Aval Consulting Group.

Transport Statement

52 Avenue Road, St Johns Wood, London NW8 6HS

52 Avenue Road Limited

April 2022

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1 Introduction

1.1 Background

AVAL Consulting Group Limited (ACGL) has been commissioned by 52 Avenue Road Limited to provide the Transport Statement for the provision of 12no. residential units (houses) at 52 Avenue Road, St Johns Wood, London NW8 6HS. This is to accompany the Planning Application to the Local Authority (London Borough of Camden (LBC)) for consent to undertake the proposed work at the site.

The proposed scheme involves the demolition of the existing building on site and re-development with 12no. x townhouses including communal Health and Wellness Spa with refuse storage, disabled parking and cycle parking.

This Transport Statement will be used to support the Planning Application for this scheme. It will appraise the effects of the proposed changes at the site on the local highway network, public transport, footways and cycleways and on-street parking conditions.

This TS has been carried out in accordance with good practice guidelines and has been prepared in accordance with TfL Travel Planning Guidance, National Planning Policy Framework (NPPF) (2021), Adopted London Plan (2021) and current Planning Guidance documents.

1.2 Site Location

Figure 1.1 shows the proposed site location. The site for the proposed development is bounded by residential properties to the north and east, Avenue Road to the south and Elsworthy Road to the west.

1.3 Report Structure

The remainder of this TS is presented in the following order:

- Chapter 2: Relevant national and regional applicable policies;
- Chapter 3: Existing Baseline Conditions;
- Chapter 4: Development Proposal;
- Chapter 5: Forecast Trip Generation and Transport Impacts;
- Chapter 6: Delivery and Servicing Plan
- Chapter 7: Travel Planning; and
- Chapter 8: Conclusion.

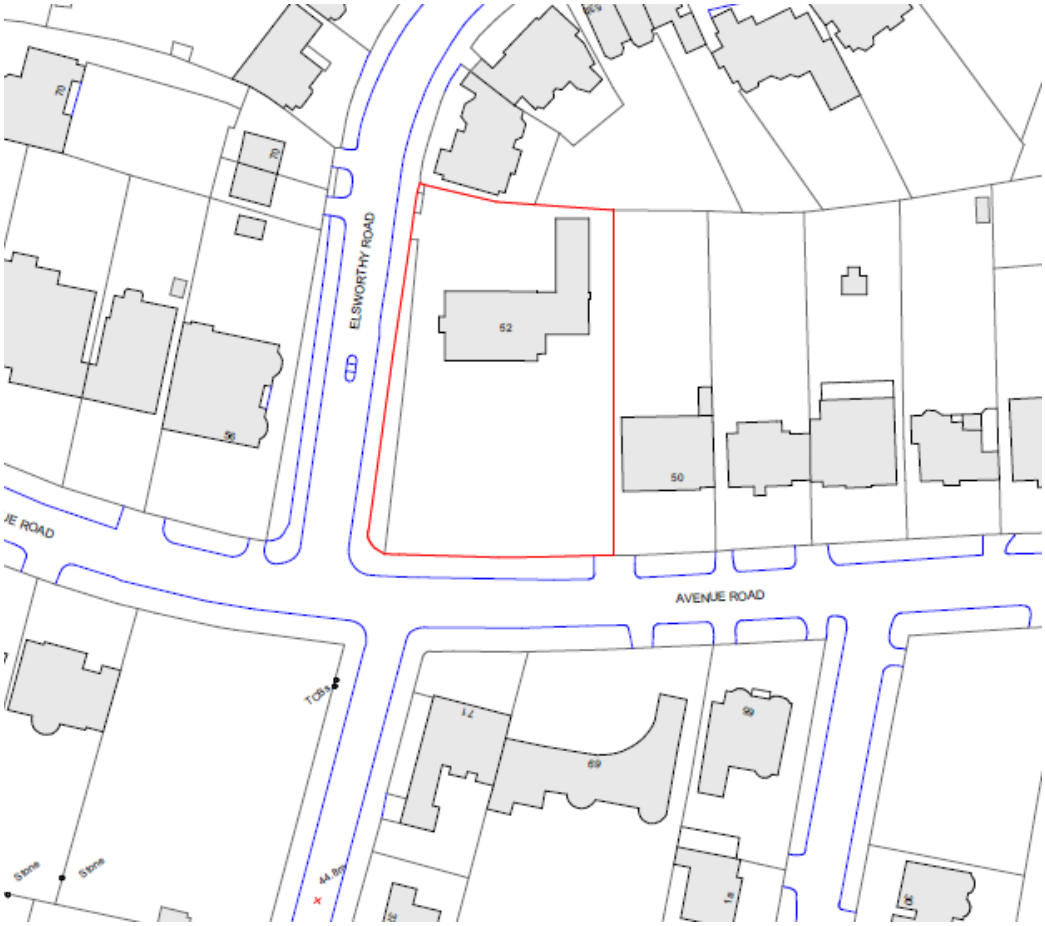


Figure 1.1: Proposed site location (image source: Client)

2 Policy and Guidance

This section lists all the latest regional and local policy, statutory and non-statutory guidelines relevant to the proposed development.

2.1 National Guidance

2.1.1 National Planning Policy Framework (2021)

The principal national planning policy guidance with respect to the proposed development is the National Planning Policy Framework (NPPF). The most recent update of the NPPF was published on 20 July 2021 by the Ministry of Housing, Communities and Local Government. The NPPF sets out the government's planning policies for England and how these are expected to be applied.

This revised Framework replaces the previous National Planning Policy Framework published in March 2012, revised in July 2018 and updated in February 2019.

Three dimensions to sustainable development have been identified in the NPPF: economic, social and environmental.

The proposed development complies with guidance and requirements set out in this Revised NPPF.

The NPPF has a "presumption in favour of sustainable development" and includes the following principles of relevance to this site:

- To drive and support economic development;
- To seek to secure high quality design; and
- Manage growth by making full use of public transport, walking and cycling and focusing development in locations which are or can be made sustainable.

The policy suggests that plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable modes can be maximised. Development should be located and designed where practical to achieve the following:

- Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians; and
- Consider the needs of disabled people by all modes of transport.

2.1.2 National Planning Practice Guidance (NPPG, 2014)

Lessening the traffic generation NPPG is a web-based resource which brings together planning guidance on various topics into one place. It was launched in March 2014 and coincided with the cancelling of the majority of Government Circulars which had previously given guidance on many aspects of planning.

The guidance note on 'Travel Plans, Transport Assessments and Statements' provides advice on when Transport Assessments and Transport Statements (TS) are required, and what they should contain. This has been referred to when preparing this report.

The above web-based NPPG replaces The Guidance on Transport Assessments (GTA) that was withdrawn in 2014. In it, the overarching principles in the preparation of Transport Assessments, Transport Statements and Travel Plans (TPs) are laid out.

It advises that a TS is a 'lighter touch' assessment, whereas a TA is a more thorough assessment. A TS can be used in the case of developments with anticipated limited transport impacts (and limited vehicle impacts) and where fewer than 80 units are proposed.

The guidance highlights that TAs, TSs and TPs are important because they can positively contribute to:

- Encouraging sustainable travel;
- and its detrimental impacts;
- Reducing carbons emissions and climate impacts;
- Creating accessible, connected, inclusive communities;
- Improving health outcomes and quality of life;
- Improving road safety; and
- Reducing the need for new developments to increase existing road capacity or provide new roads.

2.2 Regional Guidance

2.2.1 Adopted London Plan (March 2021)

The London Plan sets out the integrated economic, environment, transport and social framework for the development of London over the next 20 – 25 years. The London Plan was adopted in January 2011, and has subsequently been revised a number of times, with a recent version prior to this being the ItP Draft London Plan (Dec 2019) and then the Publication London Plan (Dec 2020).

It is, however, the most up-to-date London Plan (March 2021) that has been referred to here. Residential parking standards, cycle parking standards, public realm and accessibility policies relevant to this application have all been drawn from this version of the London Plan.

Specific transport policies are described in Chapter 6 of the London Plan with parking policies discussed in Sections 6.1 and 6.2. Without reproducing the detailed content

of each policy, integrating transport and development is the central theme, with an aspiration to encourage development that reduces the need to travel, especially by car, and locating developments that generate high levels of trips at locations with either current or committed high levels of accessibility to public transport, cycling and pedestrian networks.

The London Plan identifies that development proposals should support sustainable travel through the inclusion of appropriate cycle parking and facilities, high-quality pedestrian environments and details car parking standards for various forms of land use.

2.3 Local Guidance

2.3.1 Camden's Local Plan

Camden's Local Plan was adopted by Council on 3 July 2017.

Section 10.1 states:

"*With Camden's population forecast set to grow by nearly 2,000 per year until 2031, our challenge is to ensure that growth is supported by healthy and sustainable transport choices."*

Section 10.2 states:

"Between 2006 and 2014, trips by car in Camden reduced by 31%, whilst total motor vehicle trips reduced by 27%. Through policies within this section we will build upon this by prioritising sustainable transport such as walking, cycling and public transport and seek to minimise the use of motor vehicles to transport both people and freight. Sustainable transport supports the primary aims and objectives of both the Camden Transport Strategy 2011 and the Camden Plan."

Sections 10.5 and 10.6 states:

"One of the key aims of the Camden Plan is to enable communities across Camden to become more sustainable so that they can do more to help themselves and each other. Creating safe attractive, neighbourhoods which promote walking and reduce the dominance of motor vehicles in particular have been found to be associated with increased social interactions and a sense of community. It can also help to create a sense of place and give an area identity.

Access to jobs, training, education, support services, shopping, friends and relatives, leisure and participation in community life is dependent on people's ability to move around. Promoting the use of sustainable transport which is more affordable and more easily accessible therefore provides an alternative to car use and ensures that people unable to use or afford cars are not excluded or isolated."

Section 10.7 states:

"The Council will consider the impacts of movements to, from and within a site, including links to existing transport networks via transport assessments, travel plans, delivery and servicing management plans and construction management

plans. The application of these documents is covered within Policy A1 Managing the impact of development."

Policy T1 prioritising walking, cycling and public transport states:

"The Council will promote sustainable transport by prioritising walking, cycling and public transport in the borough.

Walking

In order to promote walking in the borough and improve the pedestrian environment, we will seek to ensure that developments:

a) *improve the pedestrian environment by supporting high quality public realm improvement works;*
b) *make improvements to the pedestrian environment including the provision of high quality safe road crossings where needed, seating, signage and landscaping;*
c) *are easy and safe to walk through ('permeable');*
d) *are adequately lit;*
e) *provide high quality footpaths and pavements that are wide enough for the number of people expected to use them. Features should also be included to assist vulnerable road users where appropriate; and*
f) *contribute towards bridges and water crossings where appropriate.*

Cycling

In order to promote cycling in the borough and ensure a safe and accessible environment for cyclists, the Council will seek to ensure that development:

g) *provides for and makes contributions towards connected, high quality, convenient and safe cycle routes, in line or exceeding London Cycle Design Standards, including the implementation of the Central London Grid, Quietways Network, Cycle Super Highways and;*
h) *provides for accessible, secure cycle parking facilities exceeding minimum standards outlined within the London Plan (Table 6.3) and design requirements outlined within our supplementary planning document Camden Planning Guidance on transport. Higher levels of provision may also be required in areas well served by cycle route infrastructure, taking into account the size and location of the development;*
i) *makes provision for high quality facilities that promote cycle usage including changing rooms, showers, dryers and lockers;*
j) *j. is easy and safe to cycle through ('permeable'); and*
k) *k. contribute towards bridges and water crossings suitable for cycle use where appropriate.*

Public Transport

In order to safeguard and promote the provision of public transport in the borough we will seek to ensure that development contributes towards improvements to bus network infrastructure including access to bus stops, shelters, passenger seating, waiting areas, signage and timetable information. Contributions will be sought

where the demand for bus services generated by the development is likely to exceed existing capacity. Contributions may also be sought towards the improvement of other forms of public transport in major developments where appropriate.

Where appropriate, development will also be required to provide for interchanging between different modes of transport including facilities to make interchange easy and convenient for all users and maintain passenger comfort."

Policy T2 Parking and car-free development states:

"The Council will limit the availability of parking and require all new developments in the borough to be car-free. We will:

a) *not issue on-street or on-site parking permits in connection with new developments and use legal agreements to ensure that future occupants are aware that they are not entitled to on-street parking permits;*
b) *limit on-site parking to: i. spaces designated for disabled people where necessary, and/or ii. essential operational or servicing needs;*
c) *support the redevelopment of existing car parks for alternative uses; and*
d) *resist the development of boundary treatments and gardens to provide vehicle crossovers and on-site parking."*

Sections 10.17 and 10.18 state:

"Car-free development means that no car parking spaces are provided within the site other than those reserved for disabled people and businesses and services reliant upon parking, where this is integral to their nature, operational and/or servicing requirements (e.g. emergency services, storage and distribution uses). In addition, current and future occupiers are not issued with on-street parking permits.

All new residential developments in the borough should be car-free. Parking will only be considered for new non-residential developments where it can be demonstrated that the parking provided is essential to the use or operation of the development. Staff parking is not considered essential and will not be permitted. Parking for disabled people for both residential and non-residential developments should be provided where it can be demonstrated as necessary, taking into account existing availability of on-street parking for Blue Badge holders. Further information can be found within Camden Planning Guidance on transport."

3 Existing Transport Conditions

3.1 Existing Site Context and Location

52 Avenue Road currently contains one detached residential property, which is derelict. There is a large garden / soft landscaped space on site. The current site entrance is from Elsworthy Road that joins the B525 Avenue Road, which runs from A5205 Prince Albert Road in the south and the A41 to the north. The site is surrounded by residential properties.

The site is bounded by the residential properties to the north and east, Avenue Road to the south and Elsworthy Road to the west.

The existing site layout plan is provided in Appendix A.

In summary, the site is in a sustainable location within a short and desirable walking distance of many facilities such as shops, bus stops, an underground and overground station, pharmacy and schools.

3.2 Local Transport Conditions

It is easy to access the B525 Avenue Road, which lies along the southern boundary of the site. Avenue Road connects to the A5205 Prince Albert Road to the south and A41 to the north. The M1 can be reached by travelling north-west to the A41 and then westbound along the A406 North Circular Road. The M1 can be reached in 14 minutes by car.

Avenue Road has adequate footways on both sides close to the site. There is a pedestrian zebra crossing on Avenue Road approximately 100m south-east of the entrance to the site from Avenue Road and a traffic-light controlled pedestrian crossing 40m to the north-west on Avenue Road.

There is no parking space along Avenue Road close to the site, as the road is dominated by cycle lanes and single yellow lines. Where on-street parking does exist in the local area, it is controlled Mon-Fri 8.30am-6pm.

Cycle lanes exist along Avenue Road and the road is subject to a 20mph speed limit, which makes it conducive for cycling. Given the local segregated cycle lanes and speed limits (20mph) on the local roads, cycling in the local area is convenient.

3.3 Public Transport Facilities

The Public Transport Accessibility Level (PTAL) for the site is 4, which means the site has a good level of public transport accessibility. The PTAL report is provided in Appendix B.

The closest bus stops are located approximately 0.3m away on the B509 Adelaide Road to the north-west of the site. These bus stops are located within a 8 minutes' walk of the site. The services 31, C11, N31, 13, 46, 187 and 603. As the stops are served by many buses, the frequency of buses is good, around every 5-15 minutes. These connect the site to Victoria, Paddington, Park Royal, City of London and Camden. The buses are provided by Transport for London (TfL).

South Hampstead Overground Station is within a 13-minute walk of the site to the north-west along Avenue Road and a 4-minute cycle or 3-minute car journey. The station is served by TfL overground trains.

St. John's Wood Underground Station is within an 11-minute walk, 4-minute cycle and 3-minute car journey of the site to the south-west. The Underground Station is on the Jubilee Line.

3.4 Local Parking Facilities

The site currently has on-site car parking for multiple vehicles.

There is no on-street parking for visitors locally. Most roads are dominated by cycle lanes, double or single yellow lines with restrictions and any on-street parking along Avenue Road is restricted to residential permit parking only between 8.30am and 6pm Monday to Friday. Outside these times, however, it is unrestricted.

3.5 Current Travel Patterns in Local Area

According to Census 2011, within the area immediately surrounding the site, 19% of residents travel to work by car or van, 42% by underground, 4% by train (overground) and 12% on foot. This shows that most residents travel to work by underground train. Census 2011 for the local area also shows that 66% of residents within the area immediately surrounding the site own a car.

In comparison, the Swiss Cottage ward, where the site is situated within, shows 11% of residents travel to work by car or van, 56% by underground, 7% by train (overground) and 9% on foot. It also shows that 50% of residents within the ward own a car. Camden shows 11% of residents travel to work by car or van, 37% by underground, 7% by train (overground) and 18% on foot. Also, 39% of residents within the borough own a car.

The local area around the site therefore has a slightly higher number of residents using car methods of transport on the journey to work than the average for the borough, according to Census 2011. The underground is the most popular method of transport in the local area and borough. Given the underground train station is only an 11-minute walk away, this result is not surprising. This supports the PTAL 4 rating.

3.6 Local Car clubs

The closest local car club space (which is fixed-point / round-trip) is at 155 Fellows Road, Belsize Park, London NW3 3JH, which is 0.4 miles away or a 8-minute walk to the north.

3.6 Local Accident Data Analysis

Accident records close to the site for the last three years (2018-2020) were obtained from CrashMap (see Figure 3.2 below). There have been two serious and seven slight incidents near to the junction of Avenue Road and Elsworthy Road. There have also been three further slight and one further serious accident in the surrounding area. All these accidents involved two vehicles except one which only involved one vehicle. There have been no fatal incidents during the last 3 years within close proximity of the site and at the junction with Elsworthy Road.

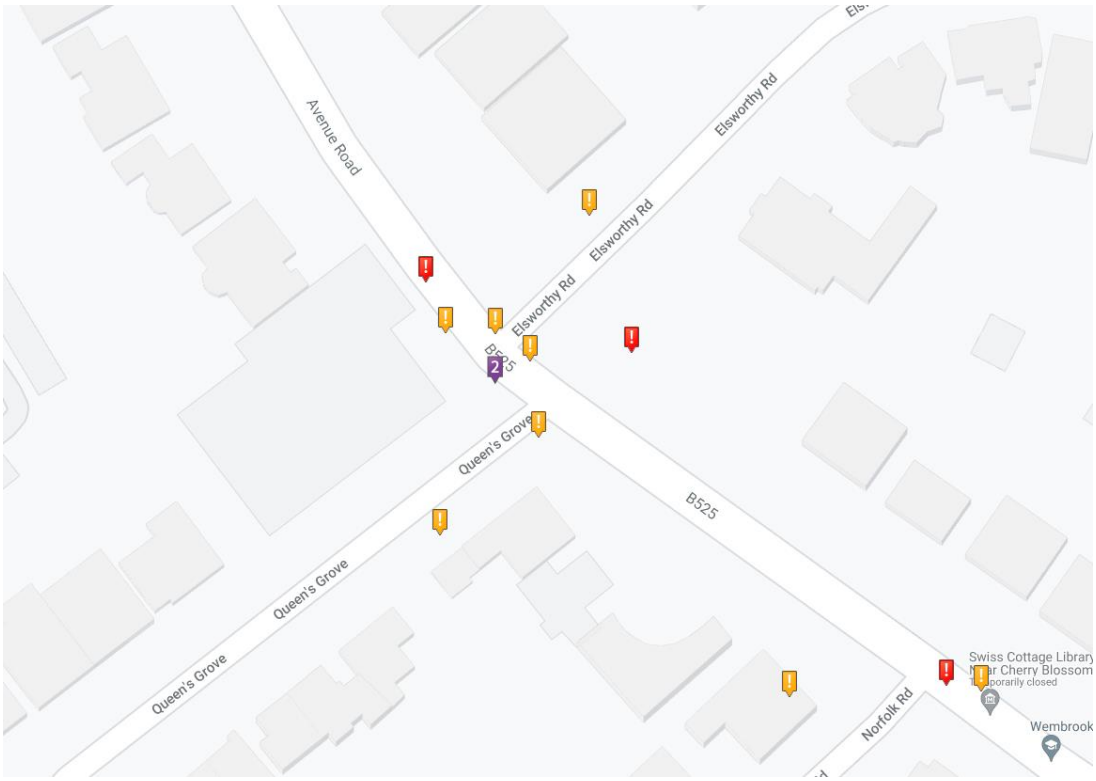


Figure 3.2: Map of Recorded Accidents from 2018-2020 (obtained from CrashMap)

4 Proposed Development

4.1 Proposed Development

The proposed scheme involves the demolition of the existing building on site and re-development with a 12x townhouse development including communal Health and Wellness Spa with refuse storage, disabled parking and cycle parking.

The proposed site layout plan is provided in Appendix C.

The site will be car free with the exception of 2 disabled car parking spaces along the southern boundary of the site. This is in line with local policy.

There will be 24no. cycle spaces provided on-site, which equates to 2 spaces per dwelling, as per the minimum cycle parking standards, according to the Adopted London Plan (2021). These will be in two enclosed cycle stores at the front entrance (southern boundary) to the site. One cycle store will be adjacent to the entrance and the other adjacent to the exit. Each cycle store will store 12no. bicycles.

A further two cycle spaces will be provided for visitors in a public area near to the southern boundary of the site. This will take the form of a Sheffield cycle stand. It will be in an overlooked and secure area along the site frontage, near the proposed disabled bays.

The site will be accessed by vehicles from Avenue Road. Only two disabled bays are being provided on site and so only these vehicles will use the driveway, along with light goods vehicles for deliveries. The driveway will be not be used as a carpark, it will be managed by the concierge at the site so that cars do not park in the driveway and block it for other users. The use of the two disabled bays will be managed to prevent misuse.

The disabled bays have been proposed on site to meet the London Plan (2021) guidance and local guidance. It is considered there is no room to accommodate on-street disabled parking bays close to the site, as there is already a police parking space on Elsworthy Road adjacent to the site and between that and the junction would endanger vehicles approaching the junction. Beyond the police parking space there is a pedestrian refuge island, which prevents any on-street spaces being installed. On Avenue Road there is an on-street cycle lane outside the site and no safe place to install one of two disabled bays on-street. This can be discussed further with the local authority post Planning Application.

No HGVs or refuse vehicles will use the driveway and there will be a notice at the entry to say they cannot. Refuse vehicles and HGVs / larger delivery vehicles will park in Elsworthy Road and not use the driveway. The refuse drivers can meet concierge at the pedestrian gate on Elsworthy Rd to collect the bins, which will be provided in a large refuse and recycling store in the north-east corner of the site. The bins will wheeled or carried to the street by the refuse collectors.

4.2 Parking Provision

4.2.1 Car Parking

The development will be car free with the exception of 2 disabled car parking spaces.

4.2.2 Cycle Parking Spaces

Cycle parking is being provided at the development in line with Policy T5 of the London Plan (2021). This states that cycle parking should be provided at least in accordance with the minimum standards set out below, ensuring that a minimum of two short-stay and two long-stay cycle parking spaces are provided.

Based on the minimum standards of 2 cycle spaces per dwelling, this development requires 24 cycle spaces for residents in an undercover area/shelter. Additionally, 2 cycle spaces are required for visitors.

Cycle parking will be designed and laid out in accordance with the guidance contained in the London Cycling Design Standards 144.

These will be in two enclosed cycle stores at the front entrance (southern boundary) to the site. One cycle store will be adjacent to the entrance and the other adjacent to the exit. Each cycle store will store 12no. bicycles.

4.3 Waste and Recycling Storage Provision / Waste Strategy

The communal refuse/bin store for the proposed development will be placed in the north-east corner of the site.

The residents will be expected to carry their waste to the ground floor store prior to the refuse collection day.

Currently refuse vehicles collect waste from Elsworthy Road and therefore this route is already undertaken.

The route from the pedestrian gate on Elsworthy Road to the refuse store is step-free and the concierge can help drag the bins to the gate for the refuse collectors.

Refuse collection at the proposed development will take place on-street.

4.4 Emergency Access

As the site is located on Avenue Road, access for emergency services is easy. Fire tender vehicle and ambulance vehicle access is improved by having the in/out carriage driveway on site. It also makes it safer for other road users. The proposed entrance is wide enough to accommodate a fire tender vehicle so that it can sit within 45m of any unit on the site.

The nearest fire station is West Hampstead Fire Station which is approximately 7 minutes driving time to reach the proposed development site. Therefore, the time taken to reach the site in case of emergency would be shorter compared to the average national response time of 8 minutes and 49 seconds.

5 Forecast Trip Generation and Transport Impacts

5.1 Introduction

This chapter considers the vehicle trip generation of the proposed residential scheme, so that the impact of the development on the roads and parking space can be considered.

5.2 Forecast Trip Generation

The national TRICS trip generation database version 7.8.2 (updated November 2021) was used to select suitable/similar residential sites, based on location, sustainable accessibility, dwelling numbers and parking numbers. The TRICS database provides vehicle trip rates per dwelling and forecasts/predicts the total number of vehicle trips to the proposed residential scheme.

The vehicle trip rates per dwelling/unit are shown in Table 5.1 for the 12-unit development. The table presents the results for the peak hours of 8-9am and 5-6pm, which are the highest (worst case) peak hours for the AM and PM peaks. A summary of vehicle trips is also provided for the whole day. The hourly trip generation data can be found in Appendix D.

Table 5.1: Forecast Vehicle and Person Trip Generation for 12no. Residential Units.

Per unit and based on 12 units	**AM Peak (0800-0900)**			**PM Peak (1700-1800)**		
	Arrivals	**Departures**	**Total**	**Arrivals**	**Departures**	**Total**
Car Trip Rate	0.091	0.364	0.455	0.212	0.091	0.303
No. of cars	**1**	**4**	**5**	**3**	**1**	**4**
Total Vehicles Trip Rate	0.152	0.364	0.516	0.303	0.152	0.455
No. of Vehicles (in total incl. car, van, servicing vehicle)	**2**	**4**	**6**	**4**	**2**	**6**
Walk Trip Rate	0.061	0.121	0.182	0.273	0.152	0.425
No. of pedestrians	**1**	**1**	**2**	**3**	**2**	**5**
Cycle Trip Rate	0.03	0.121	0.151	0.091	0.03	0.121
No. of cyclists	**0**	**1**	**1**	**1**	**0**	**1**
Bus Trip Rate	0	0	0	0	0	0
No. of bus users	**0**	**0**	**0**	**0**	**0**	**0**
Rail (incl. overground) Trip Rate	0	0.273	0.273	0.091	0.03	0.121
No. of rail users	**0**	**3**	**3**	**1**	**0**	**1**
Daily Vehicles Total	**30**			**31**		

The 12no.residential units are expected to generate a total of 1no. vehicle in trip and 4no. vehicle trips out in the AM peak and 3no. vehicle trips in and 1no. vehicle trips out in the PM peak.

Over the course of the day (7am-7pm), 30no. vehicles are expected to arrive, and 31no. vehicles are expected to leave.

As the development is proposed to be car-free, these vehicle trips are likely to be from the two disabled spaces, residents that park on-street (outside of the restriction times of 8.30am-6pm Mon-Fri), from visitors or visitors picking up or dropping residents off, delivery vehicles and servicing vehicles.

The local Crime Impact Assessment states that the local area is a hot spot for opportunistic crime and multi-generation families that need to be picked up and dropped off. On this basis, it is likely that vehicle trips associated with this development will be related to this activity.

It is likely this is a worst-case scenario, as vehicle trips are likely to be lower than this for a car-free development.

5.3 Person Trips

The development is expected to generate around 2 pedestrian movements (two-way) in the AM peak and 5 pedestrian movements (two-way) in the PM peak.

In terms of cycling, the scheme is expected to generate around 1 cyclist movement (two-way) in the AM peak and 1 cyclist movement (two-way) in the PM peak.

In terms of rail (overground), the scheme is expected to generate around 3 rail movements (two-way) in the AM peak and 1 rail movement (two-way) in the PM peak. However, given the local Census 2011 data shows the most popular method of travel to work in the local area is by underground, this is likely to be higher for this development.

It is expected for this development that there will be fewer car trips and more underground trips than the TRICS forecast data shown.

The development will, however, promote sustainable methods of travel through the Residential Travel Plan. Residents will be encouraged to either walk, cycle or use public transport to promote sustainable methods of transportation. The Residential Travel Plan for the development will highlight the measures and targets to support sustainable transport for the site.

In line with the NPPF 2021, paragraph 109, as the development will not result in an unacceptable impact on safety nor result in a severe impact on the road network, the proposed development should not be refused on highway grounds.

5.4 Proposed Transport Impacts

As stated in Section 5.2, the anticipated vehicle trip generation to/from the development site of 5no. two-way vehicular trips in the morning peak hour and 4no. two-way vehicle trips in the evening peak times is unlikely to cause any highway or safety problems.

Overall, due to the negligible number of predicted vehicular trips during peak hours, no adverse impact on the existing road network is anticipated.

6 Delivery and Servicing Plan

6.1 Delivery and Service Trip Generation

The TRICS database shows that a negligible number of light goods vehicles (LGVs) and servicing vehicles are expected to be generated by this residential development every day. The numbers expected on a daily basis based on the TRICS data (v.7.7.4) are shown in Table 6.1 below. The sites used to generate this forecast are the same as those used to calculate the trip generation in Chapter 5. The TRICS data is provided in Appendix D.

It is forecast that of this, up to two refuse vehicles (one being recycling) may arrive on site every week.

Table 6.1 Forecast Number of Vans and Servicing Vehicles

Time of Day	LGVs		OGVs	
	Arrival	Departure	Arrival	Departure
07:00-08:00	0	0	0	0
08:00-09:00	1	0	0	0
09:00-10:00	0	1	0	0
10:00-11:00	0	0	0	0
11:00-12:00	0	0	0	0
12:00-13:00	0	0	0	0
13:00-14:00	0	0	0	0
14:00-15:00	1	1	0	0
15:00-16:00	0	0	0	0
16:00-17:00	0	0	0	0
17:00-18:00	0	0	0	0
18:00-19:00	0	0	0	0
19:00-20:00	0	0	0	0
20:00-21:00	0	0	0	0

TOTAL (whole day)	**2**	**2**	**0**	**0**

This shows that the expected number of delivery and servicing vehicles forecast to access the site is not expected to cause highway safety issues within the development.

7 Travel Planning

A Travel Plan was prepared by Aval Consulting Group Limited in conjunction with this report. The purpose of the Travel Plan is to encourage the residents to use more sustainable modes of travel other than the private car.

Evidence suggests that a considerable number of car journeys are made for subjective reasons only. Alternatives to the car are therefore a realistic option for many journeys. The full list of travel plan measures are provided in the Travel Plan and some of the key measures that could be applied to this residential scheme are shown below:

- Measures to promote walking and cycling – through providing secure and well-lit cycle parking on-site (this is already proposed) and informing residents of local cycle routes through the distribution of leaflets;
- Marketing of public transport services – by providing residents with promotional material when they first join, containing relevant bus and train timetable information, route maps, telephone numbers and website addresses to meet their travel needs; and
- Information on car parking at site – Informing residents that there are no parking spaces.

8 Conclusion

The proposed scheme will consist of the demolition of the existing building on site and re-development with a 12no. townhouses, including communal Health and Wellness Spa with refuse storage and cycle parking.

There will be 24no. cycle spaces provided in 12no. cycle stands within two cycle stores at the front of the development adjacent to the entrance and exit accesses.

There will be 2 allocated disabled car parking spaces on site. Residents will not be allowed to park on site and will therefore be expected to use other (more sustainable) methods of transport when travelling.

Pedestrians can access the site from Avenue Road and from Elsworthy Road to the rear of the residential units. The site is accessible for cars from Avenue Road to the front of the development site via a carriageway driveway on-site, although this is only for blue badge cars using the two disabled spaces and light delivery vehicles serving the development. The driveway will not be used as a carpark, it will be managed by the concierge at the site so that cars do not park in the driveway and block it. The use of the two disabled bays will be managed.

No HGVs or refuse vehicles will use the driveway and there will be a notice at the entry to say they cannot. Refuse vehicles and HGVs/delivery vehicles will park in Elsworthy Road (or Avenue Road).

The refuse collection people can meet concierge at the gate on Elsworthy Road and collect the bins.

The bin stores will be located in a refuse and recycling store in the north-east corner of the development. This is within a step-free walk route from the pedestrian gate on Elsworthy Road.

The 12no.residential units are expected to generate a total of 1no. vehicle in trip and 4no. vehicle trips out in the AM peak and 3no. vehicle trips in and 2no. vehicle trips out in the PM peak.

Two light goods vehicles (deliveries and refuse) are expected to arrive throughout the day. Two cycle trips are also expected, although it is anticipated this will increase as the on-site car parking is low and residents will be encouraged to cycle.

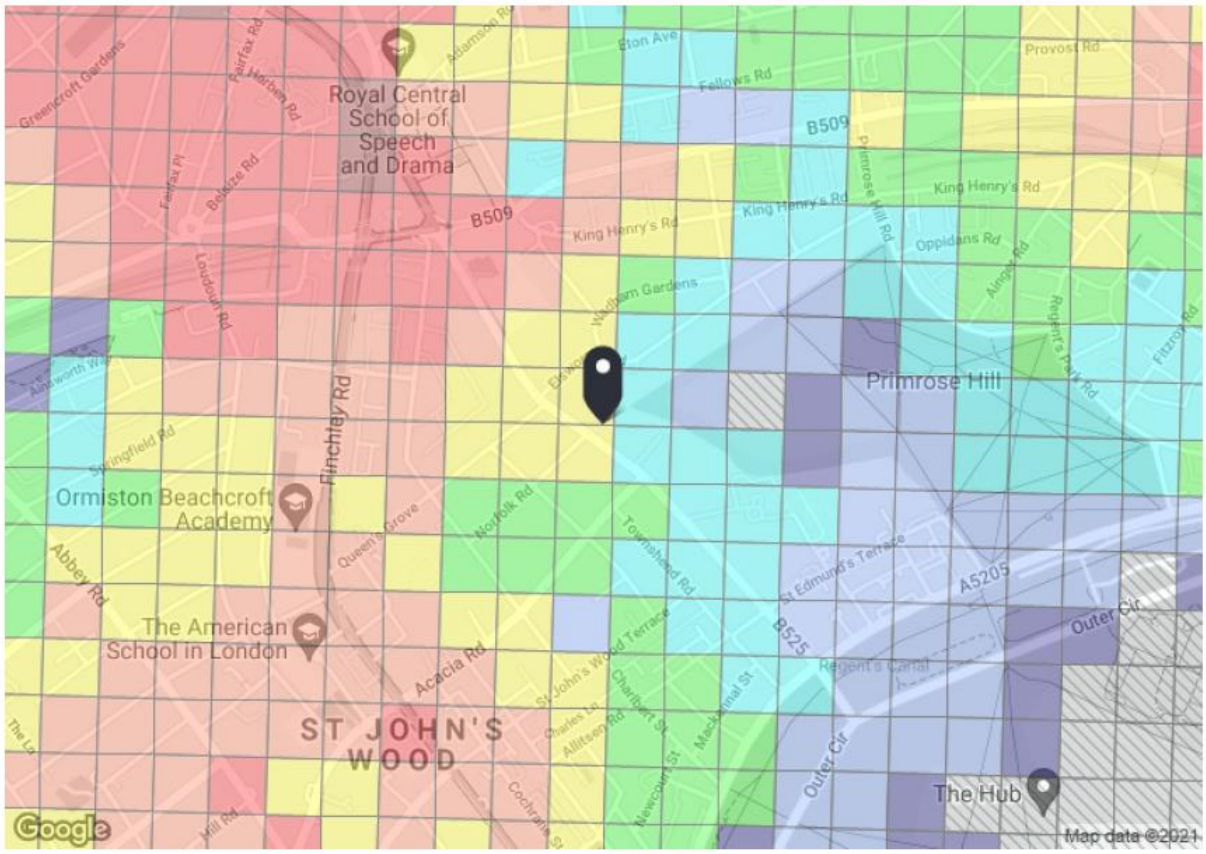
The scheme is expected to generate around 3 rail movements (two-way) in the AM peak and 1 rail movement (two-way) in the PM peak. However, given the local Census 2011 data shows the most popular method of travel to work in the local area is by underground, this is likely to be higher for this development.

Given the vehicle trips are expected to be low, the proposed residential scheme is unlikely to cause any highway or safety problems on the local roads, and no adverse impact on the existing parking area and access road is anticipated.

Appendix A : Existing Site Plan

Appendix B : PTAL Rating

TRANSPORT FOR LONDON



PTAL output for Base Year
4

NW8 6HS
Avenue Road, London NW8 6HS, UK
Easting: 527078, Northing: 183789

Grid Cell: 97166

Report generated: 03/11/2021

Map key- PTAL

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

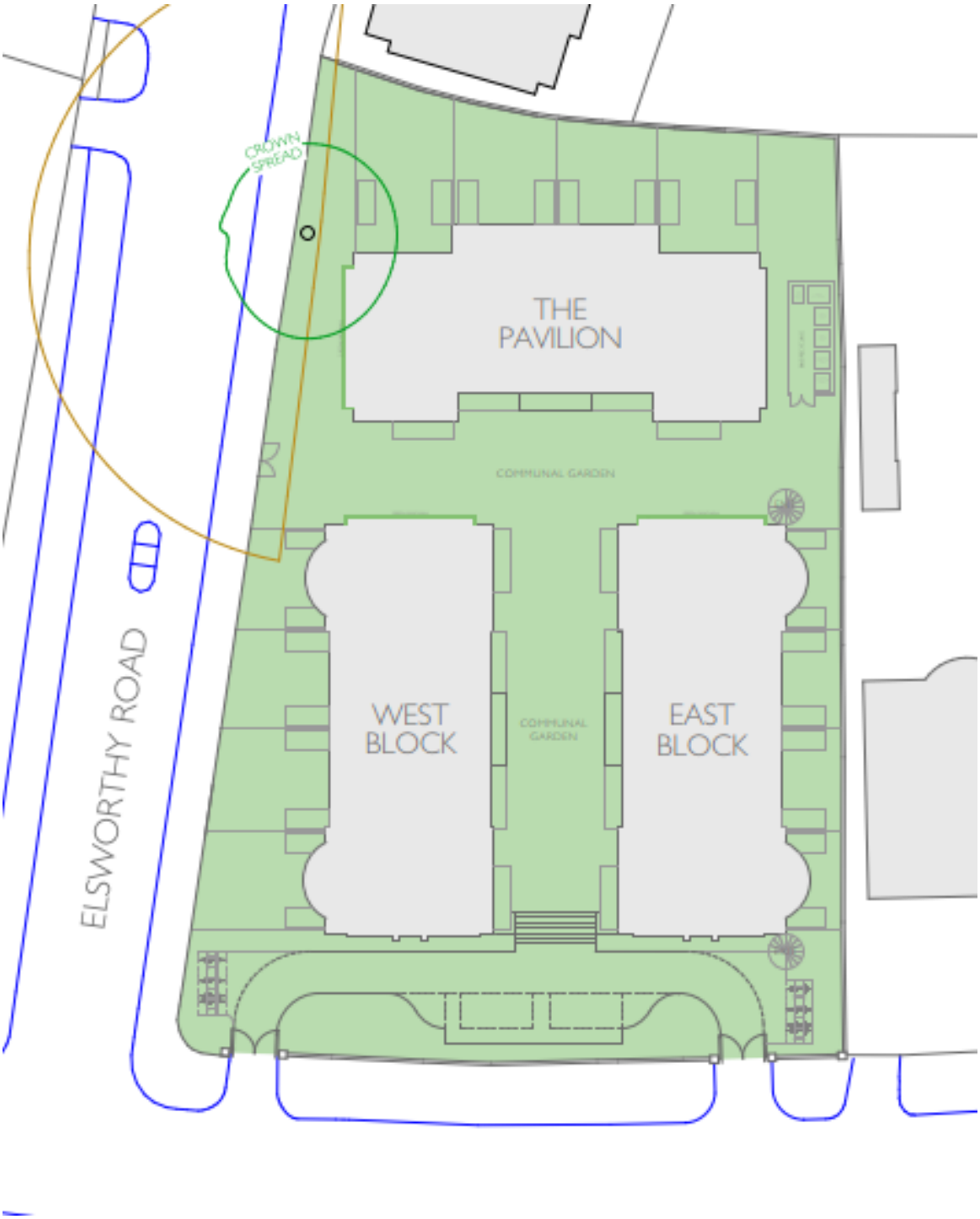
Map layers

PTAL (cell size: 100m)

Calculation Parameters

Dayof 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

Appendix C : Proposed Site Plan



Appendix D : Trip rates from TRICS

Calculation Reference: AUDIT-808401-211104-1130

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		
	WF	WALTHAM FOREST	1 days
08	NORTH WEST		
	LC	LANCASHIRE	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: 9 to 24 (units:)
Range Selected by User: 4 to 100 (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 16/06/21

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:

Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town 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

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	2 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:

5,001 to 10,000	1 days
50,001 to 100,000	1 days

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	1 days

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

Travel Plan:

No	2 days

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

PTAL Rating:

No PTAL Present	1 days
5 Very Good	1 days

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

LIST OF SITES relevant to selection parameters

1 LC-03-A-30 SEMI-DETACHED LANCASHIRE
WATSON ROAD
BLACKPOOL

Edge of Town Centre
Residential Zone
Total No of Dwellings: 24
Survey date: FRIDAY *14/06/13* *Survey Type: MANUAL*

2 WF-03-A-02 SEMI DETACHED & TERRACED WALTHAM FOREST
PALMERSTON ROAD
WALTHAMSTOW

Edge of Town Centre
Residential Zone
Total No of Dwellings: 9
Survey date: THURSDAY *06/06/19* *Survey Type: MANUAL*

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CB-03-A-05	parking
NY-03-A-12	parking
PS-03-A-01	parking
ST-03-A-06	parking
WC-03-A-02	parking
WM-03-A-05	parking
WM-03-A-05	parking
WM-03-A-05	parking
WM-03-A-05	parking

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

	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	2	17	0.091	2	17	0.273	2	17	0.364
08:00 - 09:00	2	17	0.152	2	17	0.364	2	17	0.516
09:00 - 10:00	2	17	0.212	2	17	0.212	2	17	0.424
10:00 - 11:00	2	17	0.152	2	17	0.242	2	17	0.394
11:00 - 12:00	2	17	0.121	2	17	0.091	2	17	0.212
12:00 - 13:00	2	17	0.121	2	17	0.182	2	17	0.303
13:00 - 14:00	2	17	0.212	2	17	0.091	2	17	0.303
14:00 - 15:00	2	17	0.333	2	17	0.424	2	17	0.757
15:00 - 16:00	2	17	0.273	2	17	0.121	2	17	0.394
16:00 - 17:00	2	17	0.212	2	17	0.273	2	17	0.485
17:00 - 18:00	2	17	0.303	2	17	0.152	2	17	0.455
18:00 - 19:00	2	17	0.212	2	17	0.182	2	17	0.394
19:00 - 20:00	1	9	0.000	1	9	0.000	1	9	0.000
20:00 - 21:00	1	9	0.111	1	9	0.000	1	9	0.111
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.505			2.607			5.112

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:	9 - 24 (units:)
Survey date date range:	01/01/13 - 16/06/21
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	9

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	2	17	0.000	2	17	0.030	2	17	0.030
08:00 - 09:00	2	17	0.000	2	17	0.000	2	17	0.000
09:00 - 10:00	2	17	0.030	2	17	0.000	2	17	0.030
10:00 - 11:00	2	17	0.061	2	17	0.091	2	17	0.152
11:00 - 12:00	2	17	0.000	2	17	0.000	2	17	0.000
12:00 - 13:00	2	17	0.000	2	17	0.000	2	17	0.000
13:00 - 14:00	2	17	0.061	2	17	0.030	2	17	0.091
14:00 - 15:00	2	17	0.030	2	17	0.030	2	17	0.060
15:00 - 16:00	2	17	0.030	2	17	0.061	2	17	0.091
16:00 - 17:00	2	17	0.030	2	17	0.061	2	17	0.091
17:00 - 18:00	2	17	0.061	2	17	0.030	2	17	0.091
18:00 - 19:00	2	17	0.030	2	17	0.061	2	17	0.091
19:00 - 20:00	1	9	0.000	1	9	0.000	1	9	0.000
20:00 - 21:00	1	9	0.000	1	9	0.000	1	9	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.333			0.394			0.727

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	2	17	0.000	2	17	0.000	2	17	0.000
08:00 - 09:00	2	17	0.000	2	17	0.000	2	17	0.000
09:00 - 10:00	2	17	0.030	2	17	0.000	2	17	0.030
10:00 - 11:00	2	17	0.000	2	17	0.030	2	17	0.030
11:00 - 12:00	2	17	0.000	2	17	0.000	2	17	0.000
12:00 - 13:00	2	17	0.000	2	17	0.000	2	17	0.000
13:00 - 14:00	2	17	0.030	2	17	0.030	2	17	0.060
14:00 - 15:00	2	17	0.000	2	17	0.000	2	17	0.000
15:00 - 16:00	2	17	0.000	2	17	0.000	2	17	0.000
16:00 - 17:00	2	17	0.000	2	17	0.000	2	17	0.000
17:00 - 18:00	2	17	0.000	2	17	0.000	2	17	0.000
18:00 - 19:00	2	17	0.000	2	17	0.000	2	17	0.000
19:00 - 20:00	1	9	0.000	1	9	0.000	1	9	0.000
20:00 - 21:00	1	9	0.000	1	9	0.000	1	9	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.060			0.060			0.120

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	2	17	0.000	2	17	0.000	2	17	0.000
08:00 - 09:00	2	17	0.030	2	17	0.121	2	17	0.151
09:00 - 10:00	2	17	0.000	2	17	0.000	2	17	0.000
10:00 - 11:00	2	17	0.000	2	17	0.061	2	17	0.061
11:00 - 12:00	2	17	0.000	2	17	0.000	2	17	0.000
12:00 - 13:00	2	17	0.061	2	17	0.000	2	17	0.061
13:00 - 14:00	2	17	0.030	2	17	0.000	2	17	0.030
14:00 - 15:00	2	17	0.030	2	17	0.000	2	17	0.030
15:00 - 16:00	2	17	0.000	2	17	0.000	2	17	0.000
16:00 - 17:00	2	17	0.000	2	17	0.030	2	17	0.030
17:00 - 18:00	2	17	0.091	2	17	0.030	2	17	0.121
18:00 - 19:00	2	17	0.000	2	17	0.030	2	17	0.030
19:00 - 20:00	1	9	0.111	1	9	0.000	1	9	0.111
20:00 - 21:00	1	9	0.000	1	9	0.000	1	9	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.353			0.272			0.625

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	2	17	0.091	2	17	0.333	2	17	0.424
08:00 - 09:00	2	17	0.152	2	17	0.515	2	17	0.667
09:00 - 10:00	2	17	0.242	2	17	0.242	2	17	0.484
10:00 - 11:00	2	17	0.152	2	17	0.333	2	17	0.485
11:00 - 12:00	2	17	0.152	2	17	0.182	2	17	0.334
12:00 - 13:00	2	17	0.182	2	17	0.212	2	17	0.394
13:00 - 14:00	2	17	0.273	2	17	0.091	2	17	0.364
14:00 - 15:00	2	17	0.455	2	17	0.576	2	17	1.031
15:00 - 16:00	2	17	0.424	2	17	0.121	2	17	0.545
16:00 - 17:00	2	17	0.364	2	17	0.364	2	17	0.728
17:00 - 18:00	2	17	0.485	2	17	0.182	2	17	0.667
18:00 - 19:00	2	17	0.242	2	17	0.273	2	17	0.515
19:00 - 20:00	1	9	0.000	1	9	0.000	1	9	0.000
20:00 - 21:00	1	9	0.111	1	9	0.000	1	9	0.111
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.325			3.424			6.749

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 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	2	17	0.000	2	17	0.061	2	17	0.061
08:00 - 09:00	2	17	0.061	2	17	0.121	2	17	0.182
09:00 - 10:00	2	17	0.121	2	17	0.182	2	17	0.303
10:00 - 11:00	2	17	0.121	2	17	0.121	2	17	0.242
11:00 - 12:00	2	17	0.061	2	17	0.091	2	17	0.152
12:00 - 13:00	2	17	0.061	2	17	0.030	2	17	0.091
13:00 - 14:00	2	17	0.030	2	17	0.061	2	17	0.091
14:00 - 15:00	2	17	0.091	2	17	0.182	2	17	0.273
15:00 - 16:00	2	17	0.152	2	17	0.061	2	17	0.213
16:00 - 17:00	2	17	0.061	2	17	0.061	2	17	0.122
17:00 - 18:00	2	17	0.273	2	17	0.152	2	17	0.425
18:00 - 19:00	2	17	0.182	2	17	0.091	2	17	0.273
19:00 - 20:00	1	9	0.000	1	9	0.111	1	9	0.111
20:00 - 21:00	1	9	0.111	1	9	0.000	1	9	0.111
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.325			1.325			2.650

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	2	17	0.000	2	17	0.000	2	17	0.000
08:00 - 09:00	2	17	0.000	2	17	0.000	2	17	0.000
09:00 - 10:00	2	17	0.000	2	17	0.030	2	17	0.030
10:00 - 11:00	2	17	0.000	2	17	0.000	2	17	0.000
11:00 - 12:00	2	17	0.000	2	17	0.000	2	17	0.000
12:00 - 13:00	2	17	0.000	2	17	0.000	2	17	0.000
13:00 - 14:00	2	17	0.000	2	17	0.000	2	17	0.000
14:00 - 15:00	2	17	0.000	2	17	0.000	2	17	0.000
15:00 - 16:00	2	17	0.000	2	17	0.000	2	17	0.000
16:00 - 17:00	2	17	0.000	2	17	0.000	2	17	0.000
17:00 - 18:00	2	17	0.000	2	17	0.000	2	17	0.000
18:00 - 19:00	2	17	0.000	2	17	0.000	2	17	0.000
19:00 - 20:00	1	9	0.111	1	9	0.000	1	9	0.111
20:00 - 21:00	1	9	0.000	1	9	0.000	1	9	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.111			0.030			0.141

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	2	17	0.000	2	17	0.121	2	17	0.121
08:00 - 09:00	2	17	0.000	2	17	0.273	2	17	0.273
09:00 - 10:00	2	17	0.000	2	17	0.061	2	17	0.061
10:00 - 11:00	2	17	0.000	2	17	0.000	2	17	0.000
11:00 - 12:00	2	17	0.000	2	17	0.030	2	17	0.030
12:00 - 13:00	2	17	0.030	2	17	0.000	2	17	0.030
13:00 - 14:00	2	17	0.030	2	17	0.000	2	17	0.030
14:00 - 15:00	2	17	0.000	2	17	0.000	2	17	0.000
15:00 - 16:00	2	17	0.030	2	17	0.000	2	17	0.030
16:00 - 17:00	2	17	0.061	2	17	0.000	2	17	0.061
17:00 - 18:00	2	17	0.091	2	17	0.030	2	17	0.121
18:00 - 19:00	2	17	0.121	2	17	0.000	2	17	0.121
19:00 - 20:00	1	9	0.222	1	9	0.000	1	9	0.222
20:00 - 21:00	1	9	0.444	1	9	0.000	1	9	0.444
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.029			0.515			1.544

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	2	17	0.000	2	17	0.121	2	17	0.121
08:00 - 09:00	2	17	0.000	2	17	0.273	2	17	0.273
09:00 - 10:00	2	17	0.000	2	17	0.091	2	17	0.091
10:00 - 11:00	2	17	0.000	2	17	0.000	2	17	0.000
11:00 - 12:00	2	17	0.000	2	17	0.030	2	17	0.030
12:00 - 13:00	2	17	0.030	2	17	0.000	2	17	0.030
13:00 - 14:00	2	17	0.030	2	17	0.000	2	17	0.030
14:00 - 15:00	2	17	0.000	2	17	0.000	2	17	0.000
15:00 - 16:00	2	17	0.030	2	17	0.000	2	17	0.030
16:00 - 17:00	2	17	0.061	2	17	0.000	2	17	0.061
17:00 - 18:00	2	17	0.091	2	17	0.030	2	17	0.121
18:00 - 19:00	2	17	0.121	2	17	0.000	2	17	0.121
19:00 - 20:00	1	9	0.333	1	9	0.000	1	9	0.333
20:00 - 21:00	1	9	0.444	1	9	0.000	1	9	0.444
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.140			0.545			1.685

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

	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	2	17	0.091	2	17	0.515	2	17	0.606
08:00 - 09:00	2	17	0.242	2	17	1.030	2	17	1.272
09:00 - 10:00	2	17	0.364	2	17	0.515	2	17	0.879
10:00 - 11:00	2	17	0.273	2	17	0.515	2	17	0.788
11:00 - 12:00	2	17	0.212	2	17	0.303	2	17	0.515
12:00 - 13:00	2	17	0.333	2	17	0.242	2	17	0.575
13:00 - 14:00	2	17	0.364	2	17	0.152	2	17	0.516
14:00 - 15:00	2	17	0.576	2	17	0.758	2	17	1.334
15:00 - 16:00	2	17	0.606	2	17	0.182	2	17	0.788
16:00 - 17:00	2	17	0.485	2	17	0.455	2	17	0.940
17:00 - 18:00	2	17	0.939	2	17	0.394	2	17	1.333
18:00 - 19:00	2	17	0.545	2	17	0.394	2	17	0.939
19:00 - 20:00	1	9	0.444	1	9	0.111	1	9	0.555
20:00 - 21:00	1	9	0.667	1	9	0.000	1	9	0.667
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.141			5.566			11.707

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	2	17	0.091	2	17	0.212	2	17	0.303
08:00 - 09:00	2	17	0.091	2	17	0.364	2	17	0.455
09:00 - 10:00	2	17	0.121	2	17	0.152	2	17	0.273
10:00 - 11:00	2	17	0.061	2	17	0.091	2	17	0.152
11:00 - 12:00	2	17	0.121	2	17	0.091	2	17	0.212
12:00 - 13:00	2	17	0.121	2	17	0.182	2	17	0.303
13:00 - 14:00	2	17	0.121	2	17	0.030	2	17	0.151
14:00 - 15:00	2	17	0.242	2	17	0.333	2	17	0.575
15:00 - 16:00	2	17	0.212	2	17	0.061	2	17	0.273
16:00 - 17:00	2	17	0.182	2	17	0.212	2	17	0.394
17:00 - 18:00	2	17	0.212	2	17	0.091	2	17	0.303
18:00 - 19:00	2	17	0.152	2	17	0.091	2	17	0.243
19:00 - 20:00	1	9	0.000	1	9	0.000	1	9	0.000
20:00 - 21:00	1	9	0.111	1	9	0.000	1	9	0.111
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.838			1.910			3.748

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	2	17	0.000	2	17	0.030	2	17	0.030
08:00 - 09:00	2	17	0.061	2	17	0.000	2	17	0.061
09:00 - 10:00	2	17	0.030	2	17	0.061	2	17	0.091
10:00 - 11:00	2	17	0.030	2	17	0.030	2	17	0.060
11:00 - 12:00	2	17	0.000	2	17	0.000	2	17	0.000
12:00 - 13:00	2	17	0.000	2	17	0.000	2	17	0.000
13:00 - 14:00	2	17	0.000	2	17	0.000	2	17	0.000
14:00 - 15:00	2	17	0.061	2	17	0.061	2	17	0.122
15:00 - 16:00	2	17	0.030	2	17	0.000	2	17	0.030
16:00 - 17:00	2	17	0.000	2	17	0.000	2	17	0.000
17:00 - 18:00	2	17	0.030	2	17	0.030	2	17	0.060
18:00 - 19:00	2	17	0.030	2	17	0.030	2	17	0.060
19:00 - 20:00	1	9	0.000	1	9	0.000	1	9	0.000
20:00 - 21:00	1	9	0.000	1	9	0.000	1	9	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.272			0.242			0.514

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.*