00 - 18:00	5	386	0.052	5	386	0.052	5	386	0.104
18:00 - 19:00	5	386	0.052	5	386	0.052	5	386	0.104
19:00 - 20:00	5	386	0.000	5	386	0.000	5	386	0.000
20:00 - 21:00	5	386	0.000	5	386	0.000	5	386	0.000
21:00 - 22:00	5	386	0.000	5	386	0.000	5	386	0.000
22:00 - 23:00	3	360	0.000	3	360	0.000	3	360	0.000
23:00 - 24:00	3	360	0.000	3	360	0.000	3	360	0.000
Total Rates:			0.808			0.726			1.534

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 01 - RETAIL/O - CONVENIENCE STORE

MULTI-MODAL LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	270	0.000	2	270	0.000	2	270	0.000
06:00 - 07:00	3	360	0.185	3	360	0.093	3	360	0.278
07:00 - 08:00	5	386	0.207	5	386	0.155	5	386	0.362
08:00 - 09:00	5	386	0.466	5	386	0.466	5	386	0.932
09:00 - 10:00	5	386	0.466	5	386	0.466	5	386	0.932
10:00 - 11:00	5	386	0.518	5	386	0.363	5	386	0.881
11:00 - 12:00	5	386	0.622	5	386	0.518	5	386	1.140
12:00 - 13:00	5	386	0.622	5	386	0.777	5	386	1.399
13:00 - 14:00	5	386	0.674	5	386	0.725	5	386	1.399
14:00 - 15:00	5	386	0.311	5	386	0.259	5	386	0.570
15:00 - 16:00	5	386	0.415	5	386	0.415	5	386	0.830
16:00 - 17:00	5	386	0.466	5	386	0.570	5	386	1.036
17:00 - 18:00	5	386	0.363	5	386	0.259	5	386	0.622
18:00 - 19:00	5	386	0.311	5	386	0.415	5	386	0.726
19:00 - 20:00	5	386	0.311	5	386	0.259	5	386	0.570
20:00 - 21:00	5	386	0.155	5	386	0.155	5	386	0.310
21:00 - 22:00	5	386	0.104	5	386	0.155	5	386	0.259
22:00 - 23:00	3	360	0.185	3	360	0.370	3	360	0.555
23:00 - 24:00	3	360	0.000	3	360	0.000	3	360	0.000
Total Rates:			6.381			6.420			12.801

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.

Calculation Reference: AUDIT-162301-230825-0815

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : A - OFFICE

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	BT BRENT	1 days
02	SOUTH EAST	
	BH BRIGHTON & HOVE	1 days
	ES EAST SUSSEX	1 days
	WS WEST SUSSEX	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: 186 to 920 (units: sqm)
 Range Selected by User: 186 to 1000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 17/05/22

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	2 days
Wednesday	2 days

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

Selected survey types:

Manual count	4 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:

Edge of Town Centre	2
Suburban Area (PPS6 Out of Centre)	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:

Development Zone	1
Residential Zone	2
Built-Up Zone	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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	3 days - Selected
Servicing vehicles Excluded	1 days - Selected

Secondary Filtering selection:

Use Class:

Not Known 4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

25,001 to 50,000 3 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:

75,001 to 100,000 1 days

125,001 to 250,000 1 days

250,001 to 500,000 1 days

500,001 or More 1 days

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

Car ownership within 5 miles:

0.6 to 1.0 3 days

1.1 to 1.5 1 days

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

Travel Plan:

Yes 2 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.

PTAL Rating:

No PTAL Present 3 days

6a Excellent 1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	BH-02-A-05 ROMAN ROAD HOVE	OFFICES		BRIGHTON & HOVE
	Edge of Town Centre Residential Zone			
	Total Gross floor area:	280 sqm		
	Survey date: WEDNESDAY	04/07/18	Survey Type: MANUAL	
2	BT-02-A-03 EMPIRE WAY WEMBLEY	OFFICES		BRENT
	Suburban Area (PPS6 Out of Centre) Development Zone			
	Total Gross floor area:	920 sqm		
	Survey date: WEDNESDAY	03/06/15	Survey Type: MANUAL	
3	ES-02-A-11 THE SIDINGS HASTINGS ORE VALLEY	HOUSING COMPANY		EAST SUSSEX
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Gross floor area:	186 sqm		
	Survey date: TUESDAY	17/11/15	Survey Type: MANUAL	
4	WS-02-A-05 NORTH STREET WORTHING	SOCIAL HOUSING COMPANY		WEST SUSSEX
	Edge of Town Centre Built-Up Zone			
	Total Gross floor area:	830 sqm		
	Survey date: TUESDAY	17/05/22	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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	4	554	0.000	4	554	0.000	4	554	0.000
08:00 - 09:00	4	554	0.000	4	554	0.000	4	554	0.000
09:00 - 10:00	4	554	0.000	4	554	0.000	4	554	0.000
10:00 - 11:00	4	554	0.000	4	554	0.000	4	554	0.000
11:00 - 12:00	4	554	0.000	4	554	0.000	4	554	0.000
12:00 - 13:00	4	554	0.045	4	554	0.045	4	554	0.090
13:00 - 14:00	4	554	0.000	4	554	0.000	4	554	0.000
14:00 - 15:00	4	554	0.000	4	554	0.000	4	554	0.000
15:00 - 16:00	4	554	0.000	4	554	0.000	4	554	0.000
16:00 - 17:00	4	554	0.000	4	554	0.000	4	554	0.000
17:00 - 18:00	4	554	0.000	4	554	0.000	4	554	0.000
18:00 - 19:00	4	554	0.000	4	554	0.000	4	554	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.045			0.045			0.090

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/A - OFFICE

MULTI-MODAL LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	4	554	0.090	4	554	0.000	4	554	0.090
08:00 - 09:00	4	554	0.181	4	554	0.045	4	554	0.226
09:00 - 10:00	4	554	0.090	4	554	0.271	4	554	0.361
10:00 - 11:00	4	554	0.000	4	554	0.045	4	554	0.045
11:00 - 12:00	4	554	0.000	4	554	0.000	4	554	0.000
12:00 - 13:00	4	554	0.000	4	554	0.000	4	554	0.000
13:00 - 14:00	4	554	0.045	4	554	0.045	4	554	0.090
14:00 - 15:00	4	554	0.045	4	554	0.045	4	554	0.090
15:00 - 16:00	4	554	0.090	4	554	0.045	4	554	0.135
16:00 - 17:00	4	554	0.090	4	554	0.090	4	554	0.180
17:00 - 18:00	4	554	0.000	4	554	0.045	4	554	0.045
18:00 - 19:00	4	554	0.000	4	554	0.000	4	554	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.631			0.631			1.262

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.