St Margarets Business Park Car Park

Transport Statement

Client: Godstone Developments Limited

i-Transport Ref: NM/JN/AT/ITL16162-002a

Date: 05 April 2022

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Quality Management

Report No.	Comments	Date	Author	Authorised
ITL16162-002	Draft	15/03/2022	JN/AT/WM	NM
ITL16162-002a	Issue	05/04/2022	JN/AT	NM

File Ref: L:\PROJECTS\16000 SERIES\16162 - St Margarets Business Park\Admin\Report and Tech Notes\ITL16162-002a Transport Statement.docx

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SECTION 1 INTRODUCTION

1.1 Overview

1.1.1 Godstone Developments Limited (the 'Applicant') has appointed i-Transport LLP to provide transport and highways advice with regard to a planning application for the proposed redevelopment of a private car park to provide three residential units.

1.1.2 The site is located immediately east of St Margarets Business Park. The London Borough of Richmond upon Thames (LBRuT) is the local planning and highway authority.

1.1.3 This Transport Statement (TS) has been prepared to assess the potential transport and highways implications of the scheme. In particular, the TS identifies opportunities for future residents to access a range of local facilities by sustainable modes of transport and its compliance with prevailing planning policies.

1.2 Proposal

1.2.1 The proposal seeks permission to construct three residential units consisting of 1 x 5-bed unit, 1 x 4-bed unit and 1 x 3-bed unit in place of an existing private car park. One parking space per dwelling is proposed.

1.3 Appeal Decision

1.3.1 This application follows a previous proposal for four houses on this site, submitted in September 2020 (planning ref: 20/2664/FUL). The application was refused by LBRuT in December 2020 with five reasons for refusal given, including one relating to the absence of satisfactory parking provision (which was proposed at one space per dwelling). Local Plan policy at the time allowed for a maximum of two spaces per unit whilst (at the time) the emerging London Plan had already received suggested amendments from the Secretary of State allowing only a maximum of one space per unit for development in these areas.

1.3.2 Subsequent to the refusal, the Applicant appealed the decision with the Planning Inspectorate. By the time the appeal was considered (circa July – September 2021) the London Plan (allowing a maximum of one space per unit) had been adopted (March 2021). Accordingly, LBRuT removed its objection to the proposal on the basis of car parking. This is confirmed by the Planning

Inspectorate in its Appeal Decision (appeal ref: APP/L5810/W/21/3268141), paragraph 3, which reads;

> ***"Since the planning application was determined the London Plan 2021 has been adopted. The Council has had the opportunity to comment on this in its appeal statement. Subsequently, given the change to parking provision requirements as contained within the most recently adopted London Plan, the Council is satisfied that sufficient parking provision is made within the scheme and as such removes its objection on this matter. I have no reason to disagree with this position and as such do not refer to parking provision in the main issues below."***

1.3.3 On this basis, both LBRuT and the Planning Inspectorate were satisfied a parking provision of one space per unit was appropriate.

1.4 Pre-Application Advice

1.4.1 To support the development of a new proposal, the Applicant has sought new pre-application advice for the development of three homes at the site. Notwithstanding the above appeal decision and the LBRuT position, the most recent pre-application response indicates a wholly car-free development would be acceptable and no highway objections would be raised on this basis. However, this appears to have been informed by a consideration of insufficient carriageway width for vehicles to turn to/from the proposed parking spaces. Accordingly, the scheme has been revised to increase the turning ability to/from the proposed parking spaces (further detail including swept path analysis is provided in Section 4 of this TS). The pre-application response also notes;

> ***"The London Plan sets out a maximum of 1 space per family sized unit in this location, and in accordance with the Local Plan the maximum should normally be met."***

1.4.2 On this basis, it is recognised that provision of one space per unit remains within the maximum and would therefore be policy compliant. There has been no change to local planning policy since the adoption of the London Plan/Appeal Decision.

1.5 Scope

1.5.1 This TS has been prepared by i-Transport to assess the transport impacts of the development proposal with respect to relevant national, regional and local policy and guidance.

1.6 Structure of Report

1.6.1 The remainder of this TS is set out as follows:

- Section 2 summarises the relevant national, regional and local policies and guidance relevant to the application;
- Section 3 summarises the existing accessibility of the site and local services and facilities;
- Section 4 sets out the development proposal in detail, including the access arrangements for all travel modes;
- Section 5 provides an assessment of the anticipated total and net change in multimodal movements resulting from the development and an impact assessment on the local transport network; and
- Section 6 provides summary and conclusions.

SECTION 2 POLICY CONTEXT

2.1 Overview

2.1.1 This section sets out a review of the national, regional and local transport policy and guidance against which the proposal is assessed.

2.2 National Transport Policy

National Planning Policy Framework July 2021 (NPPF)

2.2.1 The revised NPPF sets out the Government's planning policies and how these are expected to be applied. It also constitutes guidance for local planning authorities and decision takers both in drawing up plans and as a material consideration in determining applications.

2.2.2 The NPPF stresses that at the forefront of planning is the 'presumption in favour' of sustainable development. Paragraph 10 states:

"at the heart of the Framework is a presumption in favour of sustainable development".

2.2.3 Paragraph 110 presents the primary transport and design tests for new development proposals, stating that plans and specific applications for development should ensure 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."

2.2.4 Paragraph 111 of the revised NPPF presents a demanding test for assessing transport impacts. Only if there would be an 'unacceptable impact on highway safety' or when residual cumulative impacts are ***'severe'*** should proposals be refused on transport grounds**.**

2.2.5 Development should therefore provide opportunities for sustainable travel; achieve safe access; be designed in accordance with national design guidance and should only be prevented where the residual cumulative impact is '***unacceptable***' or ***'severe'***.

2.3 Regional Transport Policy

The London Plan (March 2021)

2.3.1 From a transport perspective and in general, the Mayor intends that London will be a city where it is easy, safe and convenient for everyone to access jobs, opportunities and facilities with an efficient and effective transport system which actively encourages more walking and cycling.

2.3.2 The following policies are of particular pertinence to this proposal;

- Policy T2 D – Development should reduce the dominance of vehicles on London's streets and be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport;
- Policy T5 A – Cycle parking should be provided at the levels set out in the London Plan;
- Policy T5 B – Cycle parking should be designed and laid out in accordance with the London Cycling Design Standards guidance;
- Policy T5 D - Where it is not possible to provide suitable short-stay cycle parking off the public highway, the borough should work with stakeholders to identify an appropriate on-street location for the required provision.;
- Policy T6 A - Car parking should be restricted in line with levels of existing and future public transport accessibility and connectivity; and
- Policy T6 B - Car-free development should be the starting point for all development proposals in places that are (or are planned to be) well-connected by public transport, with developments elsewhere designed to provide the minimum necessary parking ('car-lite').

2.3.3 The pertinent car and cycle parking standards in the London Plan for this site (with regard to its PTAL) are summarised in Tables 2.1 and 2.2

Table 2.1: London Plan Car Parking Standard

Location	Number of beds	Maximum parking provision
Outer London PTAL 2-3	3+	Up to 1 space per dwelling

Table 2.2: London Plan Cycle Parking Standard

Use Class		Long-stay (residents)	Short stay (visitors)
C3-C4	Dwellings (all)	• 1 space per studio or 1 person 1 bedroom dwelling • 1.5 spaces per 2 person 1 bedroom dwelling • 2 spaces per all other dwellings	• 5 to 40 dwellings: 2 spaces • Thereafter: 1 space per 40 dwellings

Source: London Plan 2021

2.4 Local Policy

Richmond Local Plan (July 2018)

2.4.1 The Local Plan for the borough of Richmond was adopted in July 2018 and establishes the policies for supporting development of the Borough. Of most relevance to this site in transport and highways terms are Policy LP24 Waste, LP25 Development in Centres, LP44 Sustainable Travel Choices, and Policy LP45 Parking Standards and Servicing.

2.4.2 LP24 Waste establishes the need for all developments, including conversions and change of use, to provide adequate refuse and recycling facilities, which allow for ease of collection and which occupiers can easily access.

2.4.3 Policy LP25 ensures that non-retail development which generates high levels of trips should be located within a main centre boundary such as Richmond town centre.

2.4.4 Policy LP44 establishes the need for new development to encourage sustainable travel choices. It confirms that high trip generating development is to be located in areas with good public transport accessibility, ensuring it provides convenient walking and cycling routes (and providing opportunities to travel by walking and cycling), maximise opportunities to provide safe and convenient access to public transport services and ensures that development does not have a severe impact on the operation, safety, or accessibility to the local or strategic highway networks.

It also states that a Transport Statement should be provided to support minor development applications.

2.4.5 Parking requirements are set out in Policy LP45, making reference to Appendix 3 of the Local Plan. It confirms that new development should make provision for the accommodation of vehicles in order to provide for the needs of the development, while minimising the impact of car-based travel. In PTALs 0 -3, the parking standard for 3-bedroom dwellings allow up to 2 spaces per unit.

2.4.6 The supporting text confirms that development may only provide fewer spaces, or car free schemes, with the support of a Transport Statement to demonstrate no unacceptable adverse impact on on-street parking, road safety, and emergency access. Generally, in areas with a PTAL of 4-6, car parking at a lower level than the standards may be appropriate where demonstrated as acceptable, however in areas with a PTAL between 0-3, the standards should be met. However, this policy has been superseded by the Transport SPD (as detailed below), to accord with the updated London Plan policy position.

Richmond Transport SPD (June 2020)

2.4.7 This Supplementary Planning Document (SPD) has been created to provide additional guidance on Local Plan Policies related to roads and transport.

- Transport Assessments / Statements, Travels Plans and Delivery and Servicing Plans should be submitted in accordance with Transport for London guidance and the Council's Local Plan and submitted alongside the planning application.
- Construction Logistics Plans – The building of the development should be carefully managed to minimise nuisance on neighbours and minimise environmental impacts.
- Sustainable development and active travel – Development should demonstrate its sustainable credentials in accordance with the transport policies set out within the Local Plan, Council's Local Implementation Plan and the Council's emerging Active Travel Strategy.
- The draft Active Travel Strategy sets out the hierarchy of street users as follows:
    1. Pedestrians and people with disabilities and/or limited mobility
    2. People cycling
    3. Buses

4 Zero and low emission delivery and servicing vehicles

5 Polluting delivery and servicing vehicles

6 Zero and low emission cars, motorcycles, mopeds and taxi and private hire

7 Polluting cars, motorcycles, mopeds and taxi and private hire

- Pedestrian priority – "Healthy Streets" checks should be undertaken to ascertain the quality of the local street network and identify potential improvements.
- Cycling – Development is expected to provide for and facilitate more cycling.
  - Cycle parking – LBRuT has adopted London Plan standards for cycle parking, however more cycle parking is desirable
- Car parking – LBRuT has adopted London Plan standards for car parking. However, an appropriate balance needs to be struck between minimising car use and ensuring development is able to operate efficiently, avoiding adding to street parking pressure. In areas of low Public Transport Accessibility (notably PTAL 1 and 2), car-free development will normally be considered inappropriate.

2.5 Summary

2.5.1 National policy establishes that development should only be prevented where the impact of the development on transport networks is considered 'severe'. The London and LBRuT policies and SPD establish the mechanisms for enabling an assessment as to the potential level of the impact, as well as guidance on car and cycle parking levels.

SECTION 3 EXISTING CONDITIONS

3.1 Overview

3.1.1 This section sets out the existing transport conditions in the vicinity of the site.

3.2 Site Location and Existing Site

3.2.1 The site is located immediately east of St Margarets Business Park, being an area of private car parking. The site's previous use would have been to accommodate any overspill demand from the Business Park; however, the site is now in separate ownership to the wider estate. It is therefore no longer available for parking by users of the adjacent business park.

3.2.2 St Margarets Railway Station is located 300m to the east of the site and Twickenham town centre is located 1km to the southwest of the site.

3.3 Local Highway Network

3.3.1 Roads surrounding the site are mostly residential in character, with connections to the A316 to the north which runs between from the A315 Chiswick High Road, Turnham Green, Chiswick to the M3 motorway.

3.3.2 Drummonds Place to the south of the site (and from which parking is to be accessed) is a private road circa 4m in width. However, the southern footway remains adopted highway and provides a connection to the railway bridge that facilities access towards Twickenham town centre (with the bridge and stairs exclusively forming part of Public Right of Way (PRoW) 222).

3.3.3 Godstone Road to the north of the site and Winchester Road to the east (which connects with Drummonds Place) are two-way single carriageway roads subject to a 20mph speed limit. Footways are provided on both sides of the roads, and are street lit.

3.3.4 The surrounding roads are located within Controlled Parking Zone (CPZ) 'S'. This CPZ operates between 10.00am to 4.30pm, Monday to Friday. There are on-street parking bays located on both sides of Godstone Road and Winchester Road. Primarily, parking bays are exclusively reserved for resident permit holders whereas some spaces on Winchester Road are available for 'permit holders', i.e. available to either resident or business permit holders.

Road Safety

3.3.5 The most recently available (at the time of the request) five-year Personal Injury Accident (PIA) has been requested from Transport for London (TfL) for the period to end December 2019. The study area comprised Drummonds Place and Winchester Road, between its junction with Godstone Road and Kenley Road. No PIAs were recorded in the vicinity of the site within this time period, and TfL has confirmed that there are no recorded PIAs in this area since 2005 (see correspondence at Appendix A). Crashmap has been reviewed in February 2022 to confirm that no PIAs have been recorded since, as shown Image 3.1.

Image 3.1 – Crashmap (2020 & 2021)

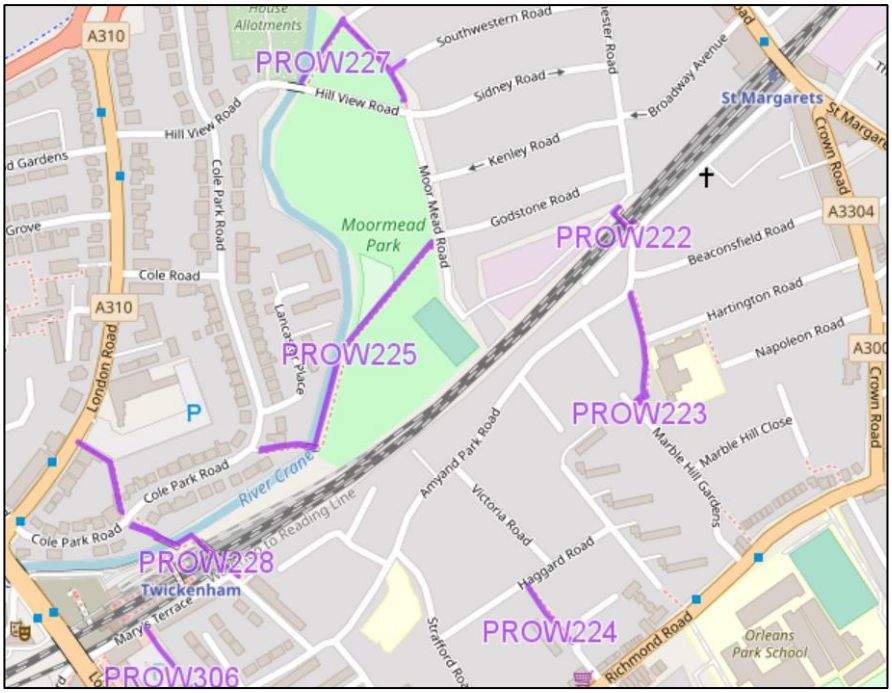
Source: Crashmap

3.4 Walking and Cycling

3.4.1 Local roads, including Godstone Road and Winchester Road provide footways on both sides on the road. These continue throughout the immediate area, facilitating pedestrian access to St. Margarets Road and St Margarets railway station.

3.4.2 There are a number of PRoWs in the vicinity of the site which are summarised in Image 3.2 below.

Image 3.2: Public Rights of Way Map



Source: LBRuT

3.4.3 As many of the roads surrounding the site are residential in character, they have low traffic flows and speeds and therefore are appealing to cyclists cycling within the carriageway. At the junction of Winchester Road and A316 Chertsey Road (which is filtered for pedestrian and cycle movements only) cycling is provided by shared footway/cycleways and crossing of the St Margarets Roundabout by toucan crossings on all arms. This connects the site to Richmond town centre whereby the majority of the route is off-carriageway. Cycling to Twickenham town centre on primarily local residential roads is also posisble from the site.

3.5 Public Transport

PTAL

3.5.1 The accessibility of the site has been assessed using the TfL Public Transport Accessibility Level (PTAL) methodology. PTALs are a detailed measure of the accessibility of a site to the public transport network, taking into account the combination of walking time and service frequency.

3.5.2 The site has a PTAL rating of 2, indicating an adequate level of public transport accessibility. This PTAL rating is a result of the proximity to St Margarets Railway Station and bus stops, which are 300m from the site.

3.5.3 The PTAL output report is included at Appendix B. Full details of the public transport services accessible from the site are provided in the remainder of this section.

Buses

3.5.4 The nearest bus stops are circa 300m east of the site – St Margaret Stop J and P. The bus stops provide sheltered waiting areas with seating. Table 3.1 summarises the destination and frequency of the bus route served by these bus stops.

Table 3.1: Local Bus Services

Service No.	Route	Typical Frequency		
		Mon-Fri	Sat	Sun
H37	Hounslow – Isleworth – St Margarets – Richmond	Every 7-8 mins	Every 7-8 mins	Every 7-8 mins
969	Whitton - Richmond - Barnes - Roehampton Vale	Once daily return service Tuesday & Thursday Only		
110	Hounslow, bus station – Whitton – St Margaret's – Richmond – Kew Gardens – Cheswick High Road – Hammersmith	Every 15 minutes	Every 15 minutes	Every 20 minutes

Source: Traveline (checked February 2022)

National Rail

3.5.5 St Margarets Station is located approximately 300m east of the site, equivalent to approximately a four-minute walk. St Margarets is served by South Western Railway , with the routes and typical frequencies are summarised in Table 3.2.

Table 3.2: National Rail Services – St Margarets Station

Destination	Duration	Typical Frequency
Chiswick	25 mins	3 per day
London Waterloo	31-48 mins	4 per hour
Wimbledon	30 mins	2 per hour

Source: Trainline (checked February 2022)

3.6 Local Facilities

3.6.1 An important element of achieving sustainable development is ensuring that new housing is well connected with local facilities and community infrastructure.

3.6.2 National guidance provided in the NPPF stresses the importance of providing accessible local facilities and services that reflect the community's need whilst focusing significant developments in locations which are or can be made sustainably. Walking and cycling provide important alternatives to the private car for short journeys and should also be encouraged to form part of longer journeys via public transport.

3.6.3 In this regard, Manual for Streets states that 'walkable neighbourhoods' are typically characterised by having a range of facilities within 10 minutes' (up to about 800m) walking distance of residential area, but this is not an upper limit *(Ref: Manual for Streets paragraph 4.4.1)*.

3.6.4 The National Travel Survey: England 2019 identifies the mode share of different journey lengths and found that walking was the most frequent mode for short trips in 2019, where 80% of trips under one mile (c. 1,600m), and 31% of trips between one and two miles (c. 3,200m) were walks (*Ref: NTS Table 0308*).

3.6.5 A review of the local facilities in the vicinity of the site has been undertaken and is summarised in Table 3.3 overleaf which also provides walking and cycling journey times.

Table 3.3: Key Destinations and Local Facilities

Type of Facility	Destination	Approximate Distance from Site	Walking Time (minutes)	Cycling Time (minutes)
Education	Orleans Primary School	220m	3 mins	1 min
	St Stephen's C of E Primary School	350m	4 mins	1 min
	Orleans Park School	500m	6 mins	2 mins
	St Marys C of E Primary School	700m	8 mins	3 mins
Health	St Margarets Pharmacy	400m	5 mins	2 mins
	Amber Dental Surgery	400m	5 mins	2 mins
	St Margarets Medical Practice	650m	8 mins	3 mins
Retail	Tesco Express	300m	4 mins	1 min
	St Margarets Post Office	300m	4 mins	1 min
	Asda Supermarket	1,200m	14 mins	5 mins
Leisure	Moormead and Bandy Recreation Ground	290m	3 mins	1 min
	The Turk's Head	300m	4 mins	1 min
	St Margarets Tavern	350m	4 mins	1 min

Source: Consultants Estimate. Note: Walk journey times assume a walk speed of 1.4m/s with cycle journey times based on an average cycling speed of 16km/h (ref: MfS 2). Journey times are measured via the shortest practicable route from the site.

Key:

Within 800m – a 'walkable neighbourhood'

Within 1.6km – a comfortable walking distance where 80% of trips up to this length are completed on foot

3.6.6 Table 3.3 demonstrates a very good range of everyday services and facilities are within a 'comfortable walking distance' from the site. Indeed, a significant majority of facilities are located within an 800m distance. The site is therefore within a sustainable location for future residents to travel to a number of services on foot or by bicycle.

3.7 Summary

3.7.1 The site is located within a reasonable walking distance of a wide range of everyday facilities and services. Residents will have excellent opportunities to travel on foot or by bicycle to access these facilities instead of using a car.

SECTION 4 DEVELOPMENT PROPOSAL

4.1 Overview

4.1.1 The Applicant seeks to replace the private car park with three residential dwellings, consisting of 1 x 5 bed dwelling, 1 x 4 bed dwelling and 1 x 3 bed dwelling. Each property will be provided a dedicated parking space.

4.2 Access

4.2.1 The proposed properties will front Winchester Road, with pedestrian access to front doors taken from this location.

4.2.2 Vehicular access and associated car parking spaces will be located to the rear of the site, accessed from Drummonds Place, a private road. Cycle parking is located in the front gardens of properties fronting Winchester Road.

4.2.3 The location of parking spaces behind the footway allows a walking route to/from the industrial units to be maintained. There is also no obstruction of the carriageway into/out of the business park as a result of this arrangement. Such a layout also allows for efficient manoeuvring into/out of parking spaces. Swept path analysis of the manoeuvres into and out of parking spaces is provided in Drawing No. ITL16162-GA-002A.

4.3 Car Parking

4.3.1 The development proposes three parking spaces, with one allocated to each dwelling.

4.3.2 To demonstrate that this level of provision is adequate to accommodate anticipated demand, whilst also ensuring the sustainable travel opportunities are maximised, reference has been made to local car ownership statistics recorded by the 2011 Census. Table KS404EW extracted from the NOMIS database enables a calculation of the car ownership rate for the Richmond Middle Super Output Area (MSOA) within which the site is located (Richmond 007).

4.3.3 A summary of the number of cars or vans associated with Households within the MSOA, and the subsequent car ownership level is provided in Table 4.1.

Table 4.1: Accommodation Type by Car or an Availability

	No. of Households	% Dwellings	Number of Cars
With no car or van	565	22%	0
With 1 car or van	1,414	54%	1,414
With 2 or more cars or vans	630	24%	1,389
Total	**1,254**	**100%**	**2,803**

Source: Census 2011 – NOMIS Table LC4415EW Richmond.

4.3.4 On the basis of Table 4.1, the car ownership rate in the local area is 1.07, i.e. one vehicle per dwelling. As such, the provision of one space per dwelling would accommodate anticipated demand from the development and no resulting overspill could reasonably be anticipated from the development.

4.3.5 Furthermore, London Plan policy does not permit more than one parking space per dwelling in PTAL 2 locations.

4.3.6 Therefore, the provision of three parking spaces complies with planning policy and will not result in an overspill in parking at the development, with future occupiers likely to be exempt from obtaining parking permits, further removing the propensity for overspill parking

4.3.7 All three parking spaces will be equipped with electric vehicle charging points from occupation to avoid the need for additional points to be installed in future which exceeds the requirement of planning policy.

Replacement of Car Parking

4.3.8 It is noted the development proposes the replacement of a former private car park. It is understood to have previously been within the same ownership as the adjacent business park and used for any required overspill parking. However, the land has now been sold for redevelopment, a commercial decision made by the owners of the business park that the land can be disposed and is not required for its use. Accordingly, the car park already falls within a separate private ownership and is no longer available for parking associated with the business park. Redevelopment of the site will therefore not result in any changes to on-street parking pressures as its right of use by the business park has already extinguished. The planning appeal also recognises at paragraphs 11-13, that the car park is not ancillary to the adjacent industrial use, with paragraph 12 reading;

"...there is nothing before me that convinces me that the use of the appeal site is inextricably linked to the use of the adjacent commercial premises. Furthermore, I note that the site lies outside of the area that is designated within the Local Plan as Locally Important Industrial Land and Business Parks. There is no floorspace provision within the site, through the presence of any buildings, and the location appears independent from the employment site."

4.4 Cycle Parking

4.4.1 Two cycle parking spaces per dwelling are provided by way of lockable cycle store in the front gardens of each dwelling which is in accordance with the prevailing cycle parking standards

4.5 Deliveries and Servicing

4.5.1 Given the scale of development, a limited volume of delivery movements can be expected across a day. Those that do occur would be of short duration and would be accommodated on-street. Due to this site being within a high-density residential area, it is likely that many such delivery vehicles will already be serving several neighbouring properties/areas, and therefore not be new to the local network.

4.5.2 Refuse bins will be located to the front of properties on Godstone Road and Winchester Road. Currently, the LBRuT refuse vehicle stops on Godstone Road and Winchester Road to undertake collections on this section of road and this will continue on completion and occupation of the development.

SECTION 5 TRIP GENERATION

5.1 Overview

5.1.1 This section of the TS sets out the trip rates and trip generation of the proposed development and assesses the subsequent traffic impact.

5.2 Extant Trip Attraction

5.2.1 The site currently comprises a private car park of circa 12 spaces. Whilst the site is within separate ownership and not actively marketed as an available car park, it could remain in this use in perpetuity and attract/generate at least 24 daily vehicle trips (assuming all 12 spaces are occupied). Greater volume of trips could occur should spaces turnover more than once per day.

5.3 Proposed Trip Generation

5.3.1 To derive the trip generation of the proposed development, trip rates have been obtained from the TRICS database for comparable residential sites with the following criteria:

- Land use category: Houses Privately Owned;
- Size Range: 9-50 dwellings; and
- Date range: Only the most recent surveys from 01/01/13 to 03/07/2019 were included (calculation made 25th February 2022).

5.3.2 Table 5.1 summarises the person trip rates for the morning and evening peak hours and the subsequent total person trip generation of the existing one dwelling. The full TRICS outputs are included as Appendix C.

Table 5.1: Anticipated Person Trip Rates

	AM Peak Hour (0800-0900)			PM Peak Hour (1700-1800)		
	Arr	Dep	2-Way	Arr	Dep	2-Way
Trip Rates (per dwelling)	0.473	1.242	1.715	0.912	0.495	1.407
Person Trips (3 dwelling)	1	4	5	3	1	4

Source: TRICS

5.3.3 Table 5.1 demonstrates that the proposal is expected to generate up to two two-way person trips in the morning and evening peak hours.

5.3.4 The likely modal split of the person trips has been estimated using 2011 Census method of travel to work data for the local area, albeit this will provide for commuting trips only. This has been summarised in Table 5.2.

Table 5.2: Extant Trips – Mode Split by Period

Mode	Method of Travel to Work (%)	AM Peak Hour (0800-0900)			PM Peak Hour (1700-1800)		
		Arr	Dep	Total	Arr	Dep	Total
Train	39%	1	2	3	2	1	3
Driving a car or van	31%	0	2	2	1	0	1
Underground, metro, light rail, tram	10%	0	0	0	0	0	0
On foot	7%	0	0	0	0	0	0
Bicycle	7%	0	0	0	0	0	0
Bus, minibus or coach	3%	0	0	0	0	0	0
Motorcycle, scooter or moped	2%	0	0	0	0	0	0
Passenger in a car or van	1%	0	0	0	0	0	0
Other	0%	0	0	0	0	0	0
Total	**100%**	**1**	**4**	**5**	**3**	**1**	**4**

Source: Census 2011 Richmond upon Thames 007. Note: Numbers may not sum due to rounding.

5.3.5 Table 5.2 highlights that the majority of trips are likely to be made by rail (39%) when persons are commuting. When factored by three dwellings, this results in three trips by rail with the remaining two trips to be accommodated by car.

5.4 Summary

5.4.1 On the basis of the above, the anticipated change in vehicular trip is considered to not materially alter the quantum of vehicle movements on the local network. The increase in trips on local public transport modes is also negligible and the availability of bus and rail services can be considered more than sufficient to readily accommodate the suggested number of trips upon each respective sustainable transport mode.

SECTION 6 SUMMARY AND CONCLUSIONS

6.1.1 Godstone Developments Limited (the 'Applicant') has appointed i-Transport LLP to provide transport and highways advice with regard to a planning application for the proposed development of a private car park to three residential units.

6.1.2 The proposal seeks permission to construct three residential units consisting of 1 x 3-bed unit, 1 x 4-bed unit and 1 x 5-bed unit in place of an existing private car park. These are accompanied by three parking spaces, i.e., one space per unit, accessed from Drummond Place to the rear of the site. This is in accordance with the maximum parking standards and at a level both LBRuT and the Planning Inspectorate deemed acceptable when an appeal for a scheme also proposing one space per unit was considered last year. Cycle parking of two spaces per unit is provided to the front of each property on Winchester Road.

6.1.3 The site is supported through the range public transport services and key local facilities and destinations available within close walking and cycling distances. Future residents of the development will be more encouraged to carry out their everyday activities with less need to leave by, and reduce dependence on, the private car.

6.1.4 With reference to the key transport tests set out in paragraph 110 of the NPPF, the main conclusions of the transport assessment are that:

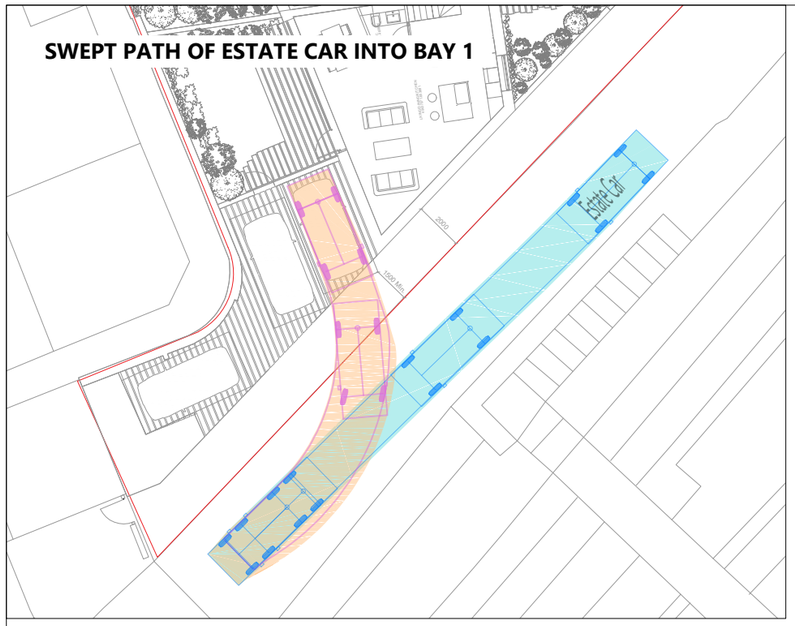
- appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- safe and suitable access to the site can be achieved for all users;
- the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance; and
- there are no forecast significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety.

6.2 Conclusion

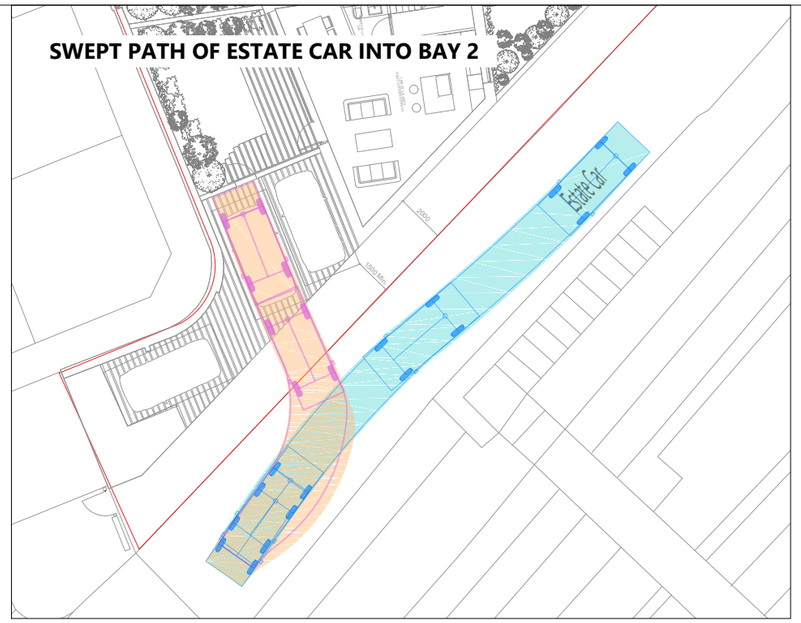
6.2.1 Against this background, the development proposal is considered acceptable in transport and highways terms, can be accommodated within the existing highway infrastructure, and the cumulative impact would be considered not severe.

DRAWING

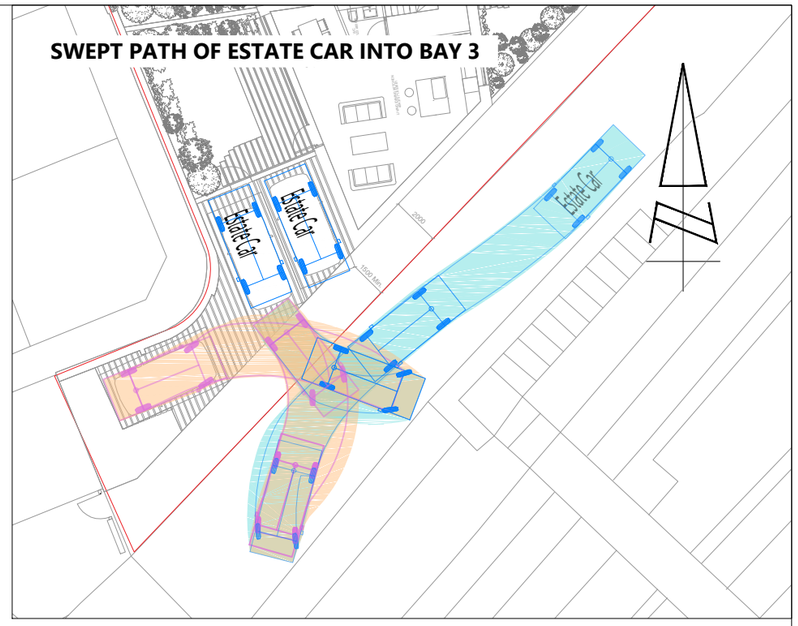
SWEPT PATH OF ESTATE CAR INTO BAY 1



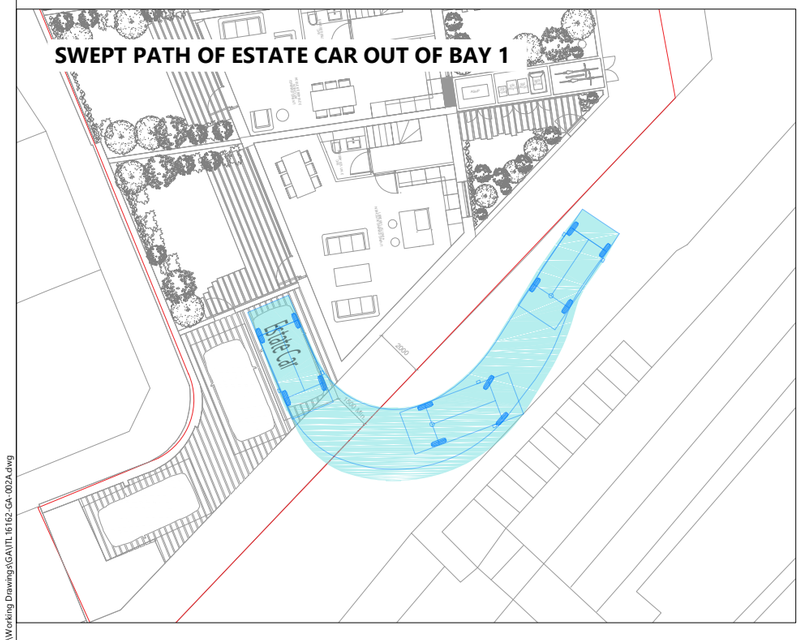
SWEPT PATH OF ESTATE CAR INTO BAY 2



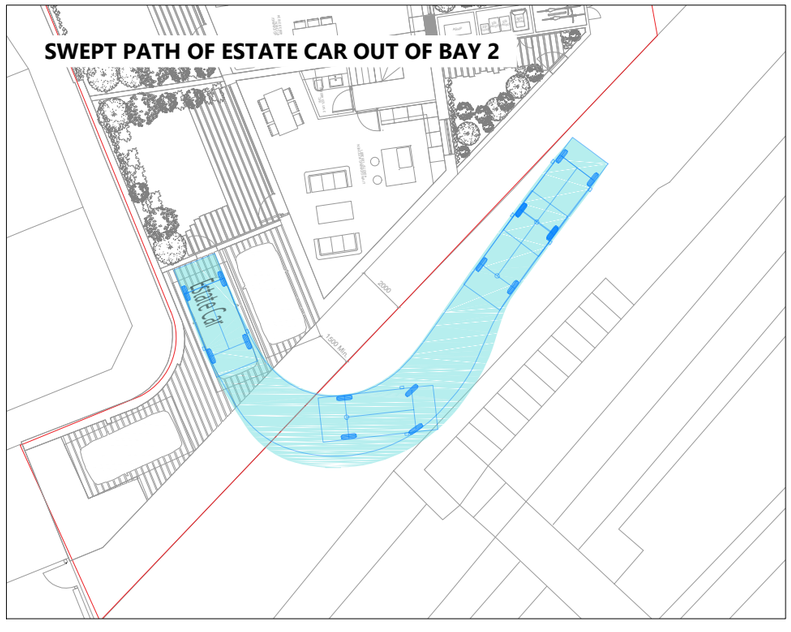
SWEPT PATH OF ESTATE CAR INTO BAY 3



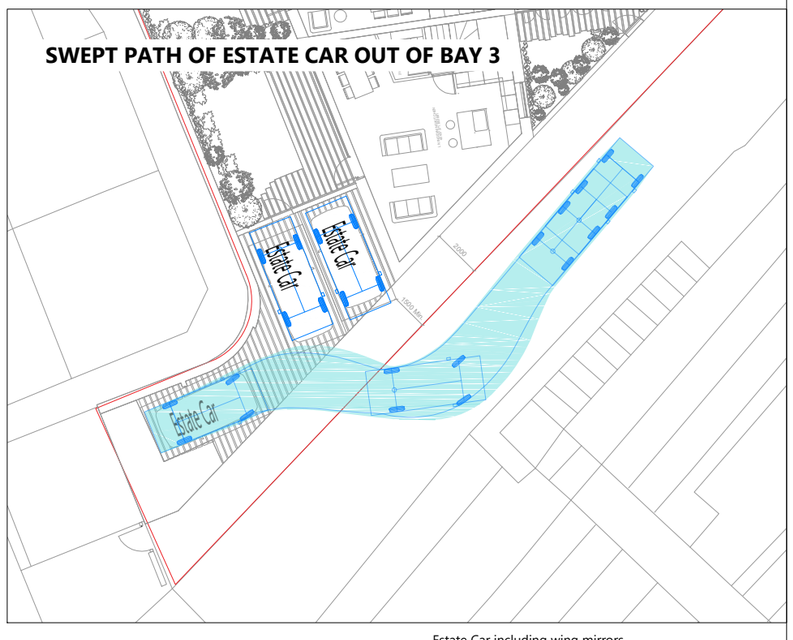
SWEPT PATH OF ESTATE CAR OUT OF BAY 1



SWEPT PATH OF ESTATE CAR OUT OF BAY 2



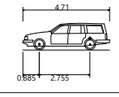
SWEPT PATH OF ESTATE CAR OUT OF BAY 3



DRAWING ISSUED FOR FEASIBILITY CONSIDERATION AND PLANNING PURPOSES ONLY. DRAWING NOT TO BE USED FOR CONSTRUCTION. I-TRANSPORT LLP ACCEPT NO RESPONSIBILITY FOR ERRORS MADE BY OTHERS IN SCALING FROM THIS DRAWING. MEASUREMENTS SHOULD BE TAKEN FROM FIGURED DIMENSIONS ONLY. CDM REQUIREMENTS CONSIDERED AT FEASIBILITY STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.

SCALE BAR @ 1:250

0 1 2 5 10 25



Estate Car including wing mirrors

Overall Length	4.710m
Overall Width	1.804m
Overall Body Height	1.442m
Min Body Ground Clearance	0.207m
Max Track Width	1.756m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.950m

i-Transport

85 Gresham Street, London, EC2V 7NQ Tel: 020 3705 9215

www.i-transport.co.uk

REV	DATE	BY	DESCRIPTION	CHK	APD
A	30.03.22	JMc	UPDATED SITE LAYOUT	JN	JN

STATUS: FOR INFORMATION

TITLE: SWEPT PATH ANALYSIS - ESTATE CAR

PROJECT: ST MARGARETS BUSINESS PARK

CLIENT:

DRAWN:	CHECKED:	APPROVED:
JB	JN	JN
PROJECT No:	SCALE @ A3:	DATE:
ITL16162	1:250	10.02.22
DRAWING No:		REV:
ITL16162-GA-002		A

L:\PROJECTS\16000 SERIES\16162 - St Margarets Business Park\Tech\Acad\-Transport Drawings\Working Drawings\GA\ITL16162-GA-002A.dwg

APPENDIX A. TfL PIA Correspondence

Alice Twyning

From: Collision Data Requests <CollisionDataRequests@tfl.gov.uk>
Sent: 31 July 2020 11:58
To: Alice Twyning
Subject: RE: Accident Data Request - St Margarets

Hi Alice

There is no collision found for this area even back to 2005, to end 2019 (provisional). Therefore, no cost for this search.

Kind Regards

Wenbo Xue

CollisionDataRequests@tfl.gov.uk

TRANSPORT FOR LONDON
EVERY JOURNEY MATTERS

From: Alice Twyning <alice.twyning@i-transport.co.uk>
Sent: 30 July 2020 17:04
To: Collision Data Requests <CollisionDataRequests@tfl.gov.uk>
Subject: RE: Accident Data Request - St Margarets

Ok great, please find completed form attached.
Many thanks,
Alice

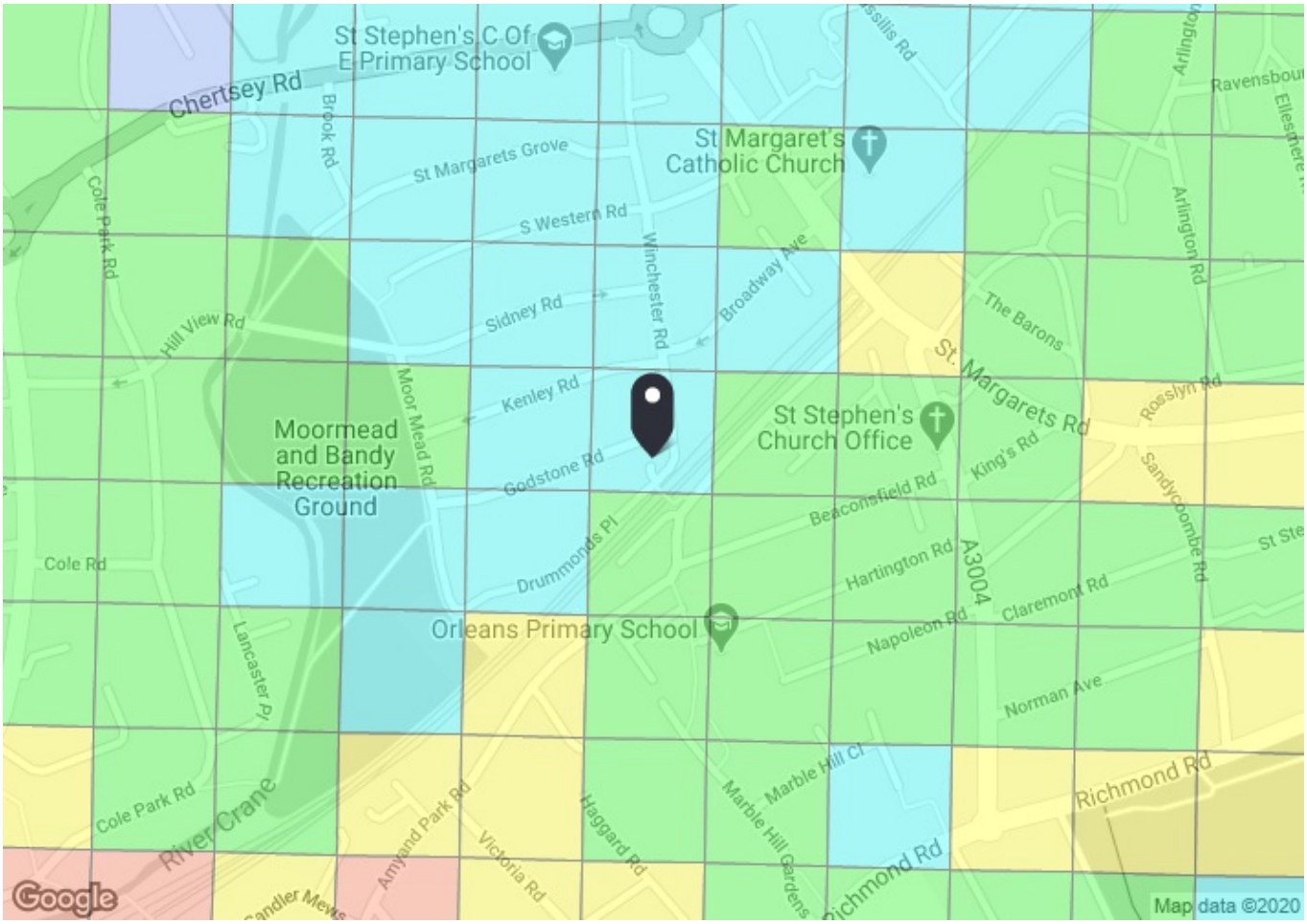
i-Transport

Alice Twyning
Consultant
for i-Transport LLP

T: 020 3705 9215
E: alice.twyning@i-transport.co.uk **W:** www.i-transport.co.uk
London Office: 85 Gresham Street, London, EC2V 7NQ

APPENDIX B. PTAL Output

TRANSPORT FOR LONDON



PTAL output for Base Year
2

102 Winchester Rd, Twickenham TW1 1LB, UK
Easting: 516647, Northing: 174121

Grid Cell: 49379

Report generated: 30/07/2020

Map key - PTAL

0 (Worst)	1a
1b	2
3	4
5	6a
6b (Best)	

Map layers

PTAL (cell size: 100m)

Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	ST MARGARETS STATION	H37	326.86	10	4.09	5	9.09	3.3	1	3.3
Rail	St Margarets	'SHEPRTN-WATRLMN 2H92'	331.55	1	4.14	30.75	34.89	0.86	0.5	0.43
Rail	St Margarets	'WDON-WATRLMN 2K03 '	331.55	0.33	4.14	91.66	95.8	0.31	0.5	0.16
Rail	St Margarets	'WATRLMN-WATRLMN 2K09'	331.55	2	4.14	15.75	19.89	1.51	1	1.51
Rail	St Margarets	'WATRLMN-WATRLMN 2O09'	331.55	2	4.14	15.75	19.89	1.51	0.5	0.75
Rail	St Margarets	'WATRLMN-WATRLMN 2R09'	331.55	2	4.14	15.75	19.89	1.51	0.5	0.75
Rail	St Margarets	'HOUNSLW-WATRLMN 2V05'	331.55	0.33	4.14	91.66	95.8	0.31	0.5	0.16
									Total Grid Cell AI:	**7.06**

APPENDIX C. TRICS Output

i-Transport LLP 85 Gresham Street London Licence No: 236603

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	9-50 DWELLS	
Actual Trip Rate Calculation Parameter Range	20-50 DWELLS	
Date Range	Minimum: 01/01/13	Maximum: 05/11/19
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	
Days of the week selected	Monday	1
	Tuesday	2
Main Location Types selected	Edge of Town Centre	1
	Neighbourhood Centre (PPS6 Local Centre)	2
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	20,001 to 25,000	1
	50,001 to 100,000	2
Population <5 Mile ranges selected	250,001 to 500,000	1
	500,001 or More	2
Car Ownership <5 Mile ranges selected	0.6 to 1.0	1
	1.1 to 1.5	2
PTAL Rating	2 Poor	1
	3 Moderate	1
	4 Good	1

Calculation Reference: AUDIT-236603-220225-0249

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	BN	BARNET	1 days
	HG	HARINGEY	1 days
	HO	HOUNSLOW	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 20 to 50 (units:)
Range Selected by User: 9 to 50 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 05/11/19

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

Selected survey days:

Monday	1 days
Tuesday	2 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Residential Zone	2
High Street	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.

Secondary Filtering selection:

Use Class:

C3	3 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

20,001 to 25,000	1 days
50,001 to 100,000	2 days

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

Population within 5 miles:

250,001 to 500,000	1 days
500,001 or More	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

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

Travel Plan:

Yes	1 days
No	2 days

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

PTAL Rating:

2 Poor	1 days
3 Moderate	1 days
4 Good	1 days

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

LIST OF SITES relevant to selection parameters

1 BN-03-A-02 MIXED HOUSES BARNET
SWEETS WAY
WHETSTONE

Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 21
Survey date: TUESDAY *03/07/18* *Survey Type: MANUAL*

2 HG-03-A-01 DETACHED & SEMI-DETACHED HARINGEY
LAWRENCE ROAD
TOTTENHAM
WEST GREEN
Neighbourhood Centre (PPS6 Local Centre)
High Street
Total No of Dwellings: 20
Survey date: TUESDAY *05/11/19* *Survey Type: MANUAL*

3 HO-03-A-02 MIXED HOUSES HOUNSLOW
HIBERNIAN ROAD
HOUNSLOW

Edge of Town Centre
Residential Zone
Total No of Dwellings: 50
Survey date: MONDAY *29/06/15* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
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): 2.88

	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	3	30	0.066	3	30	0.220	3	30	0.286
08:00 - 09:00	3	30	0.209	3	30	0.341	3	30	0.550
09:00 - 10:00	3	30	0.176	3	30	0.198	3	30	0.374
10:00 - 11:00	3	30	0.220	3	30	0.231	3	30	0.451
11:00 - 12:00	3	30	0.209	3	30	0.165	3	30	0.374
12:00 - 13:00	3	30	0.220	3	30	0.209	3	30	0.429
13:00 - 14:00	3	30	0.187	3	30	0.231	3	30	0.418
14:00 - 15:00	3	30	0.110	3	30	0.132	3	30	0.242
15:00 - 16:00	3	30	0.242	3	30	0.187	3	30	0.429
16:00 - 17:00	3	30	0.143	3	30	0.110	3	30	0.253
17:00 - 18:00	3	30	0.253	3	30	0.187	3	30	0.440
18:00 - 19:00	3	30	0.418	3	30	0.297	3	30	0.715
19:00 - 20:00	3	30	0.330	3	30	0.242	3	30	0.572
20:00 - 21:00	3	30	0.330	3	30	0.308	3	30	0.638
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.113			3.058			6.171

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

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

Parameter summary

Trip rate parameter range selected:	20 - 50 (units:)
Survey date date range:	01/01/13 - 05/11/19
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
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/A - HOUSES PRIVATELY OWNED
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	3	30	0.000	3	30	0.000	3	30	0.000
08:00 - 09:00	3	30	0.000	3	30	0.000	3	30	0.000
09:00 - 10:00	3	30	0.000	3	30	0.000	3	30	0.000
10:00 - 11:00	3	30	0.000	3	30	0.000	3	30	0.000
11:00 - 12:00	3	30	0.000	3	30	0.000	3	30	0.000
12:00 - 13:00	3	30	0.000	3	30	0.000	3	30	0.000
13:00 - 14:00	3	30	0.000	3	30	0.000	3	30	0.000
14:00 - 15:00	3	30	0.000	3	30	0.000	3	30	0.000
15:00 - 16:00	3	30	0.000	3	30	0.000	3	30	0.000
16:00 - 17:00	3	30	0.000	3	30	0.000	3	30	0.000
17:00 - 18:00	3	30	0.000	3	30	0.000	3	30	0.000
18:00 - 19:00	3	30	0.000	3	30	0.000	3	30	0.000
19:00 - 20:00	3	30	0.000	3	30	0.000	3	30	0.000
20:00 - 21:00	3	30	0.011	3	30	0.011	3	30	0.022
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.011			0.022

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/A - HOUSES PRIVATELY OWNED
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	3	30	0.011	3	30	0.011	3	30	0.022
08:00 - 09:00	3	30	0.000	3	30	0.000	3	30	0.000
09:00 - 10:00	3	30	0.022	3	30	0.022	3	30	0.044
10:00 - 11:00	3	30	0.022	3	30	0.011	3	30	0.033
11:00 - 12:00	3	30	0.022	3	30	0.000	3	30	0.022
12:00 - 13:00	3	30	0.011	3	30	0.033	3	30	0.044
13:00 - 14:00	3	30	0.011	3	30	0.011	3	30	0.022
14:00 - 15:00	3	30	0.011	3	30	0.011	3	30	0.022
15:00 - 16:00	3	30	0.022	3	30	0.011	3	30	0.033
16:00 - 17:00	3	30	0.000	3	30	0.011	3	30	0.011
17:00 - 18:00	3	30	0.000	3	30	0.000	3	30	0.000
18:00 - 19:00	3	30	0.011	3	30	0.011	3	30	0.022
19:00 - 20:00	3	30	0.033	3	30	0.022	3	30	0.055
20:00 - 21:00	3	30	0.000	3	30	0.011	3	30	0.011
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.176			0.165			0.341

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
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	3	30	0.000	3	30	0.000	3	30	0.000
08:00 - 09:00	3	30	0.011	3	30	0.011	3	30	0.022
09:00 - 10:00	3	30	0.000	3	30	0.000	3	30	0.000
10:00 - 11:00	3	30	0.000	3	30	0.000	3	30	0.000
11:00 - 12:00	3	30	0.000	3	30	0.000	3	30	0.000
12:00 - 13:00	3	30	0.000	3	30	0.000	3	30	0.000
13:00 - 14:00	3	30	0.000	3	30	0.000	3	30	0.000
14:00 - 15:00	3	30	0.000	3	30	0.000	3	30	0.000
15:00 - 16:00	3	30	0.000	3	30	0.000	3	30	0.000
16:00 - 17:00	3	30	0.011	3	30	0.011	3	30	0.022
17:00 - 18:00	3	30	0.000	3	30	0.000	3	30	0.000
18:00 - 19:00	3	30	0.000	3	30	0.000	3	30	0.000
19:00 - 20:00	3	30	0.000	3	30	0.000	3	30	0.000
20:00 - 21:00	3	30	0.000	3	30	0.000	3	30	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.022			0.022			0.044

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
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	3	30	0.000	3	30	0.044	3	30	0.044
08:00 - 09:00	3	30	0.000	3	30	0.011	3	30	0.011
09:00 - 10:00	3	30	0.011	3	30	0.011	3	30	0.022
10:00 - 11:00	3	30	0.000	3	30	0.011	3	30	0.011
11:00 - 12:00	3	30	0.011	3	30	0.000	3	30	0.011
12:00 - 13:00	3	30	0.000	3	30	0.033	3	30	0.033
13:00 - 14:00	3	30	0.022	3	30	0.000	3	30	0.022
14:00 - 15:00	3	30	0.000	3	30	0.011	3	30	0.011
15:00 - 16:00	3	30	0.000	3	30	0.000	3	30	0.000
16:00 - 17:00	3	30	0.022	3	30	0.022	3	30	0.044
17:00 - 18:00	3	30	0.011	3	30	0.000	3	30	0.011
18:00 - 19:00	3	30	0.011	3	30	0.000	3	30	0.011
19:00 - 20:00	3	30	0.011	3	30	0.000	3	30	0.011
20:00 - 21:00	3	30	0.022	3	30	0.000	3	30	0.022
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.121			0.143			0.264

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
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	3	30	0.077	3	30	0.264	3	30	0.341
08:00 - 09:00	3	30	0.275	3	30	0.495	3	30	0.770
09:00 - 10:00	3	30	0.209	3	30	0.242	3	30	0.451
10:00 - 11:00	3	30	0.330	3	30	0.319	3	30	0.649
11:00 - 12:00	3	30	0.286	3	30	0.231	3	30	0.517
12:00 - 13:00	3	30	0.341	3	30	0.363	3	30	0.704
13:00 - 14:00	3	30	0.264	3	30	0.352	3	30	0.616
14:00 - 15:00	3	30	0.154	3	30	0.154	3	30	0.308
15:00 - 16:00	3	30	0.407	3	30	0.264	3	30	0.671
16:00 - 17:00	3	30	0.176	3	30	0.121	3	30	0.297
17:00 - 18:00	3	30	0.352	3	30	0.286	3	30	0.638
18:00 - 19:00	3	30	0.538	3	30	0.385	3	30	0.923
19:00 - 20:00	3	30	0.396	3	30	0.330	3	30	0.726
20:00 - 21:00	3	30	0.418	3	30	0.341	3	30	0.759
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.223			4.147			8.370

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/A - HOUSES PRIVATELY OWNED
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	3	30	0.077	3	30	0.143	3	30	0.220
08:00 - 09:00	3	30	0.088	3	30	0.451	3	30	0.539
09:00 - 10:00	3	30	0.187	3	30	0.374	3	30	0.561
10:00 - 11:00	3	30	0.121	3	30	0.066	3	30	0.187
11:00 - 12:00	3	30	0.154	3	30	0.121	3	30	0.275
12:00 - 13:00	3	30	0.110	3	30	0.121	3	30	0.231
13:00 - 14:00	3	30	0.176	3	30	0.187	3	30	0.363
14:00 - 15:00	3	30	0.132	3	30	0.165	3	30	0.297
15:00 - 16:00	3	30	0.374	3	30	0.132	3	30	0.506
16:00 - 17:00	3	30	0.286	3	30	0.165	3	30	0.451
17:00 - 18:00	3	30	0.330	3	30	0.176	3	30	0.506
18:00 - 19:00	3	30	0.319	3	30	0.297	3	30	0.616
19:00 - 20:00	3	30	0.440	3	30	0.297	3	30	0.737
20:00 - 21:00	3	30	0.286	3	30	0.209	3	30	0.495
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.080			2.904			5.984

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/A - HOUSES PRIVATELY OWNED
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	3	30	0.022	3	30	0.077	3	30	0.099
08:00 - 09:00	3	30	0.077	3	30	0.110	3	30	0.187
09:00 - 10:00	3	30	0.022	3	30	0.044	3	30	0.066
10:00 - 11:00	3	30	0.011	3	30	0.066	3	30	0.077
11:00 - 12:00	3	30	0.033	3	30	0.077	3	30	0.110
12:00 - 13:00	3	30	0.044	3	30	0.022	3	30	0.066
13:00 - 14:00	3	30	0.088	3	30	0.044	3	30	0.132
14:00 - 15:00	3	30	0.044	3	30	0.055	3	30	0.099
15:00 - 16:00	3	30	0.055	3	30	0.033	3	30	0.088
16:00 - 17:00	3	30	0.088	3	30	0.011	3	30	0.099
17:00 - 18:00	3	30	0.110	3	30	0.022	3	30	0.132
18:00 - 19:00	3	30	0.198	3	30	0.088	3	30	0.286
19:00 - 20:00	3	30	0.099	3	30	0.110	3	30	0.209
20:00 - 21:00	3	30	0.088	3	30	0.033	3	30	0.121
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.979			0.792			1.771

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL 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	3	30	0.022	3	30	0.154	3	30	0.176
08:00 - 09:00	3	30	0.033	3	30	0.143	3	30	0.176
09:00 - 10:00	3	30	0.011	3	30	0.066	3	30	0.077
10:00 - 11:00	3	30	0.033	3	30	0.011	3	30	0.044
11:00 - 12:00	3	30	0.011	3	30	0.044	3	30	0.055
12:00 - 13:00	3	30	0.011	3	30	0.044	3	30	0.055
13:00 - 14:00	3	30	0.044	3	30	0.000	3	30	0.044
14:00 - 15:00	3	30	0.022	3	30	0.044	3	30	0.066
15:00 - 16:00	3	30	0.011	3	30	0.055	3	30	0.066
16:00 - 17:00	3	30	0.033	3	30	0.000	3	30	0.033
17:00 - 18:00	3	30	0.110	3	30	0.011	3	30	0.121
18:00 - 19:00	3	30	0.165	3	30	0.033	3	30	0.198
19:00 - 20:00	3	30	0.132	3	30	0.022	3	30	0.154
20:00 - 21:00	3	30	0.044	3	30	0.022	3	30	0.066
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.682			0.649			1.331

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/A - HOUSES PRIVATELY OWNED
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. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	30	0.000	3	30	0.000	3	30	0.000
08:00 - 09:00	3	30	0.000	3	30	0.033	3	30	0.033
09:00 - 10:00	3	30	0.000	3	30	0.000	3	30	0.000
10:00 - 11:00	3	30	0.000	3	30	0.000	3	30	0.000
11:00 - 12:00	3	30	0.000	3	30	0.000	3	30	0.000
12:00 - 13:00	3	30	0.000	3	30	0.000	3	30	0.000
13:00 - 14:00	3	30	0.000	3	30	0.000	3	30	0.000
14:00 - 15:00	3	30	0.000	3	30	0.000	3	30	0.000
15:00 - 16:00	3	30	0.000	3	30	0.000	3	30	0.000
16:00 - 17:00	3	30	0.011	3	30	0.000	3	30	0.011
17:00 - 18:00	3	30	0.000	3	30	0.000	3	30	0.000
18:00 - 19:00	3	30	0.000	3	30	0.000	3	30	0.000
19:00 - 20:00	3	30	0.000	3	30	0.000	3	30	0.000
20:00 - 21:00	3	30	0.000	3	30	0.000	3	30	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.033			0.044

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/A - HOUSES PRIVATELY OWNED
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	3	30	0.044	3	30	0.231	3	30	0.275
08:00 - 09:00	3	30	0.110	3	30	0.286	3	30	0.396
09:00 - 10:00	3	30	0.033	3	30	0.110	3	30	0.143
10:00 - 11:00	3	30	0.044	3	30	0.077	3	30	0.121
11:00 - 12:00	3	30	0.044	3	30	0.121	3	30	0.165
12:00 - 13:00	3	30	0.055	3	30	0.066	3	30	0.121
13:00 - 14:00	3	30	0.132	3	30	0.044	3	30	0.176
14:00 - 15:00	3	30	0.066	3	30	0.099	3	30	0.165
15:00 - 16:00	3	30	0.066	3	30	0.088	3	30	0.154
16:00 - 17:00	3	30	0.132	3	30	0.011	3	30	0.143
17:00 - 18:00	3	30	0.220	3	30	0.033	3	30	0.253
18:00 - 19:00	3	30	0.363	3	30	0.121	3	30	0.484
19:00 - 20:00	3	30	0.231	3	30	0.132	3	30	0.363
20:00 - 21:00	3	30	0.132	3	30	0.055	3	30	0.187
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.672			1.474			3.146

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/A - HOUSES PRIVATELY OWNED
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): 2.88

	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	3	30	0.198	3	30	0.681	3	30	0.879
08:00 - 09:00	3	30	0.473	3	30	1.242	3	30	1.715
09:00 - 10:00	3	30	0.440	3	30	0.736	3	30	1.176
10:00 - 11:00	3	30	0.495	3	30	0.473	3	30	0.968
11:00 - 12:00	3	30	0.495	3	30	0.473	3	30	0.968
12:00 - 13:00	3	30	0.505	3	30	0.582	3	30	1.087
13:00 - 14:00	3	30	0.593	3	30	0.582	3	30	1.175
14:00 - 15:00	3	30	0.352	3	30	0.429	3	30	0.781
15:00 - 16:00	3	30	0.846	3	30	0.484	3	30	1.330
16:00 - 17:00	3	30	0.615	3	30	0.319	3	30	0.934
17:00 - 18:00	3	30	0.912	3	30	0.495	3	30	1.407
18:00 - 19:00	3	30	1.231	3	30	0.802	3	30	2.033
19:00 - 20:00	3	30	1.077	3	30	0.758	3	30	1.835
20:00 - 21:00	3	30	0.857	3	30	0.604	3	30	1.461
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			9.089			8.660			17.749

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/A - HOUSES PRIVATELY OWNED
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	3	30	0.044	3	30	0.198	3	30	0.242
08:00 - 09:00	3	30	0.132	3	30	0.297	3	30	0.429
09:00 - 10:00	3	30	0.099	3	30	0.110	3	30	0.209
10:00 - 11:00	3	30	0.143	3	30	0.143	3	30	0.286
11:00 - 12:00	3	30	0.143	3	30	0.110	3	30	0.253
12:00 - 13:00	3	30	0.154	3	30	0.088	3	30	0.242
13:00 - 14:00	3	30	0.132	3	30	0.176	3	30	0.308
14:00 - 15:00	3	30	0.066	3	30	0.066	3	30	0.132
15:00 - 16:00	3	30	0.165	3	30	0.132	3	30	0.297
16:00 - 17:00	3	30	0.099	3	30	0.077	3	30	0.176
17:00 - 18:00	3	30	0.198	3	30	0.143	3	30	0.341
18:00 - 19:00	3	30	0.352	3	30	0.231	3	30	0.583
19:00 - 20:00	3	30	0.264	3	30	0.198	3	30	0.462
20:00 - 21:00	3	30	0.242	3	30	0.220	3	30	0.462
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.233			2.189			4.422

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/A - HOUSES PRIVATELY OWNED
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	3	30	0.000	3	30	0.011	3	30	0.011
08:00 - 09:00	3	30	0.066	3	30	0.033	3	30	0.099
09:00 - 10:00	3	30	0.044	3	30	0.055	3	30	0.099
10:00 - 11:00	3	30	0.055	3	30	0.077	3	30	0.132
11:00 - 12:00	3	30	0.044	3	30	0.044	3	30	0.088
12:00 - 13:00	3	30	0.055	3	30	0.088	3	30	0.143
13:00 - 14:00	3	30	0.044	3	30	0.044	3	30	0.088
14:00 - 15:00	3	30	0.033	3	30	0.044	3	30	0.077
15:00 - 16:00	3	30	0.055	3	30	0.044	3	30	0.099
16:00 - 17:00	3	30	0.033	3	30	0.011	3	30	0.044
17:00 - 18:00	3	30	0.055	3	30	0.044	3	30	0.099
18:00 - 19:00	3	30	0.055	3	30	0.055	3	30	0.110
19:00 - 20:00	3	30	0.022	3	30	0.022	3	30	0.044
20:00 - 21:00	3	30	0.033	3	30	0.044	3	30	0.077
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.594			0.616			1.210

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/A - HOUSES PRIVATELY OWNED
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. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	30	0.011	3	30	0.000	3	30	0.011
08:00 - 09:00	3	30	0.000	3	30	0.000	3	30	0.000
09:00 - 10:00	3	30	0.011	3	30	0.011	3	30	0.022
10:00 - 11:00	3	30	0.000	3	30	0.000	3	30	0.000
11:00 - 12:00	3	30	0.000	3	30	0.011	3	30	0.011
12:00 - 13:00	3	30	0.000	3	30	0.000	3	30	0.000
13:00 - 14:00	3	30	0.000	3	30	0.000	3	30	0.000
14:00 - 15:00	3	30	0.000	3	30	0.011	3	30	0.011
15:00 - 16:00	3	30	0.000	3	30	0.000	3	30	0.000
16:00 - 17:00	3	30	0.000	3	30	0.000	3	30	0.000
17:00 - 18:00	3	30	0.000	3	30	0.000	3	30	0.000
18:00 - 19:00	3	30	0.000	3	30	0.000	3	30	0.000
19:00 - 20:00	3	30	0.011	3	30	0.000	3	30	0.011
20:00 - 21:00	3	30	0.044	3	30	0.022	3	30	0.066
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.077			0.055			0.132

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL Underground 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	3	30	0.011	3	30	0.110	3	30	0.121
08:00 - 09:00	3	30	0.022	3	30	0.088	3	30	0.110
09:00 - 10:00	3	30	0.011	3	30	0.055	3	30	0.066
10:00 - 11:00	3	30	0.022	3	30	0.011	3	30	0.033
11:00 - 12:00	3	30	0.011	3	30	0.033	3	30	0.044
12:00 - 13:00	3	30	0.011	3	30	0.033	3	30	0.044
13:00 - 14:00	3	30	0.022	3	30	0.000	3	30	0.022
14:00 - 15:00	3	30	0.022	3	30	0.011	3	30	0.033
15:00 - 16:00	3	30	0.011	3	30	0.033	3	30	0.044
16:00 - 17:00	3	30	0.022	3	30	0.000	3	30	0.022
17:00 - 18:00	3	30	0.055	3	30	0.011	3	30	0.066
18:00 - 19:00	3	30	0.132	3	30	0.011	3	30	0.143
19:00 - 20:00	3	30	0.088	3	30	0.011	3	30	0.099
20:00 - 21:00	3	30	0.022	3	30	0.022	3	30	0.044
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.462			0.429			0.891

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL Overground 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	3	30	0.011	3	30	0.000	3	30	0.011
08:00 - 09:00	3	30	0.011	3	30	0.033	3	30	0.044
09:00 - 10:00	3	30	0.000	3	30	0.011	3	30	0.011
10:00 - 11:00	3	30	0.011	3	30	0.000	3	30	0.011
11:00 - 12:00	3	30	0.000	3	30	0.011	3	30	0.011
12:00 - 13:00	3	30	0.000	3	30	0.011	3	30	0.011
13:00 - 14:00	3	30	0.011	3	30	0.000	3	30	0.011
14:00 - 15:00	3	30	0.000	3	30	0.011	3	30	0.011
15:00 - 16:00	3	30	0.000	3	30	0.000	3	30	0.000
16:00 - 17:00	3	30	0.011	3	30	0.000	3	30	0.011
17:00 - 18:00	3	30	0.000	3	30	0.000	3	30	0.000
18:00 - 19:00	3	30	0.022	3	30	0.022	3	30	0.044
19:00 - 20:00	3	30	0.011	3	30	0.011	3	30	0.022
20:00 - 21:00	3	30	0.011	3	30	0.000	3	30	0.011
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.099			0.110			0.209

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL National Rail 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	3	30	0.000	3	30	0.044	3	30	0.044
08:00 - 09:00	3	30	0.000	3	30	0.022	3	30	0.022
09:00 - 10:00	3	30	0.000	3	30	0.000	3	30	0.000
10:00 - 11:00	3	30	0.000	3	30	0.000	3	30	0.000
11:00 - 12:00	3	30	0.000	3	30	0.000	3	30	0.000
12:00 - 13:00	3	30	0.000	3	30	0.000	3	30	0.000
13:00 - 14:00	3	30	0.011	3	30	0.000	3	30	0.011
14:00 - 15:00	3	30	0.000	3	30	0.022	3	30	0.022
15:00 - 16:00	3	30	0.000	3	30	0.022	3	30	0.022
16:00 - 17:00	3	30	0.000	3	30	0.000	3	30	0.000
17:00 - 18:00	3	30	0.055	3	30	0.000	3	30	0.055
18:00 - 19:00	3	30	0.011	3	30	0.000	3	30	0.011
19:00 - 20:00	3	30	0.033	3	30	0.000	3	30	0.033
20:00 - 21:00	3	30	0.011	3	30	0.000	3	30	0.011
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.121			0.110			0.231

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL Bus 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	3	30	0.022	3	30	0.077	3	30	0.099
08:00 - 09:00	3	30	0.077	3	30	0.110	3	30	0.187
09:00 - 10:00	3	30	0.022	3	30	0.044	3	30	0.066
10:00 - 11:00	3	30	0.011	3	30	0.066	3	30	0.077
11:00 - 12:00	3	30	0.033	3	30	0.077	3	30	0.110
12:00 - 13:00	3	30	0.044	3	30	0.022	3	30	0.066
13:00 - 14:00	3	30	0.088	3	30	0.044	3	30	0.132
14:00 - 15:00	3	30	0.044	3	30	0.055	3	30	0.099
15:00 - 16:00	3	30	0.055	3	30	0.033	3	30	0.088
16:00 - 17:00	3	30	0.088	3	30	0.011	3	30	0.099
17:00 - 18:00	3	30	0.110	3	30	0.022	3	30	0.132
18:00 - 19:00	3	30	0.198	3	30	0.088	3	30	0.286
19:00 - 20:00	3	30	0.099	3	30	0.110	3	30	0.209
20:00 - 21:00	3	30	0.088	3	30	0.033	3	30	0.121
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.979			0.792			1.771

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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL Servicing Vehicles
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	3	30	0.011	3	30	0.011	3	30	0.022
08:00 - 09:00	3	30	0.055	3	30	0.044	3	30	0.099
09:00 - 10:00	3	30	0.055	3	30	0.077	3	30	0.132
10:00 - 11:00	3	30	0.099	3	30	0.066	3	30	0.165
11:00 - 12:00	3	30	0.055	3	30	0.044	3	30	0.099
12:00 - 13:00	3	30	0.044	3	30	0.077	3	30	0.121
13:00 - 14:00	3	30	0.044	3	30	0.044	3	30	0.088
14:00 - 15:00	3	30	0.044	3	30	0.033	3	30	0.077
15:00 - 16:00	3	30	0.066	3	30	0.044	3	30	0.110
16:00 - 17:00	3	30	0.022	3	30	0.033	3	30	0.055
17:00 - 18:00	3	30	0.066	3	30	0.055	3	30	0.121
18:00 - 19:00	3	30	0.055	3	30	0.066	3	30	0.121
19:00 - 20:00	3	30	0.055	3	30	0.033	3	30	0.088
20:00 - 21:00	3	30	0.011	3	30	0.044	3	30	0.055
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.682			0.671			1.353

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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