# ODYSSEY 

DEVELOPING JOURNEYS

# PROPOSED 118 UNIT RESIDENTIAL DEVELOPMENT, B2050 MANSTON ROAD, RAMSGATE, CT12 6HW TRANSPORT ASSESSMENT 

## DOCUMENT CONTROL SHEET

| Project Name | Flambeau Europlast |
| :--- | :--- |
| Project No. | $23-077$ |


| Rev | Issue Purpose | Author | Checked | Reviewed | Approved | Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | For Issue | MN | MJB | MN | SRB | August 23 |
| A | Revised Unit Numbers | BEB | MJB | BEB | MJB | 16/02/2024 |
|  |  |  |  |  |  |  |
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### 1.0 INTRODUCTION

### 1.1 General

1.1.1 This Transport Assessment (TA) has been prepared by Odyssey as part of a planning application on behalf of the applicant, Flambeau Europlast Ltd (hereafter referred to as the client). This TA examines highways and transport matters associated with a proposed 118 unit residential development on land adjacent to the B2050, Manston Road, Ramsgate, CT12 6HW.
1.1.2 The site lies within the administrative boundary of Thanet District Council (TDC) who act as the local planning authority, while Kent County Council (KCC) act as the Local highway authority.
1.1.3 This TA considers the suitability of the development proposals in terms of transport policy, site access, sustainable transport accessibility, and vehicle trip generation. The potential impact of the development on the surrounding transport network is also considered.

### 1.2 Site Location

1.2.1 The site is located circa two kilometres (km) west or a 6-minute drive from Central Ramsgate, see Figure 1.
1.2.2 The site currently comprises the Flambeau Europlast Ltd plastic manufacturing plant with existing access onto Manston Road as can be seen in Drawing 23-077-03.
1.2.3 The site lies adjacent to Manston Road to the north and east with Newington Community Primary School on the opposite side of the carriageway. To the west is a Tesco Superstore and to the south is a rail line beyond which is residential land.

### 1.3 Development Proposals

1.3.1 The development proposals seek to renew the (lapsed) 2015 outline planning permission under planning reference (LPA Ref OL/TH/15/0187) for a 118-unit residential development.
1.3.2 The scheme would include a series of eight parking courts around the development, each serving a number of residential units. The parking courts are considered to be and have been designed to be an appropriate distance from each dwelling as shown on the proposed site plan in Appendix A.

### 1.4 Scope of Assessment

1.4.1 Following this introduction, the remaining sections of this TA are set out as follows:

- Section 2.0 Considers national and local planning policy.
- Section 3.0 Reviews the existing highway and transport conditions in the vicinity of the site, including a summary of the local facilities, access to sustainable transport and site accessibility.
- Section 4.0 Looks at the development proposals and how the site would be accessed.
- Section 5.0 Uses the TRICS database to identify the forecast number of trips generated by the development in comparison to the extant use.
- Section 6.0 Assesses the expected traffic generation arising from the proposed development and describes the traffic distribution and assignment methodology used.
- Section 7.0 Assesses the traffic impact on the local highway network using Junctions 10 modelling and presents the results of the junction capacity assessment undertaken.
- Section 8.0 Concludes the TA.


### 2.0 PLANNING POLICY

### 2.1 General

2.1.1 This section sets out the national and local transport planning policy relevant to the design and delivery of the development proposals.

### 2.2 National Policy

National Planning Policy Framework - 2023
2.2.1 The Department of Communities and Local Government (DCLG) initially published the National Planning Policy Framework (NPPF) in March 2012. This document was revised in July 2018, and updated in February 2019, July 2021, and December 2023 respectively.
2.2.2 Promoting sustainable transport is a key thread of the NPPF and paragraph 104 highlights the importance of considering transport issues from the earliest stages of development proposals to ensure that:
a) "the potential impacts of development on transport networks can be addressed;
b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised - for example in relation to the scale, location or density of development that can be accommodated;
c) opportunities to promote walking, cycling and public transport use are identified and pursued;
d) the environmental impacts of traffic and transport infrastructure can be identified, assessed, and taken into account - including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
e) patterns of movement, streets, parking, and other transport considerations are integral to the design of schemes, and contribute to making high quality places."
2.2.3 Paragraph 105 goes on to state that "The planning system should actively manage patterns of growth...Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes...".
2.2.4 Paragraph 114 states that "in assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:
a) appropriate opportunities to promote sustainable transport modes can be - or have been - taken up, given the type of development and its location;
b) safe and suitable access to the site can be achieved for all users;
c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and
d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."
2.2.5 Paragraph 115 continues to state that "...development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe".
2.2.6 Paragraph 116 requires that "applications for developments should:
a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second - so far as possible - to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
c) create places that are safe, secure, and attractive - which minimise the scope for conflicts between pedestrians, cyclists, and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and
e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible, and convenient locations."

National Planning Practice Guidance (March 2014)
2.3.1 The Department for Communities and Local Government (DCLG) published the National Planning Practice Guidance (NPPG) on 6th March 2014, for the purposes of providing additional information in support of the NPPF. In addition to other planning matters, the NPPG contains specific guidance on 'Travel Plans, Transport Assessments and Statements in decision-making'.
2.3.2 The guidance states that these documents should "primarily focus on evaluating the potential transport impacts of a development proposal" and that they "can be used to establish whether the
residual transport impacts of a proposed development are likely to be 'severe', which may be a reason for refusal, in accordance with the National Planning Policy Framework."
2.3.3 The NPPG states that Transport Assessments, Transport Statements and Travel Plans have a role in supporting national policy, which "sets out that planning should actively manage patterns of growth in order to make the fullest possible use of public transport, waking and cycling, and focus development which is anticipated to generate significant trips in locations which are or can be made sustainable." More specifically, the NPPG states that Travel Plans, Transport Assessments and Statements can positively contribute to:
o Encouraging sustainable travel.
o Lessening traffic generation and its detrimental impacts.
o Reducing carbon emissions and climate impacts.
o Creating accessible, connected, inclusive communities.
o Improving health outcomes and quality of life.
o Improving road safety.
o Reducing the need for new developments to increase existing road capacity or provide new roads.

### 2.3 Local Policy

Thanet District Council Local Plan - adopted July 2020
2.3.1 Policy SP43 - Safe and Sustainable Travel states:

- The Council will work with developers, transport service providers, and the local community to manage travel demand, by promoting and facilitating walking, cycling and use of public transport as safe and convenient means of transport. Development applications will be expected to take account of the need to promote safe and sustainable travel. New developments must provide safe and attractive cycling and walking opportunities to reduce the need to travel by car.
2.3.2 Policy SP44 - Accessible Locations states:
- Development generating a significant number of trips will be expected to be located where a range of services are or will be conveniently accessible by foot, by cycle or public transport.
2.3.3 6.17 under the New Railway Station sections explains:
- The introduction of faster trains on the Ramsgate to St Pancras route, utilising the Highspeed rail link (HS1) means that Ramsgate is only 76 minutes from London for much of the day. As a result, Thanet has the potential to become a more attractive location for people employed in London seeking to live in a more pleasant environment.
2.3.4 Policy TP01 - Transport Assessments and Travel Plans - under section 18 Transport states:
- Development proposals would have significant transport implications shall be supported by a Transport Assessment and where applicable a Travel Plan. These should show how multi-model access travel options will be achieved, and how transport infrastructure needs arising from the expected demand will be provided.
- In relation to other developments, a Transport Statement will be required, which addresses any transport impacts arising from the development and any mitigation measures that are needed to minimise the identified impact.
2.3.5 Policy TP04 - Public Transport states:
- Development proposals will be expected to take account of the need to facilitate use of public transport. The Council will seek to approve proposals consisting of or incorporating:

1) Improvement of passenger and waiting facilities.
2) Measures to improve personal security.
3) Improved accessibility for people with mobility limitations.
4) Bus / rail interchange facilities.
5) Secure cycle storage.

Kent Design Guide Review: Interim Guidance Note 3 - $20^{\text {th }}$ November 2008
2.3.6 The conclusions section of Interim Guidance Note 3 states:

- Residential parking has frequently been the greatest source of dissatisfaction among the residents of new developments. This has often been because of ill-conceived experiments with the amount and/or location of spaces. Otherwise, good developments have been blighted by inconsiderate, and sometimes dangerous, parking. Current guidance addresses the complex issues and leaves no excuses for poor layouts. It also encourages Local Planning Authorities to develop parking policies which take account
of these factors, offering the opportunity to provide a range of sustainable solutions, including developments with low or even zero parking provision.
- All parties involved in the design and assessment of new developments should be following current guidance by identifying parking provision that satisfies reasonable demand, is well-designed and makes the best use of the land available.
2.3.7 The note further includes a guidance table for residential parking.


### 2.4 Planning Policy Summary

2.4.1 The proposed development accords with the thrust of the aforementioned objectives and policies. Due to its location near to Ramsgate station, the local bus route, and walkable distance to local facilities, the proposed development would appear to meet sustainable transport policy objectives.

### 3.0 EXISTING CONDITIONS

### 3.1 Site Location

3.1.1 The site is located adjacent to the B2050 Manston Road circa two kilometres (km) or a six minute drive from Central Ramsgate. Ramsgate station is located 1.4 km to the east of the site. Figure 1 illustrates the site's general location.
3.1.2 The site comprises the former Flambeau Europlast Ltd plastic factory with associated extended access junction providing access to the site for large goods vehicles.
3.1.3 The site lies adjacent to Manston Road running to the north and east with Newington Community Primary School on the opposite side of the carriageway. To the west is a Tesco Superstore and to the south is a railway track beyond which is residential land.

### 3.2 Local Highway Network

## Manston Road

3.2.1 Manston Road is a two-way well-lit B-road (B2050) oriented in a northwest to southeast orientation and has a speed limit of 30 miles per hour (mph). Manston Road is used to access the site and provides further connection to the B2014 Newington Road to the southeast as well as Manston and Acol Hill to the northwest.
3.2.2 Photograph 3.1 shows Manston Road southeast from the site entrance while Photograph 3.2 shows Manston Road northwest from the site entrance.

Photograph 3.1: Manston Road in a South East Direction from the Site Entrance


Photograph 3.2: Manston Road in a North West Direction from the Site Entrance


A299
3.2.3 The A299 is a well-lit single carriageway A road to the south of the site which becomes a dual carriageway road when leaving the Ramsgate area. The road acts as the main access into Ramsgate. The A299 runs in an east to west orientation and provides access further west to the M2 near Boughton-under-Blean.

### 3.3 Existing Traffic Conditions

3.3.1 Automatic Traffic Count (ATC) surveys have been conducted from the $6^{\text {th }}$ of July 2023 to the $12^{\text {th }}$ of July 2023 on Manston Road. One ATC was placed at an appropriate location to measure vehicle flows, speeds and types. Appendix B details the survey results.
3.3.2 Table 3.1 below summarises of the results of the ATC speed survey.

Table 3.1: 85 ${ }^{\text {th }}$ Percentile Vehicle Speeds

| Road | $85^{\text {th }}$ Percentile <br> Wehicle Speed (mph) Wet <br> Weather Speed in brackets) |  |
| :--- | :---: | :---: |
|  | Eastbound | Westbound |
| ATC 1 - Manston Road (110m west of site access <br> junction) | $40(\mathrm{mph})$ | $41(\mathrm{mph})$ |

3.3.3 Although the measured speed is higher than the speed restriction of 30 mph , the road is relatively straight and visibility splays commensurate with this speed (as shown in Drawing 23-077001) are achievable.

### 3.4 Access to Local Facilities

3.4.1 Several key facilities are located within the vicinity of the site which could be used by residents. These facilities include retail and service opportunities. Figure 2 presents the location of these facilities, which are listed in Table 3.2 with their respective distance from the site.

## Table 3.2: Local Facilities

| Facility | Distance |
| :--- | :---: |
| Tesco Superstore | $160 \mathrm{~m} / 2-\mathrm{minute}$ walk |
| Newington Community Primary School | $180 \mathrm{~m} / 3-\mathrm{minute}$ walk |
| Newington Park | $480 \mathrm{~m} / 6-\mathrm{minute}$ walk |
| The Windmill | $800 \mathrm{~m} / 10-\mathrm{minute}$ walk |
| Newington Road Clinic | $960 \mathrm{~m} / 12$-minute walk |
| Newington Road Surgery | $960 \mathrm{~m} / 12-\mathrm{minute}$ walk |
| St Laurence-in-Thanet Junior Academy | $970 \mathrm{~m} / 12-\mathrm{minute}$ walk |
| The Beano Café | $980 \mathrm{~m} / 12$-minute walk |
| Ellington Infant School | $980 \mathrm{~m} / 13-\mathrm{minute}$ walk |
| Red Arrow Sports \& Social Club | $990 \mathrm{~m} / 13$-minute walk |
| Dashwood Medical Centre | $1280 \mathrm{~m} / 16-\mathrm{minute}$ walk |
| Nethercourt Park | $1290 \mathrm{~m} / 16-\mathrm{minute}$ walk |
| Ellington Park | $1290 \mathrm{~m} / 16-\mathrm{minute}$ walk |

3.4.2 The site is considered appropriately placed to benefit from these local facilities within walking distance nearby.

### 3.5 Bus

3.5.1 The nearest bus stops to the proposed development are the Princess Margaret Avenue bus stop situated on Manston Road, with both eastbound and westbound stops located circa 120 metres (m) east of the site access. The Manston Road bus stops serve the 48-bus route.
3.5.2 The 48-bus route connects with other routes around Ramsgate, such as the 34 and Loop service. The nearest bus stop for these other services is located approximately 950 m from the site. Figure 3 illustrates the bus routes available near the proposed scheme and in the wider Ramsgate area.
3.5.3 Table 3.3 below provides details of the local bus routes and their frequencies. The weekday frequency is based on average buses per hour for each route in each direction during the morning peak period.

Table 3.3: Local Bus Routes

| Number | Route | Average Weekday Frequency |
| :---: | :--- | :--- | :---: |
| 48 | Birchington-on-Sea - Manston - Newington - Newington <br> (Princess Margaret Avenue) - St Lawrence - Ramsgate - <br> Dumpton | 1 bus every hour and a half |
| 34 | Minnis Bay - Margate - St Peter's - Westwood - <br> Newington - Ramsgate | 2 buses every hour |
| LOOP | Margate - Broadstairs - Ramsgate - Westwood - <br> Margate | 6 buses every hour |
| 9 | Ramsgate - Nethercourt - St Lawrence - Monkton | 1 bus every hour |
| 45 | Broadstairs - Dumpton - Ramsgate - Discovery Park - <br> Sandwich | 3 buses every hour |

### 3.6 Rail

3.6.1 Ramsgate railway station is located approximately 1.4 km to the east of the site, a 17 -minute walk or short cycle/car ride. The station is operated and served by Southeastern Railway. Destinations available include Margate, London St Pancreas, London Charing Cross and London Victoria, and interim stations. Typical peak hour train frequencies from Ramsgate station are as follows:

- Three trains an hour to London St Pancreas.
- One train an hour to London Victoria.
- One train an hour to London Charing Cross.
- One train an hour to Margate.
3.6.2 Covered cycle parking is provided at Ramsgate Station in the form of 30 spaces for bicycles located in the forecourt by the main entrance and at the Minster end of Platform 3/4. Step free access is provided to all platforms as well as ramps for train access.


### 3.7 Walking and Cycling Routes

3.7.1 Walking routes in the vicinity of the site of the proposed development are of good quality and allow for easy access to Ramsgate. The development proposals include an added pedestrian route through the development, as well as a new access to the Tesco Superstore to the west of the development.
3.7.2 In terms of cycling, local cycleway fifteen is located circa 1.6 km to the south of the site. This route provides access south to Sandwich as well as following the coast west to Whitstable passing through Margate, Herne Bay and Westgate-on-sea.
3.7.3 Figure 4 shows the local fifteen cycleway as well as bicycle parking nearby.

### 4.0 PROPOSED DEVELOPMENT AND ACCESS

### 4.1 General

4.1.1 The development proposals include the following:

- The demolition of the existing factory.
- Construction of 118 units of residential housing.
- Provision of eight parking courts spread around the development to cater for each dwelling.
- Associated landscaping to separate the development from the adjacent Tesco Superstore, Manston Road and railway line.


### 4.2 Car Parking

4.2.1 In terms of parking the parking courts would adhere to the parking guidance table from Interim Guidance Note 3 (see Appendix C). The guidance states for edge of centre developments that one space per unit is a maximum except a 4+ bedroom house which can have 1.5 spaces per unit. Communal 0.2 spaces per unit maximum visitor parking is also allowed in the guidance, which would be adhered to via the parking courts.

### 4.3 Access

4.3.1 Vehicular access to the site is proposed to be in the same location as per the existing access from Manston Road as shown in Drawing 23-007-003, but with some junction alterations as shown in Drawing 23-077-001. The junction would be reduced in size and redesigned for the new use with associated kerb lines and road markings updated. Existing footways would be extended into the site on both sides of the site access road. Drawing 23-077-001 also shows the new visibility splays of $4.5 \mathrm{~m} \times 120 \mathrm{~m}$ in accordance with DMRB standards for a 40 mph wet weather $85^{\text {th }}$ percentile speed, as recorded in the traffic surveys.
4.3.2 An internal access road and roundabout are proposed as indicatively shown in Appendix A. The internal access road would be two way providing access east, west and north from the roundabout located in the centre of the proposed development. It is proposed that the speed limit across the whole site would be 20 mph and the principles set out in manual for Streets would be deployed to provide priority to pedestrians and cyclists and to keep vehicle speeds low.
4.3.3 Drawing 23-077-02 shows a refuse vehicle and a 10 m rigid truck accessing and egressing the site.
4.3.4 It is evident that the proposed junction would be capable of accommodating the largest vehicles expected to use the site, namely an 11 m refuse truck. It is expected that a 10 m rigid would rarely be required to visit site.

### 4.4 Pedestrian Facilities

4.4.1 The development would include a new east-west pedestrian route from the west side, adjoining the existing Tesco superstore site and other pedestrian facilities see Appendix A.

### 4.5 Cycle Facilities

4.5.1 Cycling onsite would be encouraged via a design layout in line with the manual for streets and therefore conducive to cycling. A 20 miles per hour speed restriction would be put in place site wide to lower vehicle speeds and further encourage cycling.
4.5.2 As is in line with the Thanet Local Plan guidance, cycle parking provision would be as stated in Appendix C with one space per bedroom included.

### 5.0 TRIP ESTIMATION

### 5.1 General

5.1.1 Trip estimation analysis via interrogation of the TRICS database has been used to forecast the frequency of trips associated with the existing employment, type C industrial use of the site, and the proposed residential development (type M mixed private/affordable housing). For the full TRICS output see Appendix C.
5.1.2 It is expected that a net increase in total trip rates would arise due to the change in use.

### 5.2 Trip Generation - Current Industrial Use

5.2.1 For the existing industrial use, the TRICS database has been used to assess trips on the site. Trip rates were derived from comparable sites selected from industrial uses outside of London, with consideration giving to location, size and local context.
5.2.2 Table 5.1 shown below shows trip rates by mode per 100 square metres (sqm) of industrial use. Application of these trip rates to the existing 12,440sqm of industrial use are shown in Table

## 5.2.

Table 5.1: Industrial Trip Rates (Per 100 Square Metres) - Industrial Class C

| Mode of Travel | AM Peak (0800-0900) |  |  | PM Peak ( $\mathbf{1 7 0 0} \mathbf{- 1 8 0 0 )}$ |  | Daily Trips (0700-1900) |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | In | Out | Total | In | Out | Total | In | Out | Total |
| Total Vehicles | $\mathbf{0 . 2 3 8}$ | $\mathbf{0 . 0 6 5}$ | $\mathbf{0 . 3 0 3}$ | $\mathbf{0 . 0 4 6}$ | $\mathbf{0 . 0 5 6}$ | $\mathbf{0 . 1 0 2}$ | $\mathbf{1 . 6 4 6}$ | $\mathbf{1 . 5 7 1}$ | $\mathbf{3 . 2 1 7}$ |
| Cyclists | 0 | 0 | 0 | 0 | 0 | 0 | 0.016 | 0.01 | 0.026 |
| Pedestrians | 0.01 | 0 | 0.01 | 0 | 0.009 | 0.009 | 0.043 | 0.042 | 0.085 |
| Bus/Tram | 0.051 | 0 | 0.051 | 0.052 | 0.028 | 0.08 | 0.441 | 0.456 | 0.897 |
| Rail | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Taxis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OGVs | 0.037 | 0.038 | 0.075 | 0 | 0 | 0 | 0.341 | 0.337 | 0.678 |
| Total People | $\mathbf{0 . 3 5 4}$ | $\mathbf{0 . 0 6 5}$ | $\mathbf{0 . 4 1 9}$ | $\mathbf{0 . 4 0 6}$ | $\mathbf{0 . 2 7 1}$ | $\mathbf{0 . 6 7 7}$ | $\mathbf{4 . 4 7 4}$ | $\mathbf{4 . 4 5 5}$ | $\mathbf{8 . 9 2 9}$ |

Table 5.2: Industrial Trip Rates (Per 12,440 Square Meters) - Extant Industrial Class C

| Mode of Travel | AM Peak (0800-0900) |  |  |  | PM Peak (1700-1800) |  |  | Daily Trips (0700-1900) |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | In | Out | Total | In | Out | Total | In | Out | Total |
| Total Vehicles | $\mathbf{3 0}$ | $\mathbf{8}$ | $\mathbf{3 8}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{1 3}$ | $\mathbf{2 0 5}$ | $\mathbf{1 9 5}$ | $\mathbf{4 0 0}$ |
| Cyclists | 0 | 0 | 0 | 0 | 0 | 0 | $\mathbf{2}$ | 1 | 3 |
| Pedestrians | 1 | 0 | 1 | 0 | 1 | 1 | 5 | 5 | 11 |
| Bus/Tram | 6 | 0 | 6 | 6 | 3 | 10 | 55 | 57 | 112 |
| Rail | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Taxis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OGVs | 5 | 5 | 9 | 0 | 0 | 0 | 42 | 42 | 84 |
| Total People | $\mathbf{4 4}$ | $\mathbf{8}$ | $\mathbf{5 2}$ | $\mathbf{5 1}$ | $\mathbf{3 4}$ | $\mathbf{8 4}$ | $\mathbf{5 5 7}$ | $\mathbf{5 5 4}$ | $\mathbf{1 1 1 1}$ |

5.2.3 Based on the results of the above exercise, the existing industrial use on the site is estimated to generate a total of 400 vehicle trips daily.

### 5.3 Trip Generation - Proposed Residential Units

5.3.1 For the proposed residential use sites were also selected based on comparable residential developments, bearing in mind location, size, local context and out of London location.
5.3.2 Table 5.3 below shows the trip rates per dwelling and Table 5.4 below show application of these trip rates to the 118 units proposed.

Table 5.3: Residential Trip Rates (Per Dwelling) - Mixed Private/Affordable Housing

| Mode of Travel | AM Peak (0800-0900) |  | PM Peak (1700-1800) |  |  | Daily Trips (0700-1900) |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
|  | In | Out | Total | In | Out | Total | In | Out | Total |
| Total Vehicles | $\mathbf{0 . 1 2 7}$ | $\mathbf{0 . 3 4 2}$ | $\mathbf{0 . 4 6 9}$ | $\mathbf{0 . 3 5 5}$ | $\mathbf{0 . 1 8 1}$ | $\mathbf{0 . 5 3 6}$ | $\mathbf{2 . 4 9 9}$ | $\mathbf{2 . 3 3 8}$ | $\mathbf{4 . 8 3 7}$ |
| Cyclists | 0.003 | 0.017 | 0.02 | 0.006 | 0.007 | 0.013 | 0.085 | 0.079 | 0.164 |
| Pedestrians | 0.047 | 0.195 | 0.242 | 0.05 | 0.036 | 0.086 | 0.608 | 0.62 | 1.228 |
| Bus/Tram | 0 | 0.007 | 0.007 | 0.008 | 0.004 | 0.012 | 0.065 | 0.088 | 0.153 |
| Rail | 0 | 0.006 | 0.006 | 0.003 | 0 | 0.003 | 0.032 | 0.031 | 0.063 |
| Taxis | 0.003 | 0.003 | 0.006 | 0.004 | 0.004 | 0.008 | 0.017 | 0.017 | 0.034 |
| OGVs | 0 | 0 | 0 | 0.001 | 0 | 0.001 | 0.026 | 0.025 | 0.051 |
| Total People | $\mathbf{0 . 2 0 3}$ | $\mathbf{0 . 8 5 5}$ | $\mathbf{1 . 0 5 8}$ | $\mathbf{0 . 6 2}$ | $\mathbf{0 . 3 1}$ | $\mathbf{0 . 9 3}$ | $\mathbf{4 . 3 5 3}$ | $\mathbf{4 . 2 3 4}$ | $\mathbf{8 . 5 8 7}$ |

Table 5.4: Residential Trip Rates (118 Dwellings) - Proposed Mixed Private/Affordable Housing

| Mode of Travel | AM Peak (0800-0900) |  |  | PM Peak (1700-1800) |  |  | Daily Trips (0700-1900) |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | In | Out | Total | In | Out | Total | In | Out | Total |
| Total Vehicles | $\mathbf{1 5}$ | $\mathbf{4 0}$ | $\mathbf{5 5}$ | $\mathbf{4 2}$ | $\mathbf{2 1}$ | $\mathbf{6 3}$ | $\mathbf{2 9 5}$ | $\mathbf{2 7 6}$ | $\mathbf{5 7 1}$ |
| Cyclists | 0 | 2 | 2 | 1 | 1 | 2 | 10 | 9 | 19 |
| Pedestrians | 6 | 23 | 29 | 6 | 4 | 10 | 72 | 73 | 145 |
| Bus/Tram | 0 | 1 | 1 | 1 | 0 | 1 | 8 | 10 | 18 |
| Rail | 0 | 1 | 1 | 0 | 0 | 0 | 4 | 4 | 7 |
| Taxis | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 2 | 4 |
| OGVs | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 6 |
| Total People | $\mathbf{2 4}$ | $\mathbf{1 0 1}$ | $\mathbf{1 2 5}$ | $\mathbf{7 3}$ | $\mathbf{3 7}$ | $\mathbf{1 1 0}$ | $\mathbf{5 1 4}$ | $\mathbf{5 0 0}$ | $\mathbf{1 0 1 3}$ |

5.3.3 Based on the above exercise, the proposed 118 units are estimated to generate 55 vehicle trips during the AM peak hour (08:00-09:00) and 63 vehicle trips during the PM peak hour (17:00$18: 00$ ), with a total of 571 vehicle trips daily.

### 5.4 Net Change in Trip Generation

5.4.1 Net total additional trips were calculated through removing the trips of the extant use from the multi-modal data. Table 5.5 below shows this change in trips.

Table 5.5: Net Resultant Daily Trips

| Mode of Travel | Daily Trips |  |  |
| :--- | :---: | :---: | :---: |
|  | In | Out | Total |
| Total Vehicles | $\mathbf{9 0}$ | $\mathbf{8 1}$ | $\mathbf{1 7 1}$ |
| Cyclists | 8 | 8 | 16 |
| Pedestrians | 67 | 68 | 134 |
| Bus/Tram | -47 | -47 | -94 |
| Rail | 4 | 4 | 7 |
| Taxis | 2 | 2 | 4 |
| OGVs | -39 | -39 | -78 |
| Total People | $-\mathbf{4 3}$ | $\mathbf{- 5 4}$ | $\mathbf{- 9 8}$ |

5.4.2 The result of the above exercise indicates that the proposed residential development would generate a decrease in overall trips from the site, with a decrease of 98 person trips (which includes servicing and deliveries as well as all person trips). It is estimated there would be an increase in total vehicle trips however, with 171 extra daily two-way vehicle trips expected. This increase, it is noted, would come with the decrease in daily OGVs of 78 trips.
5.4.3 It is noted that for the sake of robustness that the TRICS assessment based on the existent industrial use selected sites forecast zero trips by rail. In reality it is considered this would not be the case due to the site's proximity to Ramsgate Railway Station.
5.4.4 Despite the increase in expected vehicular trips it is considered the decrease in OGV trips by as much as 78 vehicle trips would thereby improve road safety and environmental conditions in the vicinity.

### 5.5 Impact on the Pedestrian Network

5.5.1 The pedestrian infrastructure in the vicinity of the site is of good quality and enables access into Ramsgate and to associated facilities. The proposed extra pedestrian site access to the local Tesco Superstore is considered a valuable further addition and would encourage residents to walk to a local supermarket rather than drive.

### 5.6 Impact on the Cycle Network

5.6.1 No significant detrimental impact to the local cycle network is anticipated. The TRICS assessment forecast that the residential development would generate an additional 17 cycle trips as outlined above in Table 5.5. It is anticipated that this number would grow with cycle parking added to the site and with the measures to be included in the Travel Plan.

### 5.7 Impact on the Public Transport Network

5.7.1 It is forecast that the site would generate 94 less bus trips than the existing use. As discussed above, rail trips would be encouraged in the travel plan and would be adequately catered for by the presence of Ramsgate Station which is only a short distance from the site. Overall, it is considered that the trips made by public transport could be widely accommodated by the existing local public transport infrastructure.

### 6.0 TRAFFIC GENERATION, DISTRIBUTION AND ASSIGNMENT

### 6.1 Baseline Traffic Data

6.1.1 Traffic surveys where commissioned and undertaken by Streetwise on Thursday $6^{\text {th }}$ July 2023 from 07:00 - 19:00, specifically looking at the existing staggered junction including the site access as well as eastbound, westbound and Staner Court Road traffic on Manston Road. The surveys determined that the peak hours of 08:00-09:00 and 16:00-17:00 are appropriate for assessment. Appendix D contains the traffic survey results.
6.1.2 2023 base traffic flow diagrams are presented in Figures $\mathbf{1}$ to $\mathbf{2}$ contained in Appendix F.

### 6.2 Committed Developments

6.2.1 A robust assessment has been conducted in terms of committed developments. The TEMPRO programme has been used to factor in planned local developments as well as the addition of relevant developments manually to show their effect on traffic growth on the local road network. The committed developments manually added are listed below:

- F/TH/22/0573 - Manston Gardens Development.
- OL/TH/20/1435 - Haines Road Development.
- R/TH/21/1082 - Phase 1 and 2 of Land East and West of Haines Road.
- OL/TH/20/1320 - Land South of Manston Road.
- OL/TH/20/1435 - Land West of New Haine Road.
- OL/TH/19/1162 - Melbourne Avenue Development.
- F/TH/20/1525 - St Stephens Development.
6.2.2 The associated traffic flow diagrams for these developments are presented in Figures 9 to 24 of Appendix F.


### 6.3 TEMPro Growth Factors

6.3.1 TEMPro Growth Factors have been applied to the 2023 traffic data to generate a 2028 future year using the assessment area of Thanet. The TEMPro Growth Factors are presented below in Table 6.1 with the corresponding traffic flow diagrams presented in Figures 3 and 4 of Appendix F.

Table 6.1: TEMPro Growth factors

| Years | TEMPro Growth Factors |  |
| :---: | :---: | :---: |
|  | AM Peak | PM Peak |
| 2023 to 2028 | 1.0312 | 1.032 |

### 6.4 Traffic Generation

6.4.1 As mentioned in Section 5.0 trip generation analysis has been undertaken via the TRICS (Trip Rate Information Computer System) database to analyse the vehicle trips the development proposal of 118 units could generate.
6.4.2 The TRICS datasets for the AM and PM peak hours which have been selected can be seen in Appendix $\mathbf{D}$ and are summarised below in Table 6.2. For more information and further explanation see Section 5.0.

Table 6.2: TRICS Datasets - AM and PM Peak Hours

|  | AM Peak (0800-0900) |  | PM Peak (1700-1800) |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Arrivals | Departures | Totals | Arrivals | Departures | Totals |
| Total Vehicle Trip Rate <br> (per Dwelling) | 0.127 | 0.342 | 0.469 | 0.355 | 0.181 | 0.536 |
| Forecasted Total <br> Vehicle Trips (118 <br> proposed Dwellings) | 15 | 40 | 55 | 42 | 21 | 63 |

### 6.5 Traffic Distribution and Assignment

6.5.1 The development traffic has been assigned and distributed onto the local highway network based upon the AM and PM peak splits from the traffic surveys. The development traffic distribution and assignment are presented in Figures 5 to 8 in Appendix F.

### 7.0 TRAFFIC IMPACT ASSESSMENT

### 7.1 Overview

7.1.1 This section sets out the capacity assessment for the site access. The full junction capacity results are presented in Appendix G.
7.1.2 The junction capacity assessment has been undertaken using the industry standard software package PICADY 10. The tables in this section summarise the Ratio of Flow to Capacity (RFC), driver delay and queue lengths expected during the AM and PM peak hours.

### 7.2 Junction Capacity Assessment

7.2.1 To determine the impact on the access junction, the following scenarios have been assessed for both the AM and PM peak hours. Refer to Appendix F for the respective traffic flow diagrams:

- 2023 base (Figures 1 to 2).
- 2028 growth horizon base (Figures 3 to 4 ).
- Committed developments (Figures 25 to 26).
- 2028 growth horizon base plus committed developments (Figures 27 to 28).
- 2028 growth horizon base plus committed developments plus development (Figures 29 to 30 ).
7.2.2 Table 7.1 below summarises the peak hour capacity and queue lengths expected at the access junction. The results report the 'Ratio of Flow Capacity' (RFC) together with delay (in seconds) and queue lengths (in vehicles).

Table 7.1: Proposed Site Access / Manston Road Staggered Junction Capacity Analysis Results

|  | AM Peak (0800-0900) |  |  | PM Peak (1700-1800) |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Junction Arm | Queue | Delay | RFC | Queue | Delay | RFC |  |  |  |  |  |
|  |  | 2028 Base + Com Dev + Dev |  |  |  |  |  |  |  |  |  |
| Site Access | 0.1 | 10.50 | 0.11 | 0.1 | 10.44 | 0.06 |  |  |  |  |  |
| Stanner Court Road | 0.0 | 13.33 | 0.05 | 0.1 | 18.72 | 0.10 |  |  |  |  |  |
| Manston Road East + <br> Site Access | 0.0 | 8.54 | 0.02 | 0.0 | 7.28 | 0.03 |  |  |  |  |  |
| Manston Road West + <br> Stanner Court Road | 0.0 | 7.23 | 0.0 | 0.0 | 7.13 | 0.04 |  |  |  |  |  |

7.2.3 The result in the Table 7.1 demonstrates that the proposed development vehicular access with the local highway network is forecast to operate with well within capacity at all times.
7.2.4 Traffic forecasts for the development can be seen in Figures $\mathbf{7}$ to $\mathbf{8}$ in Appendix $\mathbf{F}$ and are summarised below:

- 15 arrivals and 40 departures during the AM peak hour. 42 arrivals and 21 departures during the PM hour.


### 8.0 SUMMARY AND CONCLUSION

### 8.1 General

8.1.1 This TA has considered the transport impact of the proposed redevelopment of 118 residential units at the existing Flambeau Europlast facility in support of an application for planning permission. This TA has been prepared by Odyssey on behalf of Flambeau Europlast Ltd.
8.1.2 The proposals would seek the demolition of the existing factory and the construction of a new residential development, with associated landscaping, access junction onto Manston Road and parking courts.
8.1.3 This TA has estimated that overall daily two-way trips would decrease by 98 while the total vehicle trips would increase by 171. This is considered to be a robust upper vehicle trip limit as rail trips are considered to be under represented from the TRICS forecast and net OGV use would decrease by 78 .
8.1.4 Junction modelling was undertaken at the proposed Manston Road/site access staggered junction. The results of this modelling show that the junction would operate well within capacity during the AM and PM peak periods and the impact on the operation of the local highway network would not be material.
8.1.5 The proposed site access would cater for vehicular and pedestrian movements with a new pedestrian entrance to the west of the site connecting to the adjacent Tesco Superstore.
8.1.6 On the basis of the above, it is considered that the proposed development meets the requirements of both national and local highways and transport policy. On this basis, with regard to highways and transport, it is considered that the application should be recommended for approval.





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APPENDIX A

Proposed Site Plan


## APPENDIX B

Automated Traffic Surveys (ATC)


Ramsgate ATC 01, Manston Road
Produced by Streetwise Services Ltd.
STstreetwise


Channel 2 - Westbound

|  | 06/07/2023 | 07/07/2023 | 08/07/2023 Saturday | 09/07/2023 | 10/07/2023 | 11/07/2023 Tuesday | 12/07/2023 | $\begin{aligned} & \text { 5-DAY } \\ & \text { MEAN } \end{aligned}$ | $\begin{aligned} & \text { 7-DAY } \\ & \text { MEAN } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0000-2400 Vehicle Flow | 4371 | 4690 | 4127 | 3069 | 4619 | 4594 | 4749 | 4605 | 4317 |
| Mean Speed | 34.4 | 34.5 | 34.6 | 34.0 | 34.4 | 33.9 | 34.0 | 34.2 | 34.3 |
| 85\%ile Speed | 38.4 | 38.0 | 38.1 | 38.5 | 38.3 | 38.7 | 38.1 | 38.3 | 38.3 |
| No. Vehicles > 30 MPH Limit | 3474 | 3782 | 3327 | 2321 | 3721 | 3496 | 3652 | 3625 | 3396 |
| \% Vehicles > 30 MPH Limit | 79.5 | 80.6 | 80.6 | 75.6 | 80.6 | 76.1 | 76.9 | 78.7 | 78.6 |
| No. Vehicles $>45$ MPH | 113 | 103 | 88 | 73 | 101 | 85 | 94 | 99 | 94 |
| \% Vehicles > 45 MPH | 2.6 | 2.2 | 2.1 | 2.4 | 2.2 | 1.9 | 2.0 | 2.2 | 2.2 |

Channels $1+2$ - Eastbound \& Westbound


Produced by Streetwise Services Ltd.

Channel 1 - Eastbound

|  | $\begin{gathered} \hline \text { 06/07/2023 } \\ \text { Thursday } \\ \hline \end{gathered}$ | $07 / 07 / 2023$ <br> Friday | $\begin{gathered} \hline \text { 08/07/2023 } \\ \text { Saturday } \end{gathered}$ | $\begin{gathered} \hline \text { 09/07/2023 } \\ \text { Sunday } \end{gathered}$ | $\begin{gathered} \hline 10 / 07 / 2023 \\ \text { Monday } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { 11/07/2023 } \\ \text { Tuesday } \\ \hline \end{gathered}$ | $12 / 07 / 2023$ <br> Wednesday | $\begin{aligned} & \text { 5-DAY } \\ & \text { MEAN } \end{aligned}$ | $\begin{aligned} & \text { 7-DAY } \\ & \text { MEAN } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vehicle Flow | 3257 | 3477 | 3296 | 2591 | 3201 | 3243 | 3319 | 3299 | 3198 |
| Mean Speed | 33.3 | 34.7 | 33.7 | 33.2 | 33.6 | 33.8 | 33.9 | 33.9 | 33.7 |
| 85\%ile Speed | 39.5 | 41.6 | 40.2 | 37.7 | 39.7 | 39.4 | 41.2 | 40.3 | 39.9 |
| No. Vehicles > 30 MPH Limit | 2159 | 2366 | 2285 | 1638 | 2284 | 2184 | 2192 | 2237 | 2158 |
| \% Vehicles > 30 MPH Limit | 66.3 | 68.0 | 69.3 | 63.2 | 71.4 | 67.3 | 66.0 | 67.8 | 67.4 |
| No. Vehicles > 45 MPH | 42 | 48 | 60 | 30 | 40 | 39 | 41 | 42 | 43 |
| \% Vehicles > 45 MPH | 1.3 | 1.4 | 1.8 | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 1.3 |

Channel 2 - Westbound

|  | $\begin{gathered} \hline \text { 06/07/2023 } \\ \text { Thursday } \\ \hline \end{gathered}$ | $07 / 07 / 2023$ <br> Friday | $\begin{gathered} \hline 08 / 07 / 2023 \\ \text { Saturday } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { 09/07/2023 } \\ & \text { Sunday } \end{aligned}$ | $\begin{gathered} \hline 10 / 07 / 2023 \\ \text { Monday } \\ \hline \end{gathered}$ | $\begin{gathered} 11 / 07 / 2023 \\ \text { Tuesday } \end{gathered}$ | 12/07/2023 <br> Wednesday | $\begin{aligned} & \text { 5-DAY } \\ & \text { MEAN } \end{aligned}$ | $\begin{aligned} & \text { 7-DAY } \\ & \text { MEAN } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vehicle Flow | 3123 | 3409 | 3263 | 2627 | 3236 | 3189 | 3304 | 3252 | 3164 |
| Mean Speed | 35.0 | 35.9 | 35.3 | 35.2 | 35.7 | 34.7 | 35.9 | 35.5 | 35.4 |
| 85\%ile Speed | 41.0 | 42.2 | 42.0 | 41.5 | 41.9 | 40.5 | 42.5 | 41.6 | 41.6 |
| No. Vehicles > 30 MPH Limit | 2472 | 2721 | 2588 | 1954 | 2657 | 2466 | 2602 | 2584 | 2494 |
| \% Vehicles > 30 MPH Limit | 79.2 | 79.8 | 79.3 | 74.4 | 82.1 | 77.3 | 78.8 | 79.4 | 78.7 |
| No. Vehicles > 45 MPH | 86 | 79 | 72 | 50 | 81 | 70 | 79 | 79 | 74 |
| \% Vehicles > 45 MPH | 2.8 | 2.3 | 2.2 | 1.9 | 2.5 | 2.2 | 2.4 | 2.4 | 2.3 |

Channels 1+2-Eastbound \& Westbound

|  | $\begin{gathered} \hline \text { 06/07/2023 } \\ \text { Thursday } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 07 / 07 / 2023 \\ \text { Friday } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { 08/07/2023 } \\ \text { Saturday } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 09 / 07 / 2023 \\ \text { Sunday } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 10 / 07 / 2023 \\ \text { Monday } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { 11/07/2023 } \\ \text { Tuesday } \end{gathered}$ | 12/07/2023 <br> Wednesday | $\begin{aligned} & \text { 5-DAY } \\ & \text { MEAN } \end{aligned}$ | $\begin{aligned} & \text { 7-DAY } \\ & \text { MEAN } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vehicle Flow | 6380 | 6886 | 6559 | 5218 | 6437 | 6432 | 6623 | 6552 | 6362 |
| Mean Speed | 34.1 | 35.3 | 34.5 | 34.2 | 34.7 | 34.3 | 34.9 | 34.7 | 34.6 |
| 85\%ile Speed | 40.3 | 41.9 | 41.1 | 39.6 | 40.8 | 40.0 | 41.8 | 40.9 | 40.8 |
| No. Vehicles > 30 MPH Limit | 4631 | 5087 | 4873 | 3592 | 4941 | 4650 | 4794 | 4821 | 4653 |
| \% Vehicles > 30 MPH Limit | 72.6 | 73.9 | 74.3 | 68.8 | 76.8 | 72.3 | 72.4 | 73.6 | 73.0 |
| No. Vehicles > 45 MPH | 128 | 127 | 132 | 80 | 121 | 109 | 120 | 121 | 117 |
| \% Vehicles > 45 MPH | 2.0 | 1.8 | 2.0 | 1.5 | 1.9 | 1.7 | 1.8 | 1.8 | 1.8 |

Note: All figures are based on data from the hours 0000-0700, 0900-1600 \& 1800-2400.

## APPENDIX C

Supplementary Guidance Note (Interim Guidance Note 3)

Kent Design Guide Review: Interim Guidance Note 3 20 November 2008

## RESIDENTIAL PARKING

Highway
Servicos

## INTRODUCTION

Planning Policy Statement 3 (PPS3): Housing (Communities \& Local Government (CLG), November 2006) requires that "Local Planning Authorities should, with stakeholders and communities, develop residential parking policies for their areas, taking account of expected levels of car ownership, the importance of promoting good design and the need to use land efficiently" (PPS3, Section 51). A subsequent report published by Communities and Local Government ("Residential Car Parking Research" (CLG, May 2007)) considers the various influences on levels of residential parking, pointing to data from the 2001 Census as a starting point for estimating "expected levels of car ownership".

The wording in PPS3 suggests that there may be reasons why not all guidance on levels of residential car parking needs to be expressed as 'maximum standards'. On the other hand, in certain locations it may be appropriate to limit car parking to achieve the most efficient use of land, usually in situations where there are also vehicular constraint policies. It is no longer acceptable for those involved in the development control process to cite residential parking 'standards'; rather, it is important that a range of factors should be considered before determining the appropriate levels of parking.

Travel Plans will often include maximum vehicular trip generation rates which, if exceeded, will trigger'penalty' funding for mitigation measures. Such rates may be used in relation to reduced parking provision in appropriate locations, albeit the use of vehicles, especially at peak times, rather than ownership of them is the intended constraint. "Car Clubs" are a particularly useful feature of residential travel plans where travel flexibility without high car ownership is sought.

The previously adopted standards for residential parking in Kent, found in Supplementary Policy Guidance SPG4 of the Kent and Medway Structure Plan, are a reasonably accurate guide to the upper levels of expected ownership in the county. Further guidance in the SPG allowed interpretation of the standards down to levels appropriate in more constrained situations. However, the SPG needed to be used with proper interpretation. This Guidance Note is offered as the basis for residential parking policies in Local Development Frameworks (LDFs) across Kent, with the principles to be adopted for development control purposes as soon as possible. Adopted guidance in respect of Cycle Parking is not affected by the Note.

A Guidance Table is included towards the end of this Note. It suggests appropriate levels of parking for a range of situations. Local Planning Authorities may adopt this table and identify the areas within which particular levels will apply. Maps will help to support this approach. "The Census approach" is quite complicated, and is most relevant to large amounts of unallocated parking. Furthermore, it is not necessarily robust and needs to be the subject of validation surveys.

Kent Highway Services, in liaison with the Kent Design Initiative and Kent's district councils, is undertaking surveys of recent residential developments. Quality and quantity outputs from these surveys will assist with addressing the requirements of PPS3. At Appendices A and B, relevant results to date are tabulated, with additional comments to aid interpretation. These results represent a growing evidence base for this Guidance Note and the Guidance Table.

## FACTORS TO BE CONSIDERED

Location has a significant influence on vehicle ownership. Where effectively enforced on-street parking controls (or positively managed covenants/agreements) limit the opportunities for residents to own cars that they cannot accommodate in dedicated parking areas, lower levels provision will not cause problems. Care needs to be taken in these situations to ensure that the reasonable needs of visitors are catered for, even if only in nearby public car parks. Similar considerations apply to the relevance of garages (as opposed to car ports and car barns without gates) as part of the parking provision. In areas without on-street controls, many people do not use garages, even if they have to park on the street as a result (see Appendices for evidence).

If on-street controls are needed to support the chosen approach to parking provision, these must be considered in relation to any potential for parking in neighbouring streets. Controls within the development can be imposed without public consultation (albeit purchasers must be advised of the intention to introduce them), but residents in streets affected by wider controls need to be involved in framing controls for inclusion in any traffic regulation orders. Section 106 Agreements can be used to secure funding for such orders, along with any additional enforcement.

Tenure is also relevant, albeit only where retention in perpetuity of tenancy controls is anticipated should the effect be considered. Census data indicates that privately owned dwellings have higher overall ownership levels than the social sector, albeit longer term high occupancy levels may undermine this in some cases. Similarly, houses have higher vehicle ownership levels than flats.


TERLINGHAM VILLAGE PHASE 1, HAWKINGE
Car barns figure in residents' appreciation of the parking provision and represent a positive aspect of the built form.

The size of properties is a key factor. Census data is expressed against the number of habitable rooms, whereas standards have normally been related to the number of bedrooms. Given the ranges involved, it is not difficult to move between the two approaches. Bedrooms are used in the Guidance Table.

Growth is considered in the CLG Report. Should a 25 year horizon be used with Census data? Such a precise approach to prediction may warrant the use of such a factor. The influence of regeneration has not yet been understood. If new development is bringing about socio-economic
improvement to an area the expectations for car ownership among its residents may be higher than exists within that area, hence the need for validation surveys of recent developments. Such surveys have already produced examples of ownership levels almost 0.9 vehicles per unit above the average Census figures for the wards in question, although there are also examples of close Census/survey correlation and some 'sub-Census' values. As such, a proper understanding of the various factors is essential if expected levels of car ownership are to be predicted with confidence.

Allocation of parking to individual units increases the amount of parking needed. Non-allocated parking makes use of different levels of ownership, including those without vehicles, to use the land given over to parking in the most efficient way. It can also satisfy the reasonable needs of visitor parking because of the occupancy patterns across the day. In Kent, few developers are currently pursuing schemes with non-allocated parking, especially for houses. However, a design-led allowance for on-street parking will normally be the best way to cater for visitors, and additional vehicles owned by residents, where there are no on-street restrictions in place.

Vans are an increasingly common sight in residential areas. Although covenants are often put in place in new developments to prevent such vans from being parked, they are seldom enforced. Modern working patterns often necessitate the parking of vans at home, hence there is a need to design with them in mind. Parking bay dimensions should be modelled on vans rather than cars.

PPS3 puts good design at the heart of parking provision in requiring "a design-led approach to the provision of car-parking space, that is wellintegrated with a high quality public realm and streets that are pedestrian, cycle and vehicle friendly" (Section 16). English Partnerships' Car Parking: What Works Where (May 2006) offers detailed guidance on how to provide
well-designed parking across a range of development scenarios. Manual for Streets (Department for Transport etc., March 2007) reinforces the need to consider a range of solutions, encouraging on-street provision in line with Section 16 of PPS3, and endorsing the guidance contained in the Kent Design Guide (Kent Design Initiative, December 2005) (Section 2.2.4).

It is clear from Appendices $A$ and $B$ that parking is a major cause of dissatisfaction, and sometimes even serious neighbour disputes, in otherwise good developments. Safety concerns are often associated with parking problems. In some cases there is enough parking but it isn't being used. A design-led approach to the provision of realistic amounts of parking will address these issues.

Residential parking is not just a'numbers game'. On the negative side, refusals made without consideration of current guidance are likely to be criticised and may be inappropriate. On a more positive note, recent guidance offers all those involved the opportunity to get the amount location and design of residential parking'right' for the benefit of future residents, thus ending many years of dissatisfaction with ill-conceived approaches.

## QUALITY AUDITS

Quality Audits bring together the various assessments of public realm. The Development Team, and not individual professionals, decides on the balance to be struck between the outcomes. As such, Road Safety Audits have no superior status. Many Development

Planning Engineers have been making value judgements on attractiveness, functionality and safety for years. Increasingly, their role will be one of 'placemakers', hence they will become adept at interpreting Road Safety Audits and understanding the risks to which the findings direct the Project Team's attention. They will also develop the skills necessary to contribute positively and creatively to the placemaking agenda, not restricting themselves to the application of standards.


MILTON LANE, LACUNA, KINGS HILL
Inconsiderate parking obstructs pedestrians and engenders safety concerns.

The Local Planning Authority's Case Officer will keep a record of the Quality Audit inputs and decisions. This will be sufficient to deal with enquiries in the very unlikely event of an incident being attributed to the design of the public realm. A copy of the Quality Audit should be kept on the planning file(s) and any subsequent adoption agreement file.

The following information should be included in the Quality Audit, preferably in a standard format:

- Site
- Developer
- Case Officer
- Development Team members
- Key meeting dates and venues
- Main issues discussed and decisions made at the meetings
- Dates of Road Safety Audits, and summaries of issues raised and responses made to them
- Date of Development Team "approval" of scheme
- "Approved" drawing numbers
- Date of planning consent
- Kent Highway Services' Agreement Engineer, where appropriate (if not a member of the Development Team)
- Record of construction phase issues affecting consented scheme
- Record of construction phase and completed scheme site visits
- Date of commencement and closure of Quality Audit process

An enhancement of the service offered to the occupiers of new developments would be for the developer to give them a copy of, or a web link to, the Design and Access Statement in the Welcome Pack, explaining the background to where they live. Such a package could also include a summary of, or link to, the Quality Audit.

## MINOR DEVELOPMENTS

This Guidance Note relates primarily to development proposals involving new streets and places. The Guidance Table can be applied to minor (often infill) developments, but regard needs to be had for the severity of concerns about safety and/or amenity before recommendations of refusal are made in respect of numerically"inadequate" parking. Unless demonstrable harm is likely to be caused, it may be inappropriate to make such recommendations. Streets with existing parking problems (usually in the evenings and at weekends) may be identified for inclusion in Development Control and/or Local Development Framework policies.


FINCH CLOSE, FAVERSHAM
All residents who responded to a satisfaction survey feel that there
are parking problems in the street.

## CONCLUSIONS

Residential parking has frequently been the greatest source of dissatisfaction among the residents of new developments. This has often been because of ill-conceived experiments with the amount and/ or location of spaces. Otherwise good developments have been blighted by inconsiderate, and sometimes dangerous, parking. Current guidance addresses the complex issues and leaves no excuses for poor layouts. It also encourages Local Planning Authorities to develop parking policies which take account of these factors, offering the opportunity to provide a range of sustainable solutions, including developments with low or even zero parking provision.

All parties involved in the design and assessment of new developments should be following current guidance by identifying parking provision that satisfies reasonable demand, is well-designed and makes the best use of the land available. The Checklist that follows will help practitioners to give full and proper consideration to all relevant factors.

NOTE: Retirement and other residential developments with particular occupancy controls are not covered by this Note. While some of the principles are applicable, specialist providers have tended to develop their own evidence base for such accommodation.


TERLINGHAM VILLAGE PHASE 1, HAWKINGE
Street trees provide visual interest in public realm that readily
absorbs necessary on-street parking.

## CONCLUSIONS

Quality Audits are not new. If the Kent Design Guide is followed, Quality Audits will be carried out. Manual for Streets confirms that Road Safety Audits will inform Quality Audits, but they are only one aspect that should be considered.

Development Planning Engineers, and, where appropriate, Agreement Engineers, will be part of the Development Team that undertakes the Quality Audit. These engineers will have a responsibility to ensure that the Quality Audit process is not undermined when the development is constructed.

Many planners and engineers already possess the experience and skills needed to participate in Quality Audits. However, training and skills sharing will be required to help raise standards and bring about consistency of approach. In time, some form of placemaking accreditation should be developed.

A positive approach to Quality Audits will help to deliver attractive, safe and friendly developments that are good places to live. The Checklists that follow will help those involved in the Quality Audit process to identify relevant steps and to ensure that they understand their responsibilities.


Parking is the most complained about aspect of recently completed developments.

## CHECKLISTS

- Has the applicant demonstrated an understanding of current guidance on residential parking in the submission?
- Are there local parking policies for which the proposal must have regard? If not, are such policies in the course of preparation?
- If on-street controls are needed, are all necessary mechanisms for introducing these understood and funding agreed?
- Does the submission take account of location, tenure, size and type of accommodation?
- Is there a Travel Plan which includes maximum vehicular trip rates? If so, are these linked to reduced parking provision?
- Does the developer intend to establish a Car Club?
- Is the layout design-led in relation to parking provision, including onstreet parking where appropriate?
- Has regard been had for expected levels of ownership?
- Should growth be considered, and are there regeneration influences to be taken account of?
- Has non-allocation of parking been considered?
- If garages are included, are they likely to be used?
- What allowance has been made for visitor parking, and are the habits of visitors understood?
- Are there any'risks' associated with the layout, such as indiscriminate parking, commercial vehicle parking and hindrance to emergency service access?
- Would you be happy to live with the amount and design of the parking shown?


SCOTT AVENUE, CANTERBURY
A design-led approach to parking, achieved through close co-operation,
has resulted in good streets and few problems

GUIDANCE TABLE FOR RESIDENTIAL PARKING

| LOCATION | CITY/TOWN CENTRE | EDGE OF CENTRE | SUBURBAN | SUBURBAN EDGE/VILLAGE/RURAL |
| :---: | :---: | :---: | :---: | :---: |
| ON-STREET CONTROLS | On-street controls preventing all (or all long stay) parking | On-street controls, residents'scheme and/or existing saturation (Note 3) | No, or very limited, on-street controls | No on-street controls, but possibly a tight street layout |
| NATURE OF GUIDANCE | MAXIMUM (Note 1) | MAXIMUM | MINIMUM (Note 6) | MINIMUM (Note 6) |
| 1 \& 2 BED FLATS | 1 space per unit | 1 space per unit | 1 space per unit | 1 space per unit |
| FORM | Controlled (Note 2) | Not allocated | Not allocated | Not allocated |
| 1 \& 2 BED HOUSES | 1 space per unit | 1 space per unit | 1 space per unit | 1.5 spaces per unit |
| FORM | Controlled (Note 2) | Allocation possible | Allocation possible | Allocation of one space per unit possible |
| 3 BED HOUSES | 1 space per unit | 1 space per unit | 1.5 spaces per unit | 2 independently accessible spaces per unit |
| FORM | Controlled (Note 2) | Allocation possible | Allocation of one space per unit possible | Allocation of one or both spaces possible |
| 4+ BED HOUSES | 1 space per unit | 1.5 spaces per unit | 2 independently accessible spaces per unit | 2 independently accessible spaces per unit |
| FORM | Controlled (Note 2) | Allocation of one space per unit possible | Allocation of both spaces possible (Note 7) | Allocation of both spaces possible (Note 7) |
| ARE GARAGES ACCEPTABLE? (Note 4) | Yes, but with areas of communal space for washing etc. | Yes, but not as a significant proportion of overall provision | Additional to amount given above only | Additional to amount given above only |
| ADDITIONAL VISITOR PARKING (Note 5) | Public car parks | Communal areas, 0.2 per unit maximum | On-street areas, 0.2 per unit | On-street areas, 0.2 per unit |

## NOTES

1. Reduced, or even nil provision is encouraged in support of demand management and the most efficient use of land.
2. Parking/garage courts, probably with controlled entry.
3. Reduced, or even nil provision acceptable for rented properties, subject to effective tenancy controls.
4. Open car ports or car barns acceptable at all locations, subject to good design.
5. May be reduced where main provision is not allocated. Not always needed for flats.
6. Lower provision may be considered if vehicular trip rate constraints are to be applied in connection with a binding and enforceable Travel Plan
7. Best provided side by side, or in another independently accessible form. Tandem parking arrangements are often under-utilised.

APPENDIX A - RESIDENTS' SURVEYS: PARKING: ASHFORD - GRAVESHAM

| DISTRICT <br> Development | PARKING RATING (Note 1) | PARKING PROBLEMS (Note 2) | VEHICLES PER UNIT | 2001 CENSUS VEHICLES PER UNIT | GARAGE USED FOR PARKING | COMMENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASHFORD |  |  |  |  |  |  |
| Highland Park (part)* | -76\% | +79\% | 1.40 | 1.36 | 59\% | Need to check for covenants/agreements re parking |
| Mill Court | -26\% | +14\% | 1.26 | 1.26 | 45\% | Close to town centre and station |
| Miller Close | +50\% | -60\% | 1.00 | 1.26 | n/a | Off Mill Court |
| Orlestone View | -57\% | +52\% | 1.38 | 1.73 | 43\% | Near village centre |
| Sir John Fogge Avenue* | -43\% | +30\% | 1.61 | 1.40 | 53\% | In regeneration area |
| CANTERBURY |  |  |  |  |  |  |
| Aurelie Way | +15\% | -54\% | 1.46 | 1.35 | 25\% | Close to Tesco and secondary school |
| Barnes Way | -40\% | +28\% | 1.56 | 1.39 | 33\% | Suburban edge |
| Blackberry Way | +60\% | -60\% | 1.75 | 1.39 | 33\% | Suburban edge |
| Canterbury Fields | +15\% | -10\% | 1.48 | 1.49 | 50\% | On frequent bus route |
| Charollais Close | +17\% | 0\% | 1.16 | 1.25 | n/a | Housing association development fairly close to major facilities |
| Chartham Heights (SE) | +14\% | -14\% | 1.43 | 1.65 | 18\% | Development has convenience store and bus service |
| Chartham Heights (V Core)* | +12\% | -8\% | 1.68 | 1.65 | 51\% | Development has convenience store and bus service |
| Cordingham Close* | 0\% | -11\% | 1.00 | 1.44 | n/a | Housing association development on suburban edge |
| Dextor Close | -13\% | +50\% | 1.13 | 1.25 | n/a | Close to major facilities |
| Eider Close | -18\% | +27\% | 2.27 | 1.38 | 50\% | Close to secondary school |
| Eversleigh Rise | +16\% | -18\% | 1.50 | 1.35 | 37\% | Close to Tesco and secondary school |
| Gilbert Way | +10\% | +14\% | 1.33 | 1.21 | 45\% | Close to retail park and Park \& Ride |
| Great Stour Place* | +18\% | +9\% | 1.00 | 1.25 | (100\%) | Fairly close to City centre, station etc. |
| Mallard Close/Muscovy Way | +60\% | -33\% | 1.87 | 1.38 | 38\% | Suburban edge, fairly close to station |
| Pochard Crescent | -13\% | +13\% | 1.73 | 1.38 | 58\% | Fairly close to station |
| Quinneys Place* | -50\% | +100\% | 1.50 | 1.27 | (66\%) | Very close to station, shops and frequent bus route |
| Ruskins View | -22\% | +33\% | 1.67 | 1.49 | n/a | Village centre, close to frequent bus route |
| Scott Ave \& Birch Rd | +45\% | -27\% | 1.27 | 1.21 | 50\% | Design led approach to parking, including on-street areas |
| Speedwell Road | +56\% | -48\% | 1.89 | 1.44 | 44\% | Suburban edge |
| Walden Court* | +31\% | -23\% | 1.46 | 1.25 | n/a | Fairly close to major facilities |
| Wallis Court | -63\% | +75\% | 1.63 | 1.39 | (0\%) | Parking problems relate primarily to nearby school |
| West of Hersden | -21\% | +29\% | 1.51 | 1.62 | 42\% | Village extension in mainly rural ward |
| Willow Farm Way | +9\% | +3\% | 2.21 | 1.49 | 48\% | Neighbour problems over parking in two parts |
| DARTFORD |  |  |  |  |  |  |
| Bexley Park (part) | -21\% | +26\% | 2.08 | 1.56 | 56\% | Shops at entrance to development |
| Palladian Circus* | -29\% | +43\% | 1.52 | 1.50 | 50\% | Fastrack frequent bus service runs past Ingress Park |
| Stonechat Mews* | -67\% | +78\% | 1.11 | 1.50 | (100\%) | Fastrack runs nearby |


| Waterstone Park (part)* | $-39 \%$ | $+50 \%$ | 1.41 | 1.50 | $47 \%$ | Fastrack runs nearby |
| :--- | :---: | :---: | :---: | :---: | :---: | :--- |
| DOVER |  |  |  |  |  |  |
| Miller Close, Wingham | $+54 \%$ | $+8 \%$ | 1.00 | 1.62 | $\mathrm{n} / \mathrm{a}$ | Village edge |
| Sandwich Road, Ash | $-44 \%$ | $+31 \%$ | 1.78 | 1.35 | $41 \%$ | Village edge |
| GRAVESHAM |  |  |  |  |  |  |
| Fenners Marsh* | $+13 \%$ | $-7 \%$ | 1.33 | 1.11 | $67 \%$ | Suburban edge |
| Kendall Gardens | $+7 \%$ | $+29 \%$ | 1.14 | 1.25 | $(50 \%)$ | Close to shops |
| Rosherville Way (part) | $+9 \%$ | $-6 \%$ | 1.72 | 1.25 | $62 \%$ | In former quarry, fairly close to shops |
| Admirals Way** | $\mathrm{n} / \mathrm{a}$ | $+22 \%$ | 1.09 | 0.78 | $\mathrm{n} / \mathrm{a}$ | In regeneration area |
| Baltic Wharf** | $\mathrm{n} / \mathrm{a}$ | $+90 \%$ | 1.05 | 0.84 | $\mathrm{n} / \mathrm{a}$ | Close to town centre |
| Covesfield* | $\mathrm{n} / \mathrm{a}$ | $-42 \%$ | 1.33 | 1.25 | $\mathrm{n} / \mathrm{a}$ | Close to shops |

(For Key see Maidstone - Tunbridge Wells)
APPENDIX B - RESIDENTS' SURVEYS: PARKING: MAIDSTONE - TUNBRIDGE WELLS

| DISTRICT <br> Development | PARKING RATING (Note 1) | PARKING PROBLEMS (Note 2) | VEHICLES PER UNIT | 2001 CENSUS VEHICLES PER UNIT | GARAGE USED FOR PARKING | COMMENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MAIDSTONE |  |  |  |  |  |  |
| Edelin Road* | -85\% | +85\% | 1.46 | 1.51 | (25\%) | 25\% of properties not occupied at time of survey |
| Shaw Close | -76\% | +76\% | 1.97 | 1.43 | 45\% | Close to Park \& Ride |
| SEVENOAKS |  |  |  |  |  |  |
| Bentleys Meadow (H Zone)* | -18\% | +27\% | 1.45 | 1.90 | n/a | Housing association development in mainly rural ward |
| Parsonage Bank | 0\% | +50\% | 1.63 | 1.61 | n/a | Close to village centre |
| The Beeches | +18\% | -12\% | 1.64 | 1.61 | 51\% | Close to two railway stations, edge of town |
| The Sidings* | -31\% | +50\% | 1.19 | 1.52 | (17\%) | Adjoins railway station on edge of settlement |
| SHEPWAY |  |  |  |  |  |  |
| Terlingham Village Phase 1 | +67\% | -78\% | 1.71 | 1.60 | 50\% | Part of major expansion of village |
| SWALE |  |  |  |  |  |  |
| Finch Close | -83\% | +100\% | 1.45 | 1.34 | 10\% | Fairly close to town centre and station |
| Hilton Close | -28\% | +44\% | 1.59 | 1.34 | 58\% | Fairly close to own centre and station |
| Mallard Crescent* | -45\% | +66\% | 1.72 | 1.76 | 25\% | Connects with Sanderling Way |
| Orchard Edge | -75\% | +81\% | 1.62 | 1.76 | 36\% | Need to check for covenants/agreements re parking |
| Sanderling Way | -23\% | +18\% | 1.85 | 1.76 | 41\% | Connects with Mallard Crescent |
| THANET |  |  |  |  |  |  |
| Brindle Grove | +14\% | +43\% | 1.79 | 1.13 | 31\% | Fairly close to station and bus routes |
| Chantry Park | -44\% | +44\% | 2.11 | 1.54 | 45\% | Village location |
| College Gardens | 0\% | -9\% | 1.73 | 1.18 | 78\% | Moderate walk to shops \& station; bus route passes site |
| TONBRIDGE \& MALLING |  |  |  |  |  |  |


| Anisa Close* | -50\% | +60\% | 2.00 | 1.89 | 90\% | Close to commercial centre of Kings Hill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Busbridge Close | +17\% | -33\% | 2.08 | 1.58 | 58\% | Fairly close to station |
| Friars View | -50\% | +40\% | 1.85 | 1.71 | 42\% | On-street problems blamed on flat occupiers; very close to station |
| Lacuna (part) (1) \& (2)* | -67\% | +81\% | 1.39 | 1.89 | 76\% | Need to check for covenants/agreements re parking |
| Milton Lane | -81\% | +62\% | 1.67 | 1.89 | 68\% | Need to check for covenants/agreements re parking |
| McArthur Drive | -23\% | +44\% | 1.57 | 1.89 | 69\% | Need to check for covenants/agreements re parking |
| Perch Close* | -39\% | +65\% | 1.57 | 1.69 | (80\%) | Need to check for covenants/agreements re parking |
| The Gables, Friars View** | -89\% | +33\% | 1.22 | n/a | n/a | On-street problems blamed on house occupiers |
| Upper Mill | 0\% | -12\% | 1.44 | 1.58 | n/a | Fairly close to station |
| TUNBRIDGE WELLS |  |  |  |  |  |  |
| Blackberry Way | +22\% | -56\% | 1.44 | 1.51 | 58\% | Off Green Lane |
| Green Lane | +50\% | -85\% | 1.68 | 1.51 | 51\% | Edge of town |

CENSUS data is the average for owner-occupied houses except those in italics, which is the average for owner-occupied flats.

* Developments with a significant proportion (20\% or more) of flats, for which Census data suggests that average vehicle ownership rates are lower.
** Developments with flats only.
Note 1 ("GOOD" + "VERY GOOD") - ("POOR" + "VERY POOR") expressed as a percentage of the overall response
Note 2 " YES " - "NO" expressed as a percentage

Kent Design
c/o Kent Highways service
1st Floor, Invicta House
County Hall
Maidstone
Kent
ME14 1XX

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Design: www.astonesthrowdesign.co.uk

APPENDIX D

TRICS Output

## TRIP RATE CALCULATI ON SELECTI ON PARAMETERS:

Land Use : 02-EMPLOYMENT
Category : C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL VEHICLES
Selected regions and areas:
02 SOUTH EAST
HC HAMPSHIRE 1 days
03 SOUTH WEST
DV DEVON 1 days
04 EAST ANGLIA
NF NORFOLK 1 days
06 WEST MI DLANDS
WK WARWICKSHIRE
1 days
This section displays the number of survey days per TRICS ${ }^{\circledR}$ 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: | 690 to 9216 (units: sqm) |  |
| Range Selected by User: | 690 to 67459 (units: sqm) |  |
|  |  |  |
| Parking Spaces Range: | All Surveys Included |  |
| Public Transport Provision: |  | Include all surveys |

Date Range: $\quad 01 / 01 / 15$ to $29 / 06 / 22$
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:
$\begin{array}{ll}\text { Wednesday } & 2 \text { days } \\ \text { Thursday } & 2 \text { days }\end{array}$
This data displays the number of selected surveys by day of the week.

| Selected survey types: | 4 days |
| :--- | :--- |
| Manual 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:

Suburban Area (PPS6 Out of Centre) 2
Edge of Town 1
Neighbourhood Centre (PPS6 Local Centre) 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 3
Village 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 5 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 500 m Range:
All Surveys Included
Population within 1 mile:

| 1,000 or Less | 1 days |
| :--- | :--- |
| 5,001 to 10,000 | 1 days |
| 15,001 to 20,000 | 1 days |
| 25,001 to 50,000 | 1 days |

This data displays the number of selected surveys within stated 1-mile radii of population.
Population within 5 miles:

| 25,001 to 50,000 | 1 days |
| :--- | :--- |
| 75,001 to 100,000 | 1 days |
| 125,001 to 250,000 | 2 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 | 1 days |
| :--- | :--- |
| 1.1 to 1.5 | 2 days |
| 1.6 to 2.0 | 1 days |

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

## Travel Plan:

No
4 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 4 days
This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters


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 |
| :---: | :---: | :---: |
| WS-02-C-04 | Too Big |  |

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL VEHICLES
Calculation factor: $\mathbf{1 0 0} \mathbf{~ s q m}$
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.77


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.

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## Parameter summary

Trip rate parameter range selected:
Survey date date range:
Number of weekdays (Monday-Friday):
Number of Saturdays:
Number of Sundays:
Surveys automatically removed from selection:
Surveys manually removed from selection:

690-9216 (units: sqm)
01/01/15-29/06/22
4
0
0
1
1

This section displays a quick summary of some of the data filtering selections made by the TRICS ${ }^{\circledR}$ 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/C - INDUSTRIAL UNIT
MULTI-MODAL TAXIS
Calculation factor: $\mathbf{1 0 0} \mathbf{~ s q m}$

## BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. Days | Ave. GFA | Trip Rate | $\begin{aligned} & \text { No. } \\ & \text { Days } \end{aligned}$ | Ave. GFA | Trip Rate | $\begin{aligned} & \text { No. } \\ & \text { Days } \end{aligned}$ | 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 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 05:30-06:00 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 06:00-06:30 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 07:00-07:30 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
|  | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 07:30-08:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 08:00-08:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 08:30-09:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 09:00-09:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 09:30-10:00 | 4 | 5355 | 0.005 | 4 | 5355 | 0.005 | 4 | 5355 | 0.010 |
| 10:00-10:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 10:30-11:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 11:00-11:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 11:30-12:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 12:00-12:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 12:30-13:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 13:00-13:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 13:30-14:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 14:00-14:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 14:30-15:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 15:00-15:30 | 4 | 5355 | 0.019 | 4 | 5355 | 0.019 | 4 | 5355 | 0.038 |
| 15:30-16:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 16:00-16:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 16:30-17:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 17:00-17:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 17:30-18:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 18:00-18:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 18:30-19:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 19:00-19:30 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 19:30-20:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 20:00-20:30 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 20:30-21:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 21:00-21:30 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 21:30-22:00 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
|  |  |  |  |  |  |  |  |  |  |
| 22:30-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-23:30 |  |  |  |  |  |  |  |  |  |
| $\begin{array}{\|c\|} \hline \text { 23:30-24:00 } \\ \hline \text { Total Rates: } \\ \hline \end{array}$ |  |  | 0.024 |  |  |  |  |  |  |
|  |  |  | 0.024 |  |  | 0.048 |

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/C - INDUSTRIAL UNIT
MULTI -MODAL OGVS
Calculation factor: $\mathbf{1 0 0} \mathbf{~ s q m}$

## BOLD print indicates peak (busiest) period



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/C - INDUSTRIAL UNIT
MULTI-MODAL CYCLI STS
Calculation factor: $\mathbf{1 0 0} \mathbf{~ s q m}$

## BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | $\begin{aligned} & \text { No. } \\ & \text { Days } \end{aligned}$ | 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 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 05:30-06:00 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 06:00-06:30 | 1 | 9216 | 0.011 | 1 | 9216 | 0.000 | 1 | 9216 | 0.011 |
| 06:30-07:00 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 07:00-07:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 07:30-08:00 | 4 | 5355 | 0.005 | 4 | 5355 | 0.000 | 4 | 5355 | 0.005 |
| 08:00-08:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 08:30-09:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 09:00-09:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 09:30-10:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 10:00-10:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 10:30-11:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 11:00-11:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 11:30-12:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 12:00-12:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 12:30-13:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 13:00-13:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 13:30-14:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 14:00-14:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 14:30-15:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 15:00-15:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.005 | 4 | 5355 | 0.005 |
| 15:30-16:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 16:00-16:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 16:30-17:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.005 | 4 | 5355 | 0.005 |
| 17:00-17:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 17:30-18:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 18:00-18:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 18:30-19:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 19:00-19:30 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 19:30-20:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 20:00-20:30 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 20:30-21:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 21:00-21:30 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 21:30-22:00 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 22:00-22:30 $\quad$ 年 |  |  |  |  |  |  |  |  |  |
| 22:30-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-23:30 |  |  |  |  |  |  |  |  |  |
| 23:30-24:00 |  | 0.016 |  | 0.010 |  |  |  |  |  |
| Total Rates: |  |  |  |  |  | 0.026 |

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/C - INDUSTRIAL UNIT
MULTI-MODAL VEHICLE OCCUPANTS
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 | $\begin{aligned} & \text { No. } \\ & \text { Days } \end{aligned}$ | 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 | 1 | 9216 | 0.011 | 1 | 9216 | 0.000 | 1 | 9216 | 0.011 |
| 05:30-06:00 | 1 | 9216 | 0.076 | 1 | 9216 | 0.000 | 1 | 9216 | 0.076 |
| 06:00-06:30 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 06:30-07:00 | 1 | 9216 | 0.011 | 1 | 9216 | 0.000 | 1 | 9216 | 0.011 |
| 07:00-07:30 | 4 | 5355 | 0.219 | 4 | 5355 | 0.014 | 4 | 5355 | 0.233 |
| 07:30-08:00 | 4 | 5355 | 0.079 | 4 | 5355 | 0.014 | 4 | 5355 | 0.093 |
| 08:00-08:30 | 4 | 5355 | 0.191 | 4 | 5355 | 0.023 | 4 | 5355 | 0.214 |
| 08:30-09:00 | 4 | 5355 | 0.103 | 4 | 5355 | 0.042 | 4 | 5355 | 0.145 |
| 09:00-09:30 | 4 | 5355 | 0.075 | 4 | 5355 | 0.033 | 4 | 5355 | 0.108 |
| 09:30-10:00 | 4 | 5355 | 0.229 | 4 | 5355 | 0.093 | 4 | 5355 | 0.322 |
| 10:00-10:30 | 4 | 5355 | 0.163 | 4 | 5355 | 0.023 | 4 | 5355 | 0.186 |
| 10:30-11:00 | 4 | 5355 | 0.149 | 4 | 5355 | 0.019 | 4 | 5355 | 0.168 |
| 11:00-11:30 | 4 | 5355 | 0.070 | 4 | 5355 | 0.056 | 4 | 5355 | 0.126 |
| 11:30-12:00 | 4 | 5355 | 0.084 | 4 | 5355 | 0.051 | 4 | 5355 | 0.135 |
| 12:00-12:30 | 4 | 5355 | 0.140 | 4 | 5355 | 0.149 | 4 | 5355 | 0.289 |
| 12:30-13:00 | 4 | 5355 | 0.145 | 4 | 5355 | 0.224 | 4 | 5355 | 0.369 |
| 13:00-13:30 | 4 | 5355 | 0.084 | 4 | 5355 | 0.294 | 4 | 5355 | 0.378 |
| 13:30-14:00 | 4 | 5355 | 0.117 | 4 | 5355 | 0.187 | 4 | 5355 | 0.304 |
| 14:00-14:30 | 4 | 5355 | 0.051 | 4 | 5355 | 0.051 | 4 | 5355 | 0.102 |
| 14:30-15:00 | 4 | 5355 | 0.112 | 4 | 5355 | 0.070 | 4 | 5355 | 0.182 |
| 15:00-15:30 | 4 | 5355 | 0.061 | 4 | 5355 | 0.154 | 4 | 5355 | 0.215 |
| 15:30-16:00 | 4 | 5355 | 0.019 | 4 | 5355 | 0.093 | 4 | 5355 | 0.112 |
| 16:00-16:30 | 4 | 5355 | 0.042 | 4 | 5355 | 0.261 | 4 | 5355 | 0.303 |
| 16:30-17:00 | 4 | 5355 | 0.014 | 4 | 5355 | 0.191 | 4 | 5355 | 0.205 |
| 17:00-17:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.056 | 4 | 5355 | 0.065 |
| 17:30-18:00 | 4 | 5355 | 0.084 | 4 | 5355 | 0.019 | 4 | 5355 | 0.103 |
| 18:00-18:30 | 4 | 5355 | 0.037 | 4 | 5355 | 0.023 | 4 | 5355 | 0.060 |
| 18:30-19:00 | 4 | 5355 | 0.023 | 4 | 5355 | 0.019 | 4 | 5355 | 0.042 |
| 19:00-19:30 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 19:30-20:00 | 2 | 8608 | 0.017 | 2 | 8608 | 0.023 | 2 | 8608 | 0.040 |
| 20:00-20:30 | 2 | 8608 | 0.006 | 2 | 8608 | 0.134 | 2 | 8608 | 0.140 |
| 20:30-21:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.017 | 2 | 8608 | 0.017 |
| 21:00-21:30 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 21:30-22:00 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 22:00-22:30 |  |  |  |  |  |  |  |  |  |
| 22:30-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-23:30 |  |  |  |  |  |  |  |  |  |
| 23:30-24:00 |  | 2.421 |  |  |  |  |  |  |  |
| Total Rates: |  |  |  | 2.333 |  |  |  |  | 4.754 |

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/C - INDUSTRIAL UNIT
MULTI-MODAL PEDESTRIANS
Calculation factor: $\mathbf{1 0 0} \mathbf{~ s q m}$

## BOLD print indicates peak (busiest) period



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/C - INDUSTRIAL UNIT
MULTI-MODAL BUS/ TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. Days | Ave. GFA | Trip Rate | $\begin{gathered} \text { No. } \\ \text { Days } \end{gathered}$ | Ave. GFA | Trip Rate | $\begin{aligned} & \text { No. } \\ & \text { Days } \end{aligned}$ | 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 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 05:30-06:00 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 06:00-06:30 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 06:30-07:00 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 07:00-07:30 | 4 | 5355 | 0.005 | 4 | 5355 | 0.000 | 4 | 5355 | 0.005 |
| 07:30-08:00 | 4 | 5355 | 0.023 | 4 | 5355 | 0.009 | 4 | 5355 | 0.032 |
| 08:00-08:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.000 | 4 | 5355 | 0.009 |
| 08:30-09:00 | 4 | 5355 | 0.042 | 4 | 5355 | 0.000 | 4 | 5355 | 0.042 |
| 09:00-09:30 | 4 | 5355 | 0.019 | 4 | 5355 | 0.005 | 4 | 5355 | 0.024 |
| 09:30-10:00 | 4 | 5355 | 0.005 | 4 | 5355 | 0.000 | 4 | 5355 | 0.005 |
| 10:00-10:30 | 4 | 5355 | 0.023 | 4 | 5355 | 0.019 | 4 | 5355 | 0.042 |
| 10:30-11:00 | 4 | 5355 | 0.033 | 4 | 5355 | 0.019 | 4 | 5355 | 0.052 |
| 11:00-11:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.005 | 4 | 5355 | 0.014 |
| 11:30-12:00 | 4 | 5355 | 0.019 | 4 | 5355 | 0.019 | 4 | 5355 | 0.038 |
| 12:00-12:30 | 4 | 5355 | 0.019 | 4 | 5355 | 0.023 | 4 | 5355 | 0.042 |
| 12:30-13:00 | 4 | 5355 | 0.037 | 4 | 5355 | 0.037 | 4 | 5355 | 0.074 |
| 13:00-13:30 | 4 | 5355 | 0.005 | 4 | 5355 | 0.005 | 4 | 5355 | 0.010 |
| 13:30-14:00 | 4 | 5355 | 0.028 | 4 | 5355 | 0.023 | 4 | 5355 | 0.051 |
| 14:00-14:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.019 | 4 | 5355 | 0.028 |
| 14:30-15:00 | 4 | 5355 | 0.014 | 4 | 5355 | 0.005 | 4 | 5355 | 0.019 |
| 15:00-15:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.009 | 4 | 5355 | 0.018 |
| 15:30-16:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 16:00-16:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.000 | 4 | 5355 | 0.009 |
| 16:30-17:00 | 4 | 5355 | 0.023 | 4 | 5355 | 0.042 | 4 | 5355 | 0.065 |
| 17:00-17:30 | 4 | 5355 | 0.005 | 4 | 5355 | 0.019 | 4 | 5355 | 0.024 |
| 17:30-18:00 | 4 | 5355 | 0.047 | 4 | 5355 | 0.009 | 4 | 5355 | 0.056 |
| 18:00-18:30 | 4 | 5355 | 0.005 | 4 | 5355 | 0.019 | 4 | 5355 | 0.024 |
| 18:30-19:00 | 4 | 5355 | 0.019 | 4 | 5355 | 0.019 | 4 | 5355 | 0.038 |
| 19:00-19:30 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 19:30-20:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.006 | 2 | 8608 | 0.006 |
| 20:00-20:30 | 2 | 8608 | 0.006 | 2 | 8608 | 0.128 | 2 | 8608 | 0.134 |
| 20:30-21:00 | 2 | 8608 | 0.006 | 2 | 8608 | 0.017 | 2 | 8608 | 0.023 |
| 21:00-21:30 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 21:30-22:00 | 1 | 8000 | 0.013 | 1 | 8000 | 0.000 | 1 | 8000 | 0.013 |
| 22:00-22:30 |  |  |  |  |  |  |  |  |  |
| 22:30-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-23:30 |  |  |  |  |  |  |  |  |  |
| 23:30-24:00 |  | 0.441 |  | 0.456 |  |  |  |  |  |
| Total Rates: |  |  |  |  |  | 0.897 |

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/C - INDUSTRIAL UNIT
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period


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/C - INDUSTRIAL UNIT
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: $\mathbf{1 0 0} \mathbf{~ s q m}$
BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { No. } \\ \text { Days } \end{gathered}$ | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | $\begin{gathered} \text { No. } \\ \text { Days } \end{gathered}$ | 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 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 05:30-06:00 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 06:00-06:30 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 06:30-07:00 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 07:00-07:30 | 4 | 5355 | 0.005 | 4 | 5355 | 0.000 | 4 | 5355 | 0.005 |
| 07:30-08:00 | 4 | 5355 | 0.023 | 4 | 5355 | 0.009 | 4 | 5355 | 0.032 |
| 08:00-08:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.000 | 4 | 5355 | 0.009 |
| 08:30-09:00 | 4 | 5355 | 0.042 | 4 | 5355 | 0.000 | 4 | 5355 | 0.042 |
| 09:00-09:30 | 4 | 5355 | 0.019 | 4 | 5355 | 0.005 | 4 | 5355 | 0.024 |
| 09:30-10:00 | 4 | 5355 | 0.126 | 4 | 5355 | 0.000 | 4 | 5355 | 0.126 |
| 10:00-10:30 | 4 | 5355 | 0.023 | 4 | 5355 | 0.019 | 4 | 5355 | 0.042 |
| 10:30-11:00 | 4 | 5355 | 0.163 | 4 | 5355 | 0.140 | 4 | 5355 | 0.303 |
| 11:00-11:30 | 4 | 5355 | 0.112 | 4 | 5355 | 0.009 | 4 | 5355 | 0.121 |
| 11:30-12:00 | 4 | 5355 | 0.149 | 4 | 5355 | 0.019 | 4 | 5355 | 0.168 |
| 12:00-12:30 | 4 | 5355 | 0.019 | 4 | 5355 | 0.154 | 4 | 5355 | 0.173 |
| 12:30-13:00 | 4 | 5355 | 0.191 | 4 | 5355 | 0.037 | 4 | 5355 | 0.228 |
| 13:00-13:30 | 4 | 5355 | 0.005 | 4 | 5355 | 0.107 | 4 | 5355 | 0.112 |
| 13:30-14:00 | 4 | 5355 | 0.135 | 4 | 5355 | 0.023 | 4 | 5355 | 0.158 |
| 14:00-14:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.299 | 4 | 5355 | 0.308 |
| 14:30-15:00 | 4 | 5355 | 0.014 | 4 | 5355 | 0.005 | 4 | 5355 | 0.019 |
| 15:00-15:30 | 4 | 5355 | 0.159 | 4 | 5355 | 0.117 | 4 | 5355 | 0.276 |
| 15:30-16:00 | 4 | 5355 | 0.159 | 4 | 5355 | 0.000 | 4 | 5355 | 0.159 |
| 16:00-16:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.000 | 4 | 5355 | 0.009 |
| 16:30-17:00 | 4 | 5355 | 0.023 | 4 | 5355 | 0.191 | 4 | 5355 | 0.214 |
| 17:00-17:30 | 4 | 5355 | 0.266 | 4 | 5355 | 0.177 | 4 | 5355 | 0.443 |
| 17:30-18:00 | 4 | 5355 | 0.047 | 4 | 5355 | 0.009 | 4 | 5355 | 0.056 |
| 18:00-18:30 | 4 | 5355 | 0.005 | 4 | 5355 | 0.140 | 4 | 5355 | 0.145 |
| 18:30-19:00 | 4 | 5355 | 0.131 | 4 | 5355 | 0.019 | 4 | 5355 | 0.150 |
| 19:00-19:30 | 2 | 8608 | 0.122 | 2 | 8608 | 0.174 | 2 | 8608 | 0.296 |
| 19:30-20:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.006 | 2 | 8608 | 0.006 |
| 20:00-20:30 | 2 | 8608 | 0.006 | 2 | 8608 | 0.273 | 2 | 8608 | 0.279 |
| 20:30-21:00 | 2 | 8608 | 0.012 | 2 | 8608 | 0.139 | 2 | 8608 | 0.151 |
| 21:00-21:30 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 21:30-22:00 | 1 | 8000 | 0.013 | 1 | 8000 | 0.000 | 1 | 8000 | 0.013 |
|  |  |  |  |  |  |  |  |  |  |
| 22:30-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-23:30 |  |  |  |  |  |  |  |  |  |
| 23:30-24:00 |  | 1.996 |  | 2.071 |  |  |  |  |  |
| Total Rates: |  |  |  |  |  | 4.067 |

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/C - INDUSTRIAL UNIT
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.77

| Time Range | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
|  |  |  |  |  |  |  |  |  |  |
| 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 | 1 | 9216 | 0.011 | 1 | 9216 | 0.000 | 1 | 9216 | 0.011 |
| 05:30-06:00 |  | 9216 | 0.076 | 1 | 9216 | 0.000 | 1 | 9216 | 0.076 |
|  |  | 9216 | 0.011 | 1 | 9216 | 0.000 | 1 | 9216 | 0.011 |
| 06:30-07:00 1 |  | 9216 | 0.011 | 1 | 9216 | 0.000 | 1 | 9216 | 0.011 |
| 07:00-07:30 4 |  | 5355 | 0.238 | 4 | 5355 | 0.014 | 4 | 5355 | 0.252 |
| 07:30-08:00 4 |  | 5355 | 0.107 | 4 | 5355 | 0.023 | 4 | 5355 | 0.130 |
| 08:00-08:30 |  | 5355 | 0.205 | 4 | 5355 | 0.023 | 4 | 5355 | 0.228 |
| 08:30-09:00 |  | 5355 | 0.149 | 4 | 5355 | 0.042 | 4 | 5355 | 0.191 |
| 09:00-09:30 4 |  | 5355 | 0.093 | 4 | 5355 | 0.037 | 4 | 5355 | 0.130 |
| 09:30-10:00 | 4 | 5355 | 0.355 | 4 | 5355 | 0.093 | 4 | 5355 | 0.448 |
| 10:00-10:30 | 4 | 5355 | 0.187 | 4 | 5355 | 0.042 | 4 | 5355 | 0.229 |
| 10:30-11:00 | 4 | 5355 | 0.317 | 4 | 5355 | 0.163 | 4 | 5355 | 0.480 |
| 11:00-11:30 | 4 | 5355 | 0.182 | 4 | 5355 | 0.065 | 4 | 5355 | 0.247 |
| 11:30-12:00 | 4 | 5355 | 0.233 | 4 | 5355 | 0.070 | 4 | 5355 | 0.303 |
| 12:00-12:30 | 4 | 5355 | 0.159 | 4 | 5355 | 0.303 | 4 | 5355 | 0.462 |
| 12:30-13:00 | 4 | 5355 | 0.341 | 4 | 5355 | 0.261 | 4 | 5355 | 0.602 |
| 13:00-13:30 | 4 | 5355 | 0.089 | 4 | 5355 | 0.406 | 4 | 5355 | 0.495 |
| 13:30-14:00 | 4 | 5355 | 0.261 | 4 | 5355 | 0.219 | 4 | 5355 | 0.480 |
| 14:00-14:30 | 4 | 5355 | 0.061 | 4 | 5355 | 0.350 | 4 | 5355 | 0.411 |
| 14:30-15:00 | 4 | 5355 | 0.126 | 4 | 5355 | 0.075 | 4 | 5355 | 0.201 |
| 15:00-15:30 | 4 | 5355 | 0.219 | 4 | 5355 | 0.275 | 4 | 5355 | 0.494 |
| 15:30-16:00 | 4 | 5355 | 0.177 | 4 | 5355 | 0.093 | 4 | 5355 | 0.270 |
| 16:00-16:30 | 4 | 5355 | 0.051 | 4 | 5355 | 0.271 | 4 | 5355 | 0.322 |
| 16:30-17:00 | 4 | 5355 | 0.037 | 4 | 5355 | 0.392 | 4 | 5355 | 0.429 |
| 17:00-17:30 | 4 | 5355 | 0.275 | 4 | 5355 | 0.243 | 4 | 5355 | 0.518 |
| 17:30-18:00 | 4 | 5355 | 0.131 | 4 | 5355 | 0.028 | 4 | 5355 | 0.159 |
| 18:00-18:30 | 4 | 5355 | 0.042 | 4 | 5355 | 0.163 | 4 | 5355 | 0.205 |
| 18:30-19:00 | 4 | 5355 | 0.154 | 4 | 5355 | 0.037 | 4 | 5355 | 0.191 |
| 19:00-19:30 | 2 | 8608 | 0.122 | 2 | 8608 | 0.174 | 2 | 8608 | 0.296 |
| 19:30-20:00 | 2 | 8608 | 0.017 | 2 | 8608 | 0.029 | 2 | 8608 | 0.046 |
| 20:00-20:30 | 2 | 8608 | 0.012 | 2 | 8608 | 0.407 | 2 | 8608 | 0.419 |
| 20:30-21:00 | 2 | 8608 | 0.012 | 2 | 8608 | 0.157 | 2 | 8608 | 0.169 |
| 21:00-21:30 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 21:30-22:00 | 1 | 8000 | 0.013 | 1 | 8000 | 0.000 | 1 | 8000 | 0.013 |
| 22:00-22:30 |  |  |  |  |  |  |  |  |  |
| 22:30-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-23:30 |  |  |  |  |  |  |  |  |  |
| 23:30-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  | 4.474 |  | 4.455 |  |  |  |  | 8.929 |

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/C - INDUSTRIAL UNIT
MULTI-MODAL CARS
Calculation factor: $\mathbf{1 0 0} \mathbf{~ s q m}$

## BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { No. } \\ \text { Days } \end{gathered}$ | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | $\begin{gathered} \text { No. } \\ \text { Days } \end{gathered}$ | 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 | 1 | 9216 | 0.011 | 1 | 9216 | 0.000 | 1 | 9216 | 0.011 |
| 05:30-06:00 | 1 | 9216 | 0.076 | 1 | 9216 | 0.000 | 1 | 9216 | 0.076 |
| 06:00-06:30 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 06:30-07:00 | 1 | 9216 | 0.011 | 1 | 9216 | 0.000 | 1 | 9216 | 0.011 |
| 07:00-07:30 | 4 | 5355 | 0.187 | 4 | 5355 | 0.005 | 4 | 5355 | 0.192 |
| 07:30-08:00 | 4 | 5355 | 0.042 | 4 | 5355 | 0.000 | 4 | 5355 | 0.042 |
| 08:00-08:30 | 4 | 5355 | 0.121 | 4 | 5355 | 0.005 | 4 | 5355 | 0.126 |
| 08:30-09:00 | 4 | 5355 | 0.033 | 4 | 5355 | 0.005 | 4 | 5355 | 0.038 |
| 09:00-09:30 | 4 | 5355 | 0.037 | 4 | 5355 | 0.009 | 4 | 5355 | 0.046 |
| 09:30-10:00 | 4 | 5355 | 0.079 | 4 | 5355 | 0.019 | 4 | 5355 | 0.098 |
| 10:00-10:30 | 4 | 5355 | 0.065 | 4 | 5355 | 0.009 | 4 | 5355 | 0.074 |
| 10:30-11:00 | 4 | 5355 | 0.061 | 4 | 5355 | 0.009 | 4 | 5355 | 0.070 |
| 11:00-11:30 | 4 | 5355 | 0.028 | 4 | 5355 | 0.033 | 4 | 5355 | 0.061 |
| 11:30-12:00 | 4 | 5355 | 0.014 | 4 | 5355 | 0.005 | 4 | 5355 | 0.019 |
| 12:00-12:30 | 4 | 5355 | 0.019 | 4 | 5355 | 0.033 | 4 | 5355 | 0.052 |
| 12:30-13:00 | 4 | 5355 | 0.042 | 4 | 5355 | 0.084 | 4 | 5355 | 0.126 |
| 13:00-13:30 | 4 | 5355 | 0.042 | 4 | 5355 | 0.149 | 4 | 5355 | 0.191 |
| 13:30-14:00 | 4 | 5355 | 0.028 | 4 | 5355 | 0.070 | 4 | 5355 | 0.098 |
| 14:00-14:30 | 4 | 5355 | 0.019 | 4 | 5355 | 0.023 | 4 | 5355 | 0.042 |
| 14:30-15:00 | 4 | 5355 | 0.042 | 4 | 5355 | 0.023 | 4 | 5355 | 0.065 |
| 15:00-15:30 | 4 | 5355 | 0.005 | 4 | 5355 | 0.056 | 4 | 5355 | 0.061 |
| 15:30-16:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.042 | 4 | 5355 | 0.042 |
| 16:00-16:30 | 4 | 5355 | 0.014 | 4 | 5355 | 0.154 | 4 | 5355 | 0.168 |
| 16:30-17:00 | 4 | 5355 | 0.009 | 4 | 5355 | 0.131 | 4 | 5355 | 0.140 |
| 17:00-17:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.037 | 4 | 5355 | 0.046 |
| 17:30-18:00 | 4 | 5355 | 0.037 | 4 | 5355 | 0.019 | 4 | 5355 | 0.056 |
| 18:00-18:30 | 4 | 5355 | 0.023 | 4 | 5355 | 0.014 | 4 | 5355 | 0.037 |
| 18:30-19:00 | 4 | 5355 | 0.009 | 4 | 5355 | 0.009 | 4 | 5355 | 0.018 |
| 19:00-19:30 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 19:30-20:00 | 2 | 8608 | 0.006 | 2 | 8608 | 0.006 | 2 | 8608 | 0.012 |
| 20:00-20:30 | 2 | 8608 | 0.000 | 2 | 8608 | 0.058 | 2 | 8608 | 0.058 |
| 20:30-21:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.012 | 2 | 8608 | 0.012 |
| 21:00-21:30 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 21:30-22:00 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
|  |  |  |  |  |  |  |  |  |  |
| 22:30-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-23:30 |  |  |  |  |  |  |  |  |  |
| 23:30-24:00 |  | 1.069 |  | 1.019 |  |  |  |  |  |
| Total Rates: |  |  |  |  |  | 2.088 |

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/C - INDUSTRIAL UNIT
MULTI-MODAL LGVS

## Calculation factor: $\mathbf{1 0 0} \mathbf{~ s q m}$

## BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { No. } \\ \text { Days } \end{gathered}$ | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | $\begin{gathered} \text { No. } \\ \text { Days } \end{gathered}$ | 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 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 05:30-06:00 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 06:00-06:30 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 06:30-07:00 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 07:00-07:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.005 | 4 | 5355 | 0.014 |
| 07:30-08:00 | 4 | 5355 | 0.009 | 4 | 5355 | 0.000 | 4 | 5355 | 0.009 |
| 08:00-08:30 | 4 | 5355 | 0.019 | 4 | 5355 | 0.000 | 4 | 5355 | 0.019 |
| 08:30-09:00 | 4 | 5355 | 0.023 | 4 | 5355 | 0.019 | 4 | 5355 | 0.042 |
| 09:00-09:30 | 4 | 5355 | 0.014 | 4 | 5355 | 0.005 | 4 | 5355 | 0.019 |
| 09:30-10:00 | 4 | 5355 | 0.014 | 4 | 5355 | 0.009 | 4 | 5355 | 0.023 |
| 10:00-10:30 | 4 | 5355 | 0.014 | 4 | 5355 | 0.014 | 4 | 5355 | 0.028 |
| 10:30-11:00 | 4 | 5355 | 0.019 | 4 | 5355 | 0.005 | 4 | 5355 | 0.024 |
| 11:00-11:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.009 | 4 | 5355 | 0.009 |
| 11:30-12:00 | 4 | 5355 | 0.005 | 4 | 5355 | 0.000 | 4 | 5355 | 0.005 |
| 12:00-12:30 | 4 | 5355 | 0.005 | 4 | 5355 | 0.009 | 4 | 5355 | 0.014 |
| 12:30-13:00 | 4 | 5355 | 0.023 | 4 | 5355 | 0.014 | 4 | 5355 | 0.037 |
| 13:00-13:30 | 4 | 5355 | 0.005 | 4 | 5355 | 0.014 | 4 | 5355 | 0.019 |
| 13:30-14:00 | 4 | 5355 | 0.005 | 4 | 5355 | 0.014 | 4 | 5355 | 0.019 |
| 14:00-14:30 | 4 | 5355 | 0.009 | 4 | 5355 | 0.005 | 4 | 5355 | 0.014 |
| 14:30-15:00 | 4 | 5355 | 0.009 | 4 | 5355 | 0.014 | 4 | 5355 | 0.023 |
| 15:00-15:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 15:30-16:00 | 4 | 5355 | 0.005 | 4 | 5355 | 0.005 | 4 | 5355 | 0.010 |
| 16:00-16:30 | 4 | 5355 | 0.005 | 4 | 5355 | 0.033 | 4 | 5355 | 0.038 |
| 16:30-17:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.005 | 4 | 5355 | 0.005 |
| 17:00-17:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 17:30-18:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 18:00-18:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 18:30-19:00 | 4 | 5355 | 0.005 | 4 | 5355 | 0.005 | 4 | 5355 | 0.010 |
| 19:00-19:30 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 19:30-20:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 20:00-20:30 | 2 | 8608 | 0.006 | 2 | 8608 | 0.006 | 2 | 8608 | 0.012 |
| 20:30-21:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 21:00-21:30 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 21:30-22:00 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
|  |  |  |  |  |  |  |  |  |  |
| 22:30-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-23:30 |  |  |  |  |  |  |  |  |  |
| 23:30-24:00 |  | 0.203 |  | 0.190 |  |  |  |  |  |
| Total Rates: |  |  |  |  |  | 0.393 |

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/C - INDUSTRIAL UNIT
MULTI-MODAL MOTOR CYCLES
Calculation factor: $\mathbf{1 0 0} \mathbf{~ s q m}$

## BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. Days | Ave. GFA | Trip Rate | $\begin{aligned} & \text { No. } \\ & \text { Days } \end{aligned}$ | Ave. GFA | Trip Rate | $\begin{aligned} & \text { No. } \\ & \text { Days } \end{aligned}$ | 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 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 05:30-06:00 | 1 | 9216 | 0.011 | 1 | 9216 | 0.000 | 1 | 9216 | 0.011 |
| 06:00-06:30 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 06:30-07:00 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 | 1 | 9216 | 0.000 |
| 07:00-07:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 07:30-08:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 08:00-08:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 08:30-09:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 09:00-09:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 09:30-10:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 10:00-10:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 10:30-11:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 11:00-11:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 11:30-12:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 12:00-12:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 12:30-13:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 13:00-13:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 13:30-14:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 14:00-14:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 14:30-15:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 15:00-15:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.005 | 4 | 5355 | 0.005 |
| 15:30-16:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 16:00-16:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 16:30-17:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 17:00-17:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 17:30-18:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 18:00-18:30 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 18:30-19:00 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 | 4 | 5355 | 0.000 |
| 19:00-19:30 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 19:30-20:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 20:00-20:30 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 20:30-21:00 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 | 2 | 8608 | 0.000 |
| 21:00-21:30 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 21:30-22:00 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 | 1 | 8000 | 0.000 |
| 22:00-22:30 $\quad$ 年 |  |  |  |  |  |  |  |  |  |
| 22:30-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-23:30 |  |  |  |  |  |  |  |  |  |
| 23:30-24:00 |  | 0.011 |  | 0.005 |  |  |  |  |  |
| Total Rates: |  |  |  |  |  | 0.016 |

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 CALCULATI ON SELECTI ON PARAMETERS:

```
Land Use : 03-RESIDENTIAL
Category : M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL VEHICLES
Selected regions and areas:
02 SOUTH EAST
    ES EAST SUSSEX 2 days
    WS WEST SUSSEX 2 days
04 EAST ANGLI A
    NF NORFOLK 1 days
06 WEST MI DLANDS
    WK WARWICKSHIRE
1 days
```

This section displays the number of survey days per TRICS ${ }^{\circledR}$ 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: | 110 to 130 (units: ) |
| Range Selected by User: | 110 to 130 (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: $\quad 01 / 01 / 15$ to $17 / 10 / 22$
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:

| Wednesday | 3 days |
| :--- | :--- |
| Thursday | 2 days |
| Friday | 1 days |

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

| Selected survey types: | 6 days |
| :--- | :--- |
| Manual count | 0 days |

Directional ATC Count
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 5
Neighbourhood Centre (PPS6 Local Centre) 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:
Residential Zone
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
4 days - Selected
Servicing vehicles Excluded
2 days - Selected

## Secondary Filtering selection:

Use Class:
C3 6 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:
1,001 to $5,000 \quad 1$ days
5,001 to $10,000 \quad 3$ days
10,001 to $15,000 \quad 1$ days
25,001 to $50,000 \quad 1$ days
This data displays the number of selected surveys within stated 1-mile radii of population.

| Population within 5 miles: |  |
| :---: | :---: |
| 5,001 to 25,000 | 1 days |
| 25,001 to 50,000 | 1 days |
| 50,001 to 75,000 | 2 days |
| 75,001 to 100,000 | 1 days |
| 125,001 to 250,000 | 1 days |

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

| 1.1 to 1.5 | 5 days |
| :--- | :--- |
| 1.6 to 2.0 | 1 days |

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5 -miles of selected survey sites.
$\frac{\text { Travel Plan: }}{\text { Yes }}$

$$
\begin{aligned}
& 5 \text { days } \\
& 1 \text { days }
\end{aligned}
$$

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

LIST OF SITES relevant to selection parameters

| 1 | MI XED HOUSES \& FLATS |  | EAST SUSSEX |
| :---: | :---: | :---: | :---: |
|  | KINGS DRIVE |  |  |
|  | EASTBOURNE |  |  |
|  | UPPERTON |  |  |
|  | Edge of Town |  |  |
|  | Residential Zone |  |  |
|  | Total No of Dwellings: | : 119 |  |
|  | Survey date: THURSDAY | THURSDAY 15/11/18 | Survey Type: MANUAL EAST SUSSEX |
| 2 | ES-03-M-16 MI XED HOUSES \& FLATS |  |  |
|  | BARNHORN ROAD |  |  |
|  | BEXHILL |  |  |
|  | LITTLE COMMON |  |  |
|  | Edge of Town |  |  |
|  | Residential Zone |  |  |
|  | Total No of Dwellings: | : 119 |  |
|  | Survey date: WEDNESDAY | WEDNESDAY 10/07/19 | Survey Type: MANUAL |
| 3 | NF-03-M-51 MI XED HOUSES | MI XED HOUSES | NORFOLK |
|  | NF-03-M-51MENDHAM LANE |  |  |
|  | HARLESTON |  |  |
|  | Edge of Town |  |  |
|  | Residential Zone |  |  |
|  | Total No of Dwellings: | S: 120 |  |
|  | Survey date: WEDNESDAY | WEDNESDAY 29/09/21 | Survey Type: MANUAL |
| 4 | WK-03-M-02 MI XED HOUSES |  | WARWI CKSHI RE |
|  | BISHOPTON LANE |  |  |
|  | STRATFORD UPON AVON |  |  |
|  | BISHOPTON |  |  |
|  | Edge of Town |  |  |
|  | Residential Zone |  |  |
|  | Total No of Dwellings: | : 130 |  |
|  | Survey date: FRIDAY | FRIDAY 29/06/18 | Survey Type: MANUAL WEST SUSSEX |
| 5 | WS-03-M-20 MI XED HOUSES |  |  |
|  | OLD GUILDFORD ROAD |  |  |
|  | HORSHAM |  |  |
|  | BROADBRIDGE HEATH |  |  |
|  | Neighbourhood Centre (PPS6 Local Centre) |  |  |
|  | Residential Zone |  |  |
|  | Total No of Dwellings: | S: 121 |  |
|  | Survey date: THURSDAY | THURSDAY 24/10/19 | Survey Type: MANUAL |
| 6 | WS-03-M-25 MI XED HOUSES | MI XED HOUSES | WEST SUSSEX |
|  | CLAPPERS LANE BRACKLESHAM BAY |  |  |
|  |  |  |  |
|  | Edge of Town |  |  |
|  | Residential Zone |  |  |
|  | Total No of Dwellings: | S: 110 |  |
|  | Survey date: WEDNESDAY | WEDNESDAY 24/11/21 | 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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.79

| Time Range | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.097 | 6 | 120 | 0.273 | 6 | 120 | 0.370 |
| 08:00-09:00 | 6 | 120 | 0.127 | 6 | 120 | 0.342 | 6 | 120 | 0.469 |
| 09:00-10:00 | 6 | 120 | 0.134 | 6 | 120 | 0.202 | 6 | 120 | 0.336 |
| 10:00-11:00 | 6 | 120 | 0.124 | 6 | 120 | 0.149 | 6 | 120 | 0.273 |
| 11:00-12:00 | 6 | 120 | 0.127 | 6 | 120 | 0.145 | 6 | 120 | 0.272 |
| 12:00-13:00 | 6 | 120 | 0.159 | 6 | 120 | 0.143 | 6 | 120 | 0.302 |
| 13:00-14:00 | 6 | 120 | 0.193 | 6 | 120 | 0.177 | 6 | 120 | 0.370 |
| 14:00-15:00 | 6 | 120 | 0.153 | 6 | 120 | 0.197 | 6 | 120 | 0.350 |
| 15:00-16:00 | 6 | 120 | 0.278 | 6 | 120 | 0.174 | 6 | 120 | 0.452 |
| 16:00-17:00 | 6 | 120 | 0.275 | 6 | 120 | 0.192 | 6 | 120 | 0.467 |
| 17:00-18:00 | 6 | 120 | 0.355 | 6 | 120 | 0.181 | 6 | 120 | 0.536 |
| 18:00-19:00 | 6 | 120 | 0.250 | 6 | 120 | 0.138 | 6 | 120 | 0.388 |
| 19:00-20:00 | 1 | 119 | 0.126 | 1 | 119 | 0.008 | 1 | 119 | 0.134 |
| 20:00-21:00 | 1 | 119 | 0.101 | 1 | 119 | 0.017 | 1 | 119 | 0.118 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 2.499 |  |  | 2.338 |  |  | 4.837 |

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.

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## Parameter summary

Trip rate parameter range selected:
110-130 (units:)
Survey date date range:
01/01/15-17/10/22
Number of weekdays (Monday-Friday):
6
Number of Saturdays:
0
Number of Sundays:
Surveys automatically removed from selection:
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.

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.000 | 6 | 120 | 0.001 | 6 | 120 | 0.001 |
| 08:00-09:00 | 6 | 120 | 0.003 | 6 | 120 | 0.003 | 6 | 120 | 0.006 |
| 09:00-10:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 10:00-11:00 | 6 | 120 | 0.001 | 6 | 120 | 0.001 | 6 | 120 | 0.002 |
| 11:00-12:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 12:00-13:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 13:00-14:00 | 6 | 120 | 0.001 | 6 | 120 | 0.001 | 6 | 120 | 0.002 |
| 14:00-15:00 | 6 | 120 | 0.003 | 6 | 120 | 0.003 | 6 | 120 | 0.006 |
| 15:00-16:00 | 6 | 120 | 0.001 | 6 | 120 | 0.001 | 6 | 120 | 0.002 |
| 16:00-17:00 | 6 | 120 | 0.003 | 6 | 120 | 0.003 | 6 | 120 | 0.006 |
| 17:00-18:00 | 6 | 120 | 0.004 | 6 | 120 | 0.004 | 6 | 120 | 0.008 |
| 18:00-19:00 | 6 | 120 | 0.001 | 6 | 120 | 0.000 | 6 | 120 | 0.001 |
| 19:00-20:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 20:00-21:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.017 |  |  | 0.017 |  |  | 0.034 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.001 | 6 | 120 | 0.001 | 6 | 120 | 0.002 |
| 08:00-09:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 09:00-10:00 | 6 | 120 | 0.003 | 6 | 120 | 0.001 | 6 | 120 | 0.004 |
| 10:00-11:00 | 6 | 120 | 0.003 | 6 | 120 | 0.003 | 6 | 120 | 0.006 |
| 11:00-12:00 | 6 | 120 | 0.003 | 6 | 120 | 0.001 | 6 | 120 | 0.004 |
| 12:00-13:00 | 6 | 120 | 0.003 | 6 | 120 | 0.004 | 6 | 120 | 0.007 |
| 13:00-14:00 | 6 | 120 | 0.006 | 6 | 120 | 0.007 | 6 | 120 | 0.013 |
| 14:00-15:00 | 6 | 120 | 0.000 | 6 | 120 | 0.001 | 6 | 120 | 0.001 |
| 15:00-16:00 | 6 | 120 | 0.006 | 6 | 120 | 0.004 | 6 | 120 | 0.010 |
| 16:00-17:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 17:00-18:00 | 6 | 120 | 0.001 | 6 | 120 | 0.000 | 6 | 120 | 0.001 |
| 18:00-19:00 | 6 | 120 | 0.000 | 6 | 120 | 0.003 | 6 | 120 | 0.003 |
| 19:00-20:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 20:00-21:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.026 |  |  | 0.025 |  |  | 0.051 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 08:00-09:00 | 6 | 120 | 0.001 | 6 | 120 | 0.001 | 6 | 120 | 0.002 |
| 09:00-10:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 10:00-11:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 11:00-12:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 12:00-13:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 13:00-14:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 14:00-15:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 15:00-16:00 | 6 | 120 | 0.003 | 6 | 120 | 0.003 | 6 | 120 | 0.006 |
| 16:00-17:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 17:00-18:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 18:00-19:00 | 6 | 120 | 0.001 | 6 | 120 | 0.000 | 6 | 120 | 0.001 |
| 19:00-20:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 20:00-21:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.005 |  |  | 0.004 |  |  | 0.009 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL CYCLI STS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.006 | 6 | 120 | 0.011 | 6 | 120 | 0.017 |
| 08:00-09:00 | 6 | 120 | 0.003 | 6 | 120 | 0.017 | 6 | 120 | 0.020 |
| 09:00-10:00 | 6 | 120 | 0.004 | 6 | 120 | 0.001 | 6 | 120 | 0.005 |
| 10:00-11:00 | 6 | 120 | 0.006 | 6 | 120 | 0.004 | 6 | 120 | 0.010 |
| 11:00-12:00 | 6 | 120 | 0.001 | 6 | 120 | 0.006 | 6 | 120 | 0.007 |
| 12:00-13:00 | 6 | 120 | 0.006 | 6 | 120 | 0.007 | 6 | 120 | 0.013 |
| 13:00-14:00 | 6 | 120 | 0.006 | 6 | 120 | 0.004 | 6 | 120 | 0.010 |
| 14:00-15:00 | 6 | 120 | 0.014 | 6 | 120 | 0.008 | 6 | 120 | 0.022 |
| 15:00-16:00 | 6 | 120 | 0.019 | 6 | 120 | 0.003 | 6 | 120 | 0.022 |
| 16:00-17:00 | 6 | 120 | 0.004 | 6 | 120 | 0.004 | 6 | 120 | 0.008 |
| 17:00-18:00 | 6 | 120 | 0.006 | 6 | 120 | 0.007 | 6 | 120 | 0.013 |
| 18:00-19:00 | 6 | 120 | 0.010 | 6 | 120 | 0.007 | 6 | 120 | 0.017 |
| 19:00-20:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 20:00-21:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.085 |  |  | 0.079 |  |  | 0.164 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL VEHI CLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.113 | 6 | 120 | 0.421 | 6 | 120 | 0.534 |
| 08:00-09:00 | 6 | 120 | 0.153 | 6 | 120 | 0.629 | 6 | 120 | 0.782 |
| 09:00-10:00 | 6 | 120 | 0.164 | 6 | 120 | 0.298 | 6 | 120 | 0.462 |
| 10:00-11:00 | 6 | 120 | 0.159 | 6 | 120 | 0.206 | 6 | 120 | 0.365 |
| 11:00-12:00 | 6 | 120 | 0.167 | 6 | 120 | 0.209 | 6 | 120 | 0.376 |
| 12:00-13:00 | 6 | 120 | 0.203 | 6 | 120 | 0.179 | 6 | 120 | 0.382 |
| 13:00-14:00 | 6 | 120 | 0.275 | 6 | 120 | 0.229 | 6 | 120 | 0.504 |
| 14:00-15:00 | 6 | 120 | 0.207 | 6 | 120 | 0.266 | 6 | 120 | 0.473 |
| 15:00-16:00 | 6 | 120 | 0.455 | 6 | 120 | 0.229 | 6 | 120 | 0.684 |
| 16:00-17:00 | 6 | 120 | 0.414 | 6 | 120 | 0.264 | 6 | 120 | 0.678 |
| 17:00-18:00 | 6 | 120 | 0.554 | 6 | 120 | 0.263 | 6 | 120 | 0.817 |
| 18:00-19:00 | 6 | 120 | 0.378 | 6 | 120 | 0.186 | 6 | 120 | 0.564 |
| 19:00-20:00 | 1 | 119 | 0.168 | 1 | 119 | 0.017 | 1 | 119 | 0.185 |
| 20:00-21:00 | 1 | 119 | 0.151 | 1 | 119 | 0.017 | 1 | 119 | 0.168 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 3.561 |  |  | 3.413 |  |  | 6.974 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.028 | 6 | 120 | 0.061 | 6 | 120 | 0.089 |
| 08:00-09:00 | 6 | 120 | 0.047 | 6 | 120 | 0.195 | 6 | 120 | 0.242 |
| 09:00-10:00 | 6 | 120 | 0.049 | 6 | 120 | 0.039 | 6 | 120 | 0.088 |
| 10:00-11:00 | 6 | 120 | 0.032 | 6 | 120 | 0.028 | 6 | 120 | 0.060 |
| 11:00-12:00 | 6 | 120 | 0.018 | 6 | 120 | 0.024 | 6 | 120 | 0.042 |
| 12:00-13:00 | 6 | 120 | 0.038 | 6 | 120 | 0.038 | 6 | 120 | 0.076 |
| 13:00-14:00 | 6 | 120 | 0.028 | 6 | 120 | 0.024 | 6 | 120 | 0.052 |
| 14:00-15:00 | 6 | 120 | 0.038 | 6 | 120 | 0.049 | 6 | 120 | 0.087 |
| 15:00-16:00 | 6 | 120 | 0.160 | 6 | 120 | 0.042 | 6 | 120 | 0.202 |
| 16:00-17:00 | 6 | 120 | 0.083 | 6 | 120 | 0.050 | 6 | 120 | 0.133 |
| 17:00-18:00 | 6 | 120 | 0.050 | 6 | 120 | 0.036 | 6 | 120 | 0.086 |
| 18:00-19:00 | 6 | 120 | 0.029 | 6 | 120 | 0.026 | 6 | 120 | 0.055 |
| 19:00-20:00 | 1 | 119 | 0.008 | 1 | 119 | 0.008 | 1 | 119 | 0.016 |
| 20:00-21:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.608 |  |  | 0.620 |  |  | 1.228 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI -MODAL BUS/ TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.000 | 6 | 120 | 0.032 | 6 | 120 | 0.032 |
| 08:00-09:00 | 6 | 120 | 0.000 | 6 | 120 | 0.007 | 6 | 120 | 0.007 |
| 09:00-10:00 | 6 | 120 | 0.004 | 6 | 120 | 0.006 | 6 | 120 | 0.010 |
| 10:00-11:00 | 6 | 120 | 0.000 | 6 | 120 | 0.008 | 6 | 120 | 0.008 |
| 11:00-12:00 | 6 | 120 | 0.004 | 6 | 120 | 0.008 | 6 | 120 | 0.012 |
| 12:00-13:00 | 6 | 120 | 0.006 | 6 | 120 | 0.003 | 6 | 120 | 0.009 |
| 13:00-14:00 | 6 | 120 | 0.003 | 6 | 120 | 0.008 | 6 | 120 | 0.011 |
| 14:00-15:00 | 6 | 120 | 0.003 | 6 | 120 | 0.003 | 6 | 120 | 0.006 |
| 15:00-16:00 | 6 | 120 | 0.010 | 6 | 120 | 0.007 | 6 | 120 | 0.017 |
| 16:00-17:00 | 6 | 120 | 0.017 | 6 | 120 | 0.001 | 6 | 120 | 0.018 |
| 17:00-18:00 | 6 | 120 | 0.008 | 6 | 120 | 0.004 | 6 | 120 | 0.012 |
| 18:00-19:00 | 6 | 120 | 0.010 | 6 | 120 | 0.001 | 6 | 120 | 0.011 |
| 19:00-20:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 20:00-21:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.065 |  |  | 0.088 |  |  | 0.153 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.000 | 6 | 120 | 0.011 | 6 | 120 | 0.011 |
| 08:00-09:00 | 6 | 120 | 0.000 | 6 | 120 | 0.006 | 6 | 120 | 0.006 |
| 09:00-10:00 | 6 | 120 | 0.000 | 6 | 120 | 0.003 | 6 | 120 | 0.003 |
| 10:00-11:00 | 6 | 120 | 0.001 | 6 | 120 | 0.004 | 6 | 120 | 0.005 |
| 11:00-12:00 | 6 | 120 | 0.003 | 6 | 120 | 0.001 | 6 | 120 | 0.004 |
| 12:00-13:00 | 6 | 120 | 0.006 | 6 | 120 | 0.001 | 6 | 120 | 0.007 |
| 13:00-14:00 | 6 | 120 | 0.003 | 6 | 120 | 0.003 | 6 | 120 | 0.006 |
| 14:00-15:00 | 6 | 120 | 0.001 | 6 | 120 | 0.001 | 6 | 120 | 0.002 |
| 15:00-16:00 | 6 | 120 | 0.001 | 6 | 120 | 0.001 | 6 | 120 | 0.002 |
| 16:00-17:00 | 6 | 120 | 0.007 | 6 | 120 | 0.000 | 6 | 120 | 0.007 |
| 17:00-18:00 | 6 | 120 | 0.003 | 6 | 120 | 0.000 | 6 | 120 | 0.003 |
| 18:00-19:00 | 6 | 120 | 0.007 | 6 | 120 | 0.000 | 6 | 120 | 0.007 |
| 19:00-20:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 20:00-21:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.032 |  |  | 0.031 |  |  | 0.063 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL COACH PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELIS | 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 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 08:00-09:00 | 6 | 120 | 0.000 | 6 | 120 | 0.003 | 6 | 120 | 0.003 |
| 09:00-10:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 10:00-11:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 11:00-12:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 12:00-13:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 13:00-14:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 14:00-15:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 15:00-16:00 | 6 | 120 | 0.007 | 6 | 120 | 0.000 | 6 | 120 | 0.007 |
| 16:00-17:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 17:00-18:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 18:00-19:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 19:00-20:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 20:00-21:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.007 |  |  | 0.003 |  |  | 0.010 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.000 | 6 | 120 | 0.043 | 6 | 120 | 0.043 |
| 08:00-09:00 | 6 | 120 | 0.000 | 6 | 120 | 0.015 | 6 | 120 | 0.015 |
| 09:00-10:00 | 6 | 120 | 0.004 | 6 | 120 | 0.008 | 6 | 120 | 0.012 |
| 10:00-11:00 | 6 | 120 | 0.001 | 6 | 120 | 0.013 | 6 | 120 | 0.014 |
| 11:00-12:00 | 6 | 120 | 0.007 | 6 | 120 | 0.010 | 6 | 120 | 0.017 |
| 12:00-13:00 | 6 | 120 | 0.011 | 6 | 120 | 0.004 | 6 | 120 | 0.015 |
| 13:00-14:00 | 6 | 120 | 0.006 | 6 | 120 | 0.011 | 6 | 120 | 0.017 |
| 14:00-15:00 | 6 | 120 | 0.004 | 6 | 120 | 0.004 | 6 | 120 | 0.008 |
| 15:00-16:00 | 6 | 120 | 0.018 | 6 | 120 | 0.008 | 6 | 120 | 0.026 |
| 16:00-17:00 | 6 | 120 | 0.024 | 6 | 120 | 0.001 | 6 | 120 | 0.025 |
| 17:00-18:00 | 6 | 120 | 0.011 | 6 | 120 | 0.004 | 6 | 120 | 0.015 |
| 18:00-19:00 | 6 | 120 | 0.017 | 6 | 120 | 0.001 | 6 | 120 | 0.018 |
| 19:00-20:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 20:00-21:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.103 |  |  | 0.122 |  |  | 0.225 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI -MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.79

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.146 | 6 | 120 | 0.537 | 6 | 120 | 0.683 |
| 08:00-09:00 | 6 | 120 | 0.203 | 6 | 120 | 0.855 | 6 | 120 | 1.058 |
| 09:00-10:00 | 6 | 120 | 0.221 | 6 | 120 | 0.346 | 6 | 120 | 0.567 |
| 10:00-11:00 | 6 | 120 | 0.197 | 6 | 120 | 0.250 | 6 | 120 | 0.447 |
| 11:00-12:00 | 6 | 120 | 0.193 | 6 | 120 | 0.248 | 6 | 120 | 0.441 |
| 12:00-13:00 | 6 | 120 | 0.257 | 6 | 120 | 0.228 | 6 | 120 | 0.485 |
| 13:00-14:00 | 6 | 120 | 0.314 | 6 | 120 | 0.268 | 6 | 120 | 0.582 |
| 14:00-15:00 | 6 | 120 | 0.263 | 6 | 120 | 0.327 | 6 | 120 | 0.590 |
| 15:00-16:00 | 6 | 120 | 0.652 | 6 | 120 | 0.282 | 6 | 120 | 0.934 |
| 16:00-17:00 | 6 | 120 | 0.526 | 6 | 120 | 0.320 | 6 | 120 | 0.846 |
| 17:00-18:00 | 6 | 120 | 0.620 | 6 | 120 | 0.310 | 6 | 120 | 0.930 |
| 18:00-19:00 | 6 | 120 | 0.434 | 6 | 120 | 0.221 | 6 | 120 | 0.655 |
| 19:00-20:00 | 1 | 119 | 0.176 | 1 | 119 | 0.025 | 1 | 119 | 0.201 |
| 20:00-21:00 | 1 | 119 | 0.151 | 1 | 119 | 0.017 | 1 | 119 | 0.168 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 4.353 |  |  | 4.234 |  |  | 8.587 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL CARS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.074 | 6 | 120 | 0.243 | 6 | 120 | 0.317 |
| 08:00-09:00 | 6 | 120 | 0.107 | 6 | 120 | 0.313 | 6 | 120 | 0.420 |
| 09:00-10:00 | 6 | 120 | 0.099 | 6 | 120 | 0.168 | 6 | 120 | 0.267 |
| 10:00-11:00 | 6 | 120 | 0.095 | 6 | 120 | 0.113 | 6 | 120 | 0.208 |
| 11:00-12:00 | 6 | 120 | 0.096 | 6 | 120 | 0.110 | 6 | 120 | 0.206 |
| 12:00-13:00 | 6 | 120 | 0.114 | 6 | 120 | 0.099 | 6 | 120 | 0.213 |
| 13:00-14:00 | 6 | 120 | 0.156 | 6 | 120 | 0.138 | 6 | 120 | 0.294 |
| 14:00-15:00 | 6 | 120 | 0.122 | 6 | 120 | 0.160 | 6 | 120 | 0.282 |
| 15:00-16:00 | 6 | 120 | 0.238 | 6 | 120 | 0.134 | 6 | 120 | 0.372 |
| 16:00-17:00 | 6 | 120 | 0.228 | 6 | 120 | 0.163 | 6 | 120 | 0.391 |
| 17:00-18:00 | 6 | 120 | 0.306 | 6 | 120 | 0.159 | 6 | 120 | 0.465 |
| 18:00-19:00 | 6 | 120 | 0.232 | 6 | 120 | 0.125 | 6 | 120 | 0.357 |
| 19:00-20:00 | 1 | 119 | 0.126 | 1 | 119 | 0.008 | 1 | 119 | 0.134 |
| 20:00-21:00 | 1 | 119 | 0.101 | 1 | 119 | 0.017 | 1 | 119 | 0.118 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 2.094 |  |  | 1.950 |  |  | 4.044 |

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL LGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 6 | 120 | 0.021 | 6 | 120 | 0.025 | 6 | 120 | 0.046 |
| 08:00-09:00 | 6 | 120 | 0.015 | 6 | 120 | 0.025 | 6 | 120 | 0.040 |
| 09:00-10:00 | 6 | 120 | 0.032 | 6 | 120 | 0.032 | 6 | 120 | 0.064 |
| 10:00-11:00 | 6 | 120 | 0.025 | 6 | 120 | 0.032 | 6 | 120 | 0.057 |
| 11:00-12:00 | 6 | 120 | 0.028 | 6 | 120 | 0.032 | 6 | 120 | 0.060 |
| 12:00-13:00 | 6 | 120 | 0.039 | 6 | 120 | 0.039 | 6 | 120 | 0.078 |
| 13:00-14:00 | 6 | 120 | 0.028 | 6 | 120 | 0.026 | 6 | 120 | 0.054 |
| 14:00-15:00 | 6 | 120 | 0.028 | 6 | 120 | 0.033 | 6 | 120 | 0.061 |
| 15:00-16:00 | 6 | 120 | 0.028 | 6 | 120 | 0.031 | 6 | 120 | 0.059 |
| 16:00-17:00 | 6 | 120 | 0.043 | 6 | 120 | 0.025 | 6 | 120 | 0.068 |
| 17:00-18:00 | 6 | 120 | 0.039 | 6 | 120 | 0.015 | 6 | 120 | 0.054 |
| 18:00-19:00 | 6 | 120 | 0.014 | 6 | 120 | 0.010 | 6 | 120 | 0.024 |
| 19:00-20:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 20:00-21:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.340 |  |  | 0.325 |  |  | 0.665 |

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/M - MIXED PRIVATE/AFFORDABLE HOUSING
MULTI-MODAL MOTOR CYCLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELIS | 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 | 6 | 120 | 0.001 | 6 | 120 | 0.001 | 6 | 120 | 0.002 |
| 08:00-09:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 09:00-10:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 10:00-11:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 11:00-12:00 | 6 | 120 | 0.000 | 6 | 120 | 0.001 | 6 | 120 | 0.001 |
| 12:00-13:00 | 6 | 120 | 0.003 | 6 | 120 | 0.001 | 6 | 120 | 0.004 |
| 13:00-14:00 | 6 | 120 | 0.003 | 6 | 120 | 0.004 | 6 | 120 | 0.007 |
| 14:00-15:00 | 6 | 120 | 0.000 | 6 | 120 | 0.000 | 6 | 120 | 0.000 |
| 15:00-16:00 | 6 | 120 | 0.003 | 6 | 120 | 0.001 | 6 | 120 | 0.004 |
| 16:00-17:00 | 6 | 120 | 0.001 | 6 | 120 | 0.001 | 6 | 120 | 0.002 |
| 17:00-18:00 | 6 | 120 | 0.004 | 6 | 120 | 0.003 | 6 | 120 | 0.007 |
| 18:00-19:00 | 6 | 120 | 0.001 | 6 | 120 | 0.000 | 6 | 120 | 0.001 |
| 19:00-20:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 20:00-21:00 | 1 | 119 | 0.000 | 1 | 119 | 0.000 | 1 | 119 | 0.000 |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.016 |  |  | 0.012 |  |  | 0.028 |

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.

## APPENDIX E

Traffic Survey

Manston Rd, Ramsgate: Queue Length Survey - Thursday, 06 July 2023
Produced by Streetwise Services Ltd.

Junction: A - Satner Court Road / B - (South East) B2050 Manston Road / C - (North West) B2050 Manston Road

| CLASSIFICATION | PCU |
| :---: | :---: |
| CAR | 1.0 |
| LGV | 1.0 |
| OGV1 | 1.5 |
| OGV2 | 2.3 |
| BUS | 2.0 |
| P/CYCLE | 0.2 |
| M/CYCLE | 0.4 |

## CSIstreetwise



## CSIstreetwise



## 



## SSIreetwise

Manston Rd, Ramsgate - Manual Traffic Survey: Thursday, 06 July 2023
Produced by Streetwise Services Ltd.
Junction: A - Satner Court Road / B - (South East) B2050 Manston Road / C - (North West) B2050 Manston Road


| Classifications | Include |
| :--- | :--- |
| CAR | Yes |
| LGV | Yes |
| OGV1 | Yes |
| OGV2 | Yes |
| BUS | Yes |
| P/CYCLE | Yes |
| M/CYCLE | Yes |

Manston Rd, Ramsgate: Queue Length Survey - Thursday, 06 July 2023 Produced by Streetwise Services Ltd.

Junction: A - Manstn Road / B - B2050 Manston Road / C - Car Park Access

| CLASSIFICATION | PCU |
| :---: | :---: |
| CAR | 1.0 |
| LGV | 1.0 |
| OGV1 | 1.5 |
| OGV2 | 2.3 |
| BUS | 2.0 |
| P/CYCLE | 0.2 |
| M/CYCLE | 0.4 |

CSIStreetwise

| $\cdots$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | - | $\cdots$ | - | $\stackrel{\square}{\text { am }}$ | - | $\ldots$ | $\cdots$ | $\cdots$ | $\cdots$ | - | \% | - | , |  | ["] | - | ur | en | $\cdots$ | $\cdots$ | $\cdots$ | - | +"] |
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| $\cdots$ | $\stackrel{\text { In }}{\sim}$ | - | $\div$ | + | + | ! | - | $!$ | ! | $\stackrel{\square}{\square}$ | $\stackrel{3}{\square}$ | - | ! | - | - | ! | $\stackrel{+}{1}$ | $\stackrel{+}{+}$ | - | $\stackrel{+}{\square}$ | $\square$ | $\cdots$ |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  | : |  | - | - | - | - | - | - | $\div$ | $\div$ | : | - | : |  |  | - | + | $\div$ |  |  |  |  |
| $\cdots$ | * | $\because$ | : | : | : | ; | : | + | ! | : | ! | $\because$ | - | $\stackrel{1}{1}$ |  | : | , | + | : |  | + |  |  |
| -mm | " | $\because$ | $\div$ | $\div$ | - | $\because$ | $\because{ }^{\circ}$ | ! | - | $\because$ | $\because$ | $\because$ | - | - |  |  |  | $\because$ |  |  |  |  |  |
|  | * | : | : | - | ; | ! | * |  |  | : | ; | : | ! | - | * |  | ! | ! |  |  | : |  | - |
|  |  |  |  |  |  |  | , ${ }^{\text {P }}$ + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



CSIStreetwise




## S streetwise

Manston Rd, Ramsgate - Manual Traffic Survey: Thursday, 06 July 2023

## Produced by Streetwise Services Ltd.

Junction: A - Manstn Road / B - B2050 Manston Road / C - Car Park Access


| Classifications | Include |
| :--- | :--- |
| CAR | Yes |
| LGV | Yes |
| OGV1 | Yes |
| OGV2 | Yes |
| BUS | Yes |
| P/CYCLE | Yes |
| M/CYCLE | Yes |

## APPENDIX F

Traffic Flow Diagrams

















| Notes | Equals total vehicles <br> Equals total HGV's | Flambeau Europlast | Figure 9 | (a) <br> ODYSSEY <br> Tuscany House - White Hart Lane T:01256 331144 <br> E:info@odysseyconsult.co.uk Basingstoke - Hampshire - RG21 4AF F:01256 331134 W:www.odysseyconsult.co.uk |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Job Title: | Job No: |  |
|  |  | Flambeau Europlast, Manston Road, Ramsgate | 23-077 |  |
|  |  | Drawing Title: | Date: |  |
|  |  | Manston Gardens AM - Commited Development | July 2023 |  |





| Notes | Equals total vehicles Equals total HGV 's | Flambeau Europlast | Figure 11 | (0) ODYSSEY <br> Tuscany House - White Hart Lane T:01256 331144 Basingstoke - Hampshire - RG21 4AF F:01256 331134 <br> E:info@odysseyconsult.co.uk <br> W:www.odysseyconsult.co.uk |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Job Title: | Job No: |  |
|  |  | Flambeau Europlast, Manston Road, Ramsgate | 23-077 |  |
|  |  | Drawing Title: | Date: |  |
|  |  | Haines Road AM - Committed Development | July 2023 |  |





| Notes | Equals total vehicles <br> Equals total HGV's | Flambeau Europlast | Figure 13 | (D) ODYSSEY |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Job Title: | Job No: |  |
|  |  | Flambeau Europlast, Manston Road, Ramsgate | 23-077 |  |
|  |  | Drawing Title: | Date: |  |
|  |  | Phase 1 Haines Road AM - Committed Development | July 2023 |  |

















| Notes | Equals total vehicles <br> Equals total HGV's | Flambeau Europlast | Figure 21 | (a) <br> ODYSSEY <br> Tuscany House - White Hart Lane T:01256 331144 <br> E:info@odysseyconsult.co.uk Basingstoke - Hampshire - RG21 4AF F:01256 331134 W:www.odysseyconsult.co.uk |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Job Title: | Job No: |  |
|  |  | Flambeau Europlast, Manston Road, Ramsgate | 23-077 |  |
|  |  | Drawing Title: | Date: |  |
|  |  | Melbourne Avenue AM - Committed Development | July 2023 |  |





| Notes | Equals total vehicles <br> Equals total HGV's | Flambeau Europlast | Figure 23 | (a) <br> ODYSSEY <br> Tuscany House - White Hart Lane T:01256 331144 <br> E:info@odysseyconsult.co.uk Basingstoke - Hampshire - RG21 4AF F:01256 331134 W:www.odysseyconsult.co.uk |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Job Title: | Job No: |  |
|  |  | Flambeau Europlast, Manston Road, Ramsgate | 23-077 |  |
|  |  | Drawing Title: | Date: |  |
|  |  | St Stephens AM - Committed Development | July 2023 |  |





| Notes | Equals total vehicles <br> Equals total HGV's | Flambeau Europlast | Figure 25 | (a) <br> ODYSSEY <br> Tuscany House - White Hart Lane T:01256 331144 <br> E:info@odysseyconsult.co.uk Basingstoke - Hampshire - RG21 4AF F:01256 331134 W:www.odysseyconsult.co.uk |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Job Title: | Job No: |  |
|  |  | Flambeau Europlast, Manston Road, Ramsgate | 23-077 |  |
|  |  | Drawing Title: | Date: |  |
|  |  | Total Committed Developments AM | July 2023 |  |





| Notes | Equals total vehicles <br> Equals total HGV's | Flambeau Europlast | Figure 27 | (a) <br> ODYSSEY <br> Tuscany House - White Hart Lane T:01256 331144 <br> E:info@odysseyconsult.co.uk Basingstoke - Hampshire - RG21 4AF F:01256 331134 W:www.odysseyconsult.co.uk |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Job Title: | Job No: |  |
|  |  | Flambeau Europlast, Manston Road, Ramsgate | 23-077 |  |
|  |  | Drawing Title: | Date: |  |
|  |  | 2028 plus Total Committed Developments AM | July 2023 |  |








## APPENDIX G

Junction Capacity Assessment Results

| Junctions 10 |
| :---: |
| PICADY 10 - Priority Intersection Module |
| Version: 10.1.0.1820 <br> © Copyright TRL Software Limited, 2023 |
| For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |

Filename: Import of Site Access - Stagger.j10
Path: P:\23-077 - Flambeau Europlast, Manston Road, Ramsgate\Trans\Picady
Report generation date: 07/02/2024 15:57:56

```
"2028 Base + Com Dev + Dev, AM
"2028 Base + Com Dev + Dev, PM
```


## Summary of junction performance

|  | AM |  |  |  |  |  |  | PM |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Set } \\ & \text { ID } \end{aligned}$ | Queue (Veh) | Delay <br> (s) | RFC | LOS | Junction <br> Delay (s) | Network Residual Capacity | $\begin{aligned} & \text { Set } \\ & \text { ID } \end{aligned}$ | Queue (Veh) | Delay (s) | RFC | LOS | Junction Delay (s) | Network <br> Residual Capacity |
|  | 2028 Base + Com Dev + Dev |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stream B-ACD | D1 | 0.1 | 10.50 | 0.11 | B | 0.28 | $67 \%$ <br> [Stream D-ABC] | D2 | 0.1 | 10.44 | 0.06 | B | 0.35 | $\begin{gathered} 40 \% \\ \text { [Stream D-ABC] } \end{gathered}$ |
| Stream AB-CD |  | 0.0 | 8.54 | 0.02 | A |  |  |  | 0.0 | 7.28 | 0.03 | A |  |  |
| Stream D-ABC |  | 0.0 | 13.33 | 0.05 | B |  |  |  | 0.1 | 18.72 | 0.10 | C |  |  |
| Stream CD-AB |  | 0.0 | 7.23 | 0.02 | A |  |  |  | 0.0 | 7.13 | 0.04 | A |  |  |

[^0]File summary
File Description

| Title |  |
| :--- | :--- |
| Location |  |
| Site number |  |
| Date | $08 / 08 / 2023$ |
| Version |  |
| Status | (new file) |
| Identifier |  |
| Client |  |
| Jobnumber |  |
| Enumerator | ODYSSEY-CE\msheridan |
| Description |  |

Units

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

## Analysis Options

| Vehicle length (m) | $\begin{gathered} \text { Calculate } \\ \text { Queue } \\ \text { Percentiles } \end{gathered}$ | Calculate detailed queueing delay | Show lane queues in feet/ metres | Show all PICADY stream intercepts | Calculate residual capacity | Residual capacity criteria type | RFC <br> Threshold | Average Delay threshold (s) | Queue threshold (PCU) | Use iterations with HCM roundabouts | Max number of iterations for roundabouts |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5.75 |  |  |  |  | $\checkmark$ | Delay | 0.85 | 36.00 | 20.00 |  | 500 |

## Demand Set Summary

| ID | Scenario name | Time Period <br> name | Traffic profile <br> type | Start time <br> (HH:mm) | Finish time <br> (HH:mm) | Time segment length <br> (min) | Run <br> automatically |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D1 | 2028 Base + Com Dev + Dev | AM | ONE HOUR | $07: 45$ | $09: 15$ | 15 | $\checkmark$ |
| D2 | 2028 Base + Com Dev + Dev | PM | ONE HOUR | $16: 45$ | $18: 15$ |  |  |

## Analysis Set Details

| ID | Include in report | Network flow scaling factor (\%) | Network capacity scaling factor (\%) |
| :---: | :---: | :---: | :---: |
| A1 | $\checkmark$ | 100.000 | 100.000 |

## 2028 Base + Com Dev + Dev, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

## Junctions

| Junction | Name | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Arm D Direction | Use circulating lanes | Junction Delay <br> (s) | Junction LOS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | untitled | Left-Right Stagger | Two-way | Two-way | Two-way | Two-way |  | 0.28 | A |

## Junction Network

| Driving side | Lighting | Network residual capacity (\%) | First arm reaching threshold | Network delay (s) | Network LOS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Left | Normal/unknown | 67 | Stream D-ABC | 0.28 | A |

## Arms

## Arms

| Arm | Name | Description | Arm type |
| :---: | :--- | :--- | :--- |
| A | B2050 Manston Road E |  | Major |
| B | Site Access |  | Minor |
| C | B2050 Manston Road W |  | Major |
| D | Stanner Court Road |  | Minor |

Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Width for right-turn storage (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 7.50 |  | $\checkmark$ | 3.10 | 120.0 | $\checkmark$ | 1.00 |
| C | 7.50 |  | $\checkmark$ | 2.50 | 120.0 | $\checkmark$ | 1.00 |

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

## Minor Arm Geometry

| Arm | Minor arm type | Lane width (m) | Visibility to left (m) | Visibility to right (m) |
| :---: | :---: | :---: | :---: | :---: |
| B | One lane | 2.75 | 120 | 120 |
| D | One lane | 2.20 | 40 | 40 |

## Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

| Stream | Intercept <br> (Veh/hr) | Slope <br> for <br> AB | Slope <br> for <br> AC | Slope <br> for <br> AD | Slope <br> for <br> B-C | Slope <br> for <br> B-D | Slope <br> for <br> C-A | Slope <br> for <br> C-B | Slope <br> for <br> C-D | Slope <br> for <br> D-A | Slope <br> for <br> D-B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AB-D | 706 | - | - | - | - | - | 0.256 | 0.256 | 0.256 | - | - |
| B-A | 564 | 0.096 | 0.243 | 0.243 | - | - | 0.153 | 0.346 | - | 0.153 | 0.346 |
| B-CD | 682 | 0.098 | 0.247 | 0.247 | - | - | - | - | - | - | - |
| CD-B | 664 | 0.241 | 0.241 | 0.241 | - | - | - | - | - | - | - |
| D-AB | 597 | - | - | - | - | - | 0.216 | 0.216 | 0.086 | - | - |
| D-C | 469 | - | 0.127 | 0.289 | 0.127 | 0.289 | 0.202 | 0.202 | 0.080 | - | - |

The slopes and intercepts shown above include custom intercept adjustments only.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

## Traffic Demand

## Demand Set Details

| ID | Scenario name | Time Period <br> name | Traffic profile <br> type | Start time <br> (HH:mm) | Finish time <br> (HH:mm) | Time segment length <br> (min) | Run <br> automatically |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D1 | 2028 Base + Com Dev + Dev | AM | ONE HOUR | $07: 45$ | $09: 15$ | 15 |  |

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A |  | ONE HOUR | $\checkmark$ | 566 | 100.000 |
| B |  | ONE HOUR | $\checkmark$ | 40 | 100.000 |
| C |  | ONE HOUR | $\checkmark$ | 534 | 100.000 |
| D |  | ONE HOUR | $\checkmark$ | 12 | 100.000 |

## Origin-Destination Data

Demand (Veh/hr)

|  | To |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| From |  | A | B | C | D |  |
|  | A | 0 | 6 | 554 | 6 |  |
|  | B | 17 | 0 | 23 | 0 |  |
|  | C | 516 | 8 | 0 | 10 |  |
|  | D | 6 | 0 | 6 | 0 |  |

## Vehicle Mix

| HV data entry mode | PCU Factor for a HV (PCU) |
| :---: | :---: |
| HV Percentages | 2.00 |

Heavy Vehicle \%

|  | To |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| From |  | $\mathbf{A}$ | $\mathbf{B}$ | C | D |
|  | A | 0 | 0 | 12 | 33 |
|  | B | 0 | 0 | 0 | 0 |
|  | C | 15 | 0 | 0 | 100 |
|  | D | 0 | 0 | 17 | 0 |

THEFUTURE

## Results

Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (Veh) | Max LOs | Average Demand <br> (Veh/hr) | Total Junction <br> Arrivals (Veh) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 0.11 | 10.50 | 0.1 | B | 37 | 55 |
| AB |  |  |  |  | 6 | 8 |
| AC |  |  |  |  | 508 | 763 |
| AD |  |  |  |  | 6 | 8 |
| AB-CD | 0.02 | 8.54 | 0.0 |  | A | 6 |
| AB-C |  |  |  |  | 529 | 9 |
| D-ABC | 0.05 | 13.33 | 0.0 |  | 11 | 794 |
| C-D |  |  |  |  | 9 | 17 |
| C-A |  |  |  |  | 473 | 14 |
| C-B |  |  |  |  | 7 | 710 |
| CD-AB | 0.02 | 7.23 |  |  |  | 7 |
| CD-A |  |  |  |  | 711 |  |

## Main Results for each time segment

07:45-08:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity <br> (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 30 | 8 | 466 | 0.065 | 30 | 0.0 | 0.1 | 8.241 | A |
| AB | 5 | 1 |  |  | 5 |  |  |  |  |
| AC | 417 | 104 |  |  | 417 |  |  |  |  |
| AD | 5 | 1 |  |  | 5 |  |  |  |  |
| AB-CD | 5 | 1 | 455 | 0.010 | 5 | 0.0 | 0.0 | 7.992 | A |
| AB-C | 434 | 109 |  |  | 434 |  |  |  |  |
| D-ABC | 9 | 2 | 348 | 0.026 | 9 | 0.0 | 0.0 | 10.602 | B |
| C-D | 8 | 2 |  |  | 8 |  |  |  |  |
| C-A | 388 | 97 |  |  | 388 |  |  |  |  |
| C-B | 6 | 2 |  |  | 6 |  |  |  |  |
| CD-AB | 6 | 2 | 554 | 0.011 | 6 | 0.0 | 0.0 | 6.571 | A |
| CD-A | 393 | 98 |  |  | 393 |  |  |  |  |

08:00-08:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 36 | 9 | 434 | 0.083 | 36 | 0.1 | 0.1 | 9.049 | A |
| AB | 5 | 1 |  |  | 5 |  |  |  |  |
| AC | 498 | 125 |  |  | 498 |  |  |  |  |
| AD | 5 | 1 |  |  | 5 |  |  |  |  |
| AB-CD | 6 | 1 | 444 | 0.013 | 6 | 0.0 | 0.0 | 8.226 | A |
| AB-C | 518 | 130 |  |  | 518 |  |  |  |  |
| D-ABC | 11 | 3 | 321 | 0.034 | 11 | 0.0 | 0.0 | 11.584 | B |
| C-D | 9 | 2 |  |  | 9 |  |  |  |  |
| C-A | 464 | 116 |  |  | 464 |  |  |  |  |
| C-B | 7 | 2 |  |  | 7 |  |  |  |  |
| CD-AB | 7 | 2 | 533 | 0.014 | 7 | 0.0 | 0.0 | 6.838 | A |
| CD-A | 469 | 117 |  |  | 469 |  |  |  |  |

08:15-08:30

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 44 | 11 | 387 | 0.114 | 44 | 0.1 | 0.1 | 10.493 | B |
| AB | 7 | 2 |  |  | 7 |  |  |  |  |
| AC | 610 | 152 |  |  | 610 |  |  |  |  |
| AD | 7 | 2 |  |  | 7 |  |  |  |  |
| AB-CD | 7 | 2 | 429 | 0.017 | 7 | 0.0 | 0.0 | 8.539 | A |
| AB-C | 635 | 159 |  |  | 635 |  |  |  |  |
| D-ABC | 13 | 3 | 283 | 0.047 | 13 | 0.0 | 0.0 | 13.326 | B |
| C-D | 11 | 3 |  |  | 11 |  |  |  |  |
| C-A | 568 | 142 |  |  | 568 |  |  |  |  |
| C-B | 9 | 2 |  |  | 9 |  |  |  |  |
| CD-AB | 9 | 2 | 506 | 0.018 | 9 | 0.0 | 0.0 | 7.234 | A |
| CD-A | 575 | 144 |  |  | 575 |  |  |  |  |

08:30-08:45

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 44 | 11 | 387 | 0.114 | 44 | 0.1 | 0.1 | 10.501 | B |
| AB | 7 | 2 |  |  | 7 |  |  |  |  |
| AC | 610 | 152 |  |  | 610 |  |  |  |  |
| AD | 7 | 2 |  |  | 7 |  |  |  |  |
| AB-CD | 7 | 2 | 429 | 0.017 | 7 | 0.0 | 0.0 | 8.541 | A |
| AB-C | 635 | 159 |  |  | 635 |  |  |  |  |
| D-ABC | 13 | 3 | 283 | 0.047 | 13 | 0.0 | 0.0 | 13.332 | B |
| C-D | 11 | 3 |  |  | 11 |  |  |  |  |
| C-A | 568 | 142 |  |  | 568 |  |  |  |  |
| C-B | 9 | 2 |  |  | 9 |  |  |  |  |
| CD-AB | 9 | 2 | 507 | 0.018 | 9 | 0.0 | 0.0 | 7.234 | A |
| CD-A | 575 | 144 |  |  | 575 |  |  |  |  |

08:45-09:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 36 | 9 | 434 | 0.083 | 36 | 0.1 | 0.1 | 9.059 | A |
| AB | 5 | 1 |  |  | 5 |  |  |  |  |
| AC | 498 | 125 |  |  | 498 |  |  |  |  |
| AD | 5 | 1 |  |  | 5 |  |  |  |  |
| AB-CD | 6 | 1 | 442 | 0.013 | 6 | 0.0 | 0.0 | 8.229 | A |
| AB-C | 519 | 130 |  |  | 519 |  |  |  |  |
| D-ABC | 11 | 3 | 321 | 0.034 | 11 | 0.0 | 0.0 | 11.594 | B |
| C-D | 9 | 2 |  |  | 9 |  |  |  |  |
| C-A | 464 | 116 |  |  | 464 |  |  |  |  |
| C-B | 7 | 2 |  |  | 7 |  |  |  |  |
| CD-AB | 7 | 2 | 534 | 0.014 | 7 | 0.0 | 0.0 | 6.842 | A |
| CD-A | 469 | 117 |  |  | 469 |  |  |  |  |

09:00-09:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 30 | 8 | 466 | 0.065 | 30 | 0.1 | 0.1 | 8.256 | A |
| AB | 5 | 1 |  |  | 5 |  |  |  |  |
| AC | 417 | 104 |  |  | 417 |  |  |  |  |
| AD | 5 | 1 |  |  | 5 |  |  |  |  |
| AB-CD | 5 | 1 | 455 | 0.010 | 5 | 0.0 | 0.0 | 7.993 | A |
| AB-C | 434 | 109 |  |  | 434 |  |  |  |  |
| D-ABC | 9 | 2 | 348 | 0.026 | 9 | 0.0 | 0.0 | 10.614 | B |
| C-D | 8 | 2 |  |  | 8 |  |  |  |  |
| C-A | 388 | 97 |  |  | 388 |  |  |  |  |
| C-B | 6 | 2 |  |  | 6 |  |  |  |  |
| CD-AB | 6 | 2 | 554 | 0.011 | 6 | 0.0 | 0.0 | 6.574 | A |
| CD-A | 393 | 98 |  |  | 393 |  |  |  |  |

## 2028 Base + Com Dev + Dev, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

## Junctions

| Junction | Name | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Arm D Direction | Use circulating lanes | Junction Delay <br> (s) | Junction LOS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | untitled | Left-Right Stagger | Two-way | Two-way | Two-way | Two-way |  | 0.35 | A |

## Junction Network

| Driving side | Lighting | Network residual capacity (\%) | First arm reaching threshold | Network delay (s) | Network LOS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Left | Normal/unknown | 40 | Stream D-ABC | 0.35 | A |

## Traffic Demand

## Demand Set Details

| ID | Scenario name | Time Period <br> name | Traffic profile <br> type | Start time <br> (HH:mm) | Finish time <br> (HH:mm) | Time segment length <br> (min) | Run <br> automatically |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D2 | 2028 Base + Com Dev + Dev | PM | ONE HOUR | $16: 45$ | $18: 15$ | 15 |  |

## Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A |  | ONE HOUR | $\checkmark$ | 558 | 100.000 |
| B |  | ONE HOUR | $\checkmark$ | 21 | 100.000 |
| C |  | ONE HOUR | $\checkmark$ | 563 | 100.000 |
| D |  | ONE HOUR | $\checkmark$ | 20 | 100.000 |

## Origin-Destination Data

Demand (Veh/hr)

|  | To |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| From |  | A | B | C | D |
|  | A | 0 | 22 | 521 | 15 |
|  | B | 11 | 0 | 10 | 0 |
|  | C | 536 | 20 | 0 | 7 |
|  | D | 0 | 0 | 20 | 0 |

## Vehicle Mix

| HV data entry mode | PCU Factor for a HV (PCU) |
| :---: | :---: |
| HV Percentages | 2.00 |

THEFUTURE

Heavy Vehicle \%

|  | To |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| From |  | A | B | C | D |
|  | A | 0 | 0 | 10 | 7 |
|  | B | 0 | 0 | 0 | 0 |
|  | C | 17 | 0 | 0 | 43 |
|  | D | 0 | 0 | 11 | 0 |

## Results

Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 0.06 | 10.44 | 0.1 | B | 19 | 29 |
| AB |  |  |  |  | 20 | 30 |
| AC |  |  |  |  | 478 | 717 |
| AD |  |  |  |  | 14 | 21 |
| $A B-C D$ | 0.03 | 7.28 | 0.0 | A | 14 | 21 |
| AB-C |  |  |  |  | 487 | 730 |
| D-ABC | 0.10 | 18.72 | 0.1 | C | 18 | 28 |
| C-D |  |  |  |  | 6 | 10 |
| C-A |  |  |  |  | 492 | 738 |
| C-B |  |  |  |  | 18 | 28 |
| CD-AB | 0.04 | 7.13 | 0.0 | A | 19 | 29 |
| CD-A |  |  |  |  | 491 | 737 |

## Main Results for each time segment

16:45-17:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 16 | 4 | 450 | 0.035 | 16 | 0.0 | 0.0 | 8.288 | A |
| AB | 17 | 4 |  |  | 17 |  |  |  |  |
| AC | 392 | 98 |  |  | 392 |  |  |  |  |
| AD | 11 | 3 |  |  | 11 |  |  |  |  |
| AB-CD | 12 | 3 | 553 | 0.021 | 11 | 0.0 | 0.0 | 6.651 | A |
| AB-C | 399 | 100 |  |  | 399 |  |  |  |  |
| D-ABC | 15 | 4 | 280 | 0.054 | 15 | 0.0 | 0.1 | 13.551 | B |
| C-D | 5 | 1 |  |  | 5 |  |  |  |  |
| C-A | 404 | 101 |  |  | 404 |  |  |  |  |
| C-B | 15 | 4 |  |  | 15 |  |  |  |  |
| CD-AB | 15 | 4 | 565 | 0.027 | 15 | 0.0 | 0.0 | 6.549 | A |
| CD-A | 403 | 101 |  |  | 403 |  |  |  |  |

THEFUTURE

17:00-17:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 19 | 5 | 416 | 0.045 | 19 | 0.0 | 0.0 | 9.060 | A |
| AB | 20 | 5 |  |  | 20 |  |  |  |  |
| AC | 468 | 117 |  |  | 468 |  |  |  |  |
| AD | 13 | 3 |  |  | 13 |  |  |  |  |
| AB-CD | 14 | 3 | 535 | 0.026 | 14 | 0.0 | 0.0 | 6.910 | A |
| AB-C | 477 | 119 |  |  | 477 |  |  |  |  |
| D-ABC | 18 | 4 | 253 | 0.071 | 18 | 0.1 | 0.1 | 15.336 | C |
| C-D | 6 | 2 |  |  | 6 |  |  |  |  |
| C-A | 482 | 120 |  |  | 482 |  |  |  |  |
| C-B | 18 | 4 |  |  | 18 |  |  |  |  |
| CD-AB | 19 | 5 | 548 | 0.034 | 18 | 0.0 | 0.0 | 6.791 | A |
| CD-A | 481 | 120 |  |  | 481 |  |  |  |  |

17:15-17:30

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 23 | 6 | 368 | 0.063 | 23 | 0.0 | 0.1 | 10.433 | B |
| AB | 24 | 6 |  |  | 24 |  |  |  |  |
| AC | 574 | 143 |  |  | 574 |  |  |  |  |
| AD | 17 | 4 |  |  | 17 |  |  |  |  |
| AB-CD | 17 | 4 | 512 | 0.034 | 17 | 0.0 | 0.0 | 7.277 | A |
| AB-C | 584 | 146 |  |  | 584 |  |  |  |  |
| D-ABC | 22 | 6 | 214 | 0.103 | 22 | 0.1 | 0.1 | 18.709 | C |
| C-D | 8 | 2 |  |  | 8 |  |  |  |  |
| C-A | 590 | 148 |  |  | 590 |  |  |  |  |
| C-B | 22 | 6 |  |  | 22 |  |  |  |  |
| CD-AB | 23 | 6 | 528 | 0.044 | 23 | 0.0 | 0.0 | 7.124 | A |
| CD-A | 589 | 147 |  |  | 589 |  |  |  |  |

17:30-17:45

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity <br> (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 23 | 6 | 368 | 0.063 | 23 | 0.1 | 0.1 | 10.437 | B |
| AB | 24 | 6 |  |  | 24 |  |  |  |  |
| AC | 574 | 143 |  |  | 574 |  |  |  |  |
| AD | 17 | 4 |  |  | 17 |  |  |  |  |
| AB-CD | 17 | 4 | 512 | 0.034 | 17 | 0.0 | 0.0 | 7.280 | A |
| AB-C | 584 | 146 |  |  | 584 |  |  |  |  |
| D-ABC | 22 | 6 | 214 | 0.103 | 22 | 0.1 | 0.1 | 18.723 | C |
| C-D | 8 | 2 |  |  | 8 |  |  |  |  |
| C-A | 590 | 148 |  |  | 590 |  |  |  |  |
| C-B | 22 | 6 |  |  | 22 |  |  |  |  |
| CD-AB | 23 | 6 | 528 | 0.044 | 23 | 0.0 | 0.0 | 7.127 | A |
| CD-A | 589 | 147 |  |  | 589 |  |  |  |  |

17:45-18:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity <br> (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 19 | 5 | 416 | 0.045 | 19 | 0.1 | 0.0 | 9.068 | A |
| AB | 20 | 5 |  |  | 20 |  |  |  |  |
| AC | 468 | 117 |  |  | 468 |  |  |  |  |
| AD | 13 | 3 |  |  | 13 |  |  |  |  |
| AB-CD | 14 | 3 | 535 | 0.026 | 14 | 0.0 | 0.0 | 6.911 | A |
| AB-C | 477 | 119 |  |  | 477 |  |  |  |  |
| D-ABC | 18 | 4 | 253 | 0.071 | 18 | 0.1 | 0.1 | 15.365 | C |
| C-D | 6 | 2 |  |  | 6 |  |  |  |  |
| C-A | 482 | 120 |  |  | 482 |  |  |  |  |
| C-B | 18 | 4 |  |  | 18 |  |  |  |  |
| CD-AB | 19 | 5 | 550 | 0.034 | 19 | 0.0 | 0.0 | 6.795 | A |
| CD-A | 481 | 120 |  |  | 481 |  |  |  |  |

18:00-18:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity <br> (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | Unsignalised level of service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-ACD | 16 | 4 | 450 | 0.035 | 16 | 0.0 | 0.0 | 8.296 | A |
| AB | 17 | 4 |  |  | 17 |  |  |  |  |
| AC | 392 | 98 |  |  | 392 |  |  |  |  |
| AD | 11 | 3 |  |  | 11 |  |  |  |  |
| AB-CD | 12 | 3 | 553 | 0.021 | 12 | 0.0 | 0.0 | 6.654 | A |
| AB-C | 400 | 100 |  |  | 400 |  |  |  |  |
| D-ABC | 15 | 4 | 280 | 0.054 | 15 | 0.1 | 0.1 | 13.586 | B |
| C-D | 5 | 1 |  |  | 5 |  |  |  |  |
| C-A | 404 | 101 |  |  | 404 |  |  |  |  |
| C-B | 15 | 4 |  |  | 15 |  |  |  |  |
| CD-AB | 15 | 4 | 565 | 0.027 | 15 | 0.0 | 0.0 | 6.553 | A |
| CD-A | 403 | 101 |  |  | 403 |  |  |  |  |


[^0]:    Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

