

Civil Engineers & Transport Planners

Kingston Bridge House

Travel Plan

March 2022 201345/TP/JR/KBL/02



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TRICS Output



1 INTRODUCTION

1.1 Scope

1.1.1 Lanmor Consulting Ltd has been commissioned to prepare a Travel Plan for the proposed development at the site of Kingston Bridge House, Church Grove, Hampton Wick in support of a planning application to convert the existing student accommodation to 89 residential dwellings.

1.2 Site Location

- 1.2.1 The site is located within an area made up of residential, commercial and public spaces, with the London Borough of Richmond. The site is located at the junction of Church Grove and Hampton Court Road, opposite the Kings Field.
- 1.2.2 Kingston Bridge House is currently made up of student living facilities which span over 7 floors. Drawing FLU.1191.3.02 in Appendix A shows the existing site plan for the site.

1.3 Proposed Development

- 1.3.1 The proposed development will see the conversion from the existing student living arrangement (C4) to make way for a total of 70 new residential (C3) units spread across 7 floors.
- 1.3.2 The development will include for 21 parking spaces, 7 car parking spaces will be allocated for disabled; 160 secure cycle spaces will also be provided, 80 in one store and 80 in the other. Drawing FLU.1191.3.10 shows the proposed site plan and this is enclosed within Appendix A.

1.4 Travel Plan Overview

1.4.1 Travel Plans are a means of managing the transport generated by a development and a method of implementing initiatives to reduce identified impacts on the transportation networks, these are an essential element of the Government's integrated transport strategy.

- 1.4.2 A Travel Plan should establish a structured strategy with clear objectives and targets, supported by suitable measures for implementation. This can be defined as a long-term management strategy for delivering sustainable transport objectives which is reviewed regularly.
- 1.4.3 A Travel Plan involves identifying measures aimed at promoting sustainable travel, with an emphasis on reducing reliance on 'single occupancy car journeys'.
- 1.4.4 Whilst the location of the site and its proximity to facilities and services create the conditions to make sustainable travel choices a practical option; communicating these opportunities to the users is critical to the success of the Travel Plan.

1.5 Benefit of Travel Plans

- 1.5.1 A Travel Plan if implemented can offer residents not only health benefits but also financial savings, they can include;
 - Energy savings through reduced fossil fuel use;
 - Improved air quality through reduction in traffic;
 - Improved travel options; and
 - Provide opportunity for healthier lifestyles through increased walking and cycling.
- 1.5.2 The Travel Plan can also provide wider benefits for the community although not as tangible, these depending on the characteristics of the development but can include:
 - Improved quality of life through time savings achieved as a result of less congestion and reduced stress;
 - Improved air quality; and
 - More vibrant communities to live in through greater interaction via Bicycle Users Groups (BUG's), walking initiatives etc.



1.6 Structure of the Travel Plan

- 1.6.1 The structure of this Travel Plan will reflect the principals set out in the relevant guidance documents. This Travel Plan will set out the structure and management of the plan and will update the surveyed data within the specified timeframe following completion of the works with any further agreed measures / targets. The structure of this Travel Plan will be as follows:
 - Review accessibility and existing travel conditions
 - Set objectives and targets
 - Outline Travel Plan management and administration
 - Identify measures and initiatives
 - Set monitoring and reviews of the plan



2 POLICY CONTEXT

2.1 Introduction

2.1.1 The following sections provide a review of the local, regional and national policy documents relevant to the Travel Plan.

2.2 National Planning Policy Framework (February 2021)

- 2.2.1 The National Planning Policy Framework (NPPF) was published in February 2019 and sets out the Government's planning policies for England and how these are expected to be applied to achieve sustainable development.
- 2.2.2 The promotion of sustainable transport is described within paragraphs 102 to 111 of the NPPF. Specifically, paragraph 110 states that:

"Within this context, applications for development should:

- a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- c) create places that are safe, secure and attractive which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."

2.2.3 Regarding the requirement for a Travel Plan, paragraph 111 recognises that a Travel Plan is a key tool to facilitate the requirements of paragraph 110. It states that *"all developments which generate significant amounts of movement should be required to provide a Travel Plan"*. The sustainable travel initiatives contained within this TP emphasise the need to introduce measures to promote walking, cycling and the use of public transport.

2.3 National Planning Practice Guidance

- 2.3.1 The National Planning Practice Guidance (NPPG) was published as a web-based resource in March 2014 and provides important information for any user of the planning system.
- 2.3.2 This resource includes a section titled *"Travel plans, transport assessments and statements in decision-taking"*. Within this is a sub-section specifically on Travel Plans. This requires that Travel Plans should evaluate and consider:
 - benchmark travel data including trip generation databases;
 - information concerning the nature of the proposed development and the forecast level of trips by all modes of transport likely to be associated with the development;
 - relevant information about existing travel habits in the surrounding area;
 - proposals to reduce the need for travel to and from the site via all modes of transport; and
 - provision of improved public transport services.

2.4 Mayor's Transport Strategy (2018)

- 2.4.1 The Mayor's Transport Strategy was published in 2018 to cover a period of 20 years. It is part of a strategic policy framework which aims to support and shape the economic development of London.
- 2.4.2 Proposal 5 states that: "The Mayor, through TfL and the boroughs, will make it easier for people to walk and cycle in London by:
 - a) Maintaining, expanding and improving 'Legible London' walking wayfinding maps and ensuring that on-street cycle network signage is clear and consistent.

- b) Using new data to develop and improve online journey planning and navigation tools that will make walking and cycling trips the easiest journeys to plan."
- 2.4.3 Proposal 7 also states that: "The Mayor, through TfL and the boroughs, will work with schools, employers and community and user groups to promote walking and cycling, whether for the whole journey or as part of a longer journey."

2.5 London Plan

- 2.5.1 The London Plan is the spatial development strategy for London. Chapter six of the London Plan covers London's transport, where it states that *"Transport assessments and travel plans for major developments should give details of proposed measures to improve non-car based access, reduce parking and mitigate adverse transport impacts".*
- 2.5.2 The London Plans' main objective pertaining to Travel Plans is as follows:

"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, makes better use of the Thames and supports delivery of all the objectives of this Plan".

2.5.3 A New Draft London Plan is currently under development and has been published as a draft for consultation. This states that Travel Plans are required in accordance with the relevant TfL guidance.

2.6 Transport for London (TfL) guidance (2013)

2.6.1 Transport for London provides guidance on the requirements for Travel Plans for new developments located within London. It specifies that:

"A travel plan is a long-term management strategy which encourages sustainable travel for new and existing developments. It sets out transport impacts, establishes targets and identifies a package of measures to encourage sustainable travel"



2.6.2 This guidance also states that:

"The overarching purpose of a travel plan should be to encourage behaviour change which will lead to the use of more sustainable modes of travel and reduce overall travel to and from the site."

2.6.3 This report has been structured based on the "Travel Plan Content" section of this TfL guidance.

3 ACCESSIBILITY AND EXISTING CONDITIONS

3.1 Site Accessibility and Local Facilities

- 3.1.1 Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly those under 2km. A number of local facilities are located within close proximity of the site, these include supermarkets, schools, restaurants, pharmacies and leisure facilities.
- 3.1.2 The site is located to west of Kingston Town Centre, on the opposite side of Kingston Bridge. Most facilities are located to the north and to the east of the site of the site. Table 3.1 below shows some selected facilities near the site.

Facility	Description	Distance from site (m)
HSBC UK	Bank	50m
St Johns Hampton Wick	Place of Worship	60m
Hampton Wick Hotel	Hotel	100m
Copper Leaf Restaurant	Restaurant	105m
London Pizza Experts	Restaurant	110m
Bright Horizons Nursery (HW)	School	145m
CLD Computers	Computer Repair Shop	170m
The Swan	Restaurant	195m
Bills Kingston	Restaurant	280m
TK Maxx	Superstore	290m
John Lewis	Superstore	320m
Hampton Wick Station	Train Station	432m
Bentall Centre	Shopping Centre	434m
All Saints Church	Place of Worship	445m
Barclays Bank	Bank	445m
Hampton Wick Library	Library	465m
Kingston Historic Market	Market	466m
Kingston Train Station	Train Station	900m

Table 3.1 – Local Facilities

3.1.3 As mentioned, Kingston Town Centre is located just over Kingston Bridge, approximately 300m away. There are various facilities located within a Kingston Town Centre.

3.2 Public Accessibility Rating Level (PTAL)

- 3.2.1 PTAL (Public Transport Accessibility Level) is a method of calculating public transport access in Central and Greater London. Originally developed by the London Borough of Hammersmith and Fulham, it has since been adopted by Transport for London. The PTAL ratings specified by Transport for London vary from 1a, considered very poor, to 6b considered excellent. The PTAL of the site has been categorized as Level 4, this considered to be good. It is also very close to PTAL zone 6 which have very good accessibility level.
- 3.2.2 A copy of the full PTAL report can be found in Appendix B.

3.3 Pedestrian Access

- 3.3.1 Walking is the most important mode that offers the greatest potential to replace short car trips, particular those under 2.0 km. Guidance suggests that walking distances of between 200m and 2km depending on the journey purpose are reasonable. There is a network of footways within the vicinity of the site. This runs alongside all the major and minor routes allowing safe and convenient access to the site. The footpaths in the area are generally well maintained and lit.
- 3.3.2 Walking can also from part of a wider journey for commuting and leisure purposes when combined with public transport. The nearest train stations are Hampton Wick and Kingston Station, which are located 450m from the site (6minute walk) and 900m (11-minute walk) respectively.th
- 3.3.3 Drawing 201345/TS/01 is included in Appendix B and shows the range of destinations that can be reached within walking distance of the site.

3.4 Cycle Access

3.4.1 Cycling also has the potential to substitute for short car trips particularly for those journeys of less than 5km, or when it forms part of a longer journey by public transport etc. Both train stations can be reached within 4-minutes of cycling from the site. Drawing 201345/TS/02 in Appendix B shows the destinations that can be reached within different cycle times.

3.4.2 There are cycle routes within the vicinity of the site, those on main roads, quieter roads, through parks and along canals. The closest identified on road cycle route is located on Hampton Court Road which has cycle lanes marked on the road surface. A cycle route map is provided in Appendix B and shows all routes within the vicinity of the site. Figure 3.1 below also shows information from a PTAL Time Map on the range of destinations that can be reached within cycling distance of the site. The map below only covers London, the cycle times with the county of Surrey are not shown.



TIM output for Base Year

Scenario: Base Year Mode: Cycle only, Time of day: Between peak times, Direction: From location

KT1 4AG	
Kingston upon Thames KT1 4AG, UK	
Easting: 517494, Northing: 169388	

Code: NWMAT001

Map key - Travel Time		Map layers	
< 15 mins	15 - 30 mins	👝 Travel Times	
30 - 45 mins	45 - 60 mins		
60 - 75 mins	75 - 90 mins		
90 - 105 mins	105 - 120 mins		
120 - 135 mins	135 - 150 mins		
Copyright 2020, TfL			For LONDON

Figure 3.1 – Cycle PTAL Time Map



3.5 Travel by Bus

3.5.1 The nearest bus stop to the site is located directly outside the building on Hampton Court Road however the services for this stop end in Kingston which is 2-3 stops away. Therefore, bus stops within the area which provide services away from Kingston have been considered as users are most likely to use a bus for longer journeys.

```
3.5.2 The nearest bus stops which provide a greater service to the application site are
located outside the site on Church Grove opposite the existing access for Kingston
Bridge House, 93m to the southwest on Hampton Court Road, 230m to the
northeast on the High Street, 130m to the northeast on the High Street and 550m
to the east on Wood Street. The services calling at the surrounding bus stops ar1e
tabulated below in Table 3.2 and outline the frequencies.
```

Service	Bus Stop	Distance from Site	Bus Route	Weekday Frequency (p/h)	Saturday Frequency (p/h)	Sunday Frequency (p/h)
111	Church Grove / The King's Field (Stop J)	93m	Kingston - Hampton - Hanworth - Hounslow - Heston - Cranford - Heathrow Central	24 Hours 7	24 Hours 5-6	24 Hours 5
216	Church Grove / The King's Field (Stop J)	93m	Kingston - Hampton Court Green - Hampton - Sunbury - Ashford - Staines	(06:28 – 00:34) 2-3	(06:29 – 00:34) 3	(06:28 – 00:33) 2
411	Church Grove / The King's Field (Stop J)	93m	Kingston - Hampton Court - West Molesey	(05:33 – 00:13) 3-4	(05:34 – 00:13) 3	(08:08 – 00:13) 2
461	Church Grove / The King's Field (Stop J)	93m	Kingston Upon Thames - Weybridge - Addlestone	(06:42 – 18:51) 2	(06:42 – 18:45) 2	-
481	Church Grove / The King's Field (Stop U)	Outside Site	Kingston - Twickenham - West Middlesex Hospital	(06:49 – 19:04) 1	(06:58 – 19:04) 1	(10:03 – 19:04) 1
281 Northbound	Lower Teddington Road (Stop A)	230m	Tolworth - Kingston - Hounslow	(05:39 – 00:29) 6	(06:14 – 00:29) 6	(06:24 – 00:29) 4-5
281 Southbound	Lower Teddington Road (Stop H)	130m	Hounslow - Kingston - Tolworth	(05:28 – 01:08) 5-6	(05:28 – 01:08) 5-6	(05:28 – 01:08) 4
285	Lower Teddington Road (Stop A)	230m	Kingston - Hampton Wick - Teddington - Hanworth - Feltham - Hatton Cross - Heathrow Central	24 Hours 5	24 Hours 4-5	24 Hours 4-5



X26	Wood Street	550m	Heathrow Central -	(06:17 – 01:00)	(06:15 – 00:59)	(06:15 – 00:59)
SE-Bound	(Stop N)		West Croydon	2	2	2
X26	Wood Street	550m	West Croydon -	(05:01 – 00:01)	(05:00 – 00:01)	(05:01 – 00:01)
NW-Bound	(Stop P1)		Heathrow Central	2	2	2

Table 3.2 – Bus Schedule

- 3.5.3 Guidance suggest that people will walk up to 400m for a bus, the assessments used in TfL PTAL scoring assumes distances of up to 640m which equates to an 8-minute journey time by foot at a walking speed of 80m per minute. The bus stops are well within walking distance of the site. The services offered from these stops provide a highly frequent service to a wide range of destinations including underground stations, national rail stations, hospitals, schools, supermarkets and other facilities.
- 3.5.4 The majority of buses around the local area are run and maintained by Transport for London, others include Falcon Buses, Metrobus and Reptons Coaches. A bus route map for Richmond is included within Appendix B. Figure 3.2 below also shows information from the PTAL Time Map on the range of destinations that can be reached by bus in London, again destinations within Surrey are not shown.



M25 West Drayton	Southall	WHITE	CITY	ondon
Harmondsworth Longford		Royal Botanic Gardens, Kew	FULHAM	
Stanwell	Hounslow	Richmond		BRIXTON
	Feltham Twicke	nham Richmond Park	EARLSFIELD	M FO
gham	Teddi	ngt	KAYA	WEST NORWOOD
k Resort 😳		upon Thames	MBLEDON	
M3	East Molesey	New Malden	Mitcham	Thornton
Chertsey Wa	Iton-on-Thames	Surbiton	Morden	Heath
Weybridge	Esher			Croydon
Ottershaw		Chessington	Sutton	South Croydon
Byfleet	Cobham	Epsom		Purley
ing Coogle	Downside M25	Ashtead	Banstead Couls	Map data ©2020
TIM output for Base Year				
Scenario: Base Year Mode: Bus only KT1 4AG Kingston upon Thames KT1 4AG, U Easting: 517494, Northing: 169388 Code: N7096/05A	r, Time of day: Between peak times	, Direction: From location		
Map key - Travel Time		Map layers		
< 15 mins	15 - 30 mins	Travel Times		
30 - 45 mins 60 - 75 mins	45 - 60 mins 75 - 90 mins			
90 - 105 mins	105 - 120 mins			
120 - 135 mins	135 - 150 mins			
Copyright 2020, TfL			•	FOR LONDON

Figure 3.2 – Bus PTAL Time Map

3.6 National Rail

- 3.6.1 The nearest rail stations which offer national services is Hampton Wick Station and Kingston Station, which are located to the north of the site on High Street (A310) and east on Wood Street (A307) respectively. Facilities provided at Hampton Wick include public Wi-Fi and ticket machines, more facilities are provided at Kingston Station where there are payphones, post box, shops, toilets and step free access.
- 3.6.2 Hampton Wick and Kingston Station are within the Travelcard Zone 6, train services from the stations are operated by South Western Railway. The typical off-peak weekday service at both stations in trains per hour are:

- 6 to Waterloo, of which:
 - 4 run via Wimbledon
 - 2 run via Richmond and Twickenham
- 2 to Shepperton
- 3.6.3 On Sundays, there are hourly services at Kingston to Waterloo via Wimbledon & via Richmond and along the branch to Shepperton. An additional hourly service to Waterloo via the Hounslow Loop Line (calling at all intermediate stations) starts/terminates here.
- 3.6.4 Stations which can be accessed include Twickenham, Richmond, Wimbledon, Clapham Junction and London Waterloo. A copy of the South Western Railway map is included in Appendix B.

3.7 Car Clubs

- 3.7.1 Car clubs are another great sustainable means of travel which have been implemented largely across London over recent years. The nearest car club spot is located only a 7-minute walk away towards the north of the site on Seymour Road. There is currently one car available at this location and is provided by Enterprise Car Club.
- 3.7.2 There are more car club locations within the area provided by Zipcar, 9-11 minutes away located on Down Hall Road and Seven Kings Way. It is considered that there are sufficient car clubs within the area and within suitable walking distance and therefore a car club provision on site is considered excessive.

3.8 Site Location Summary

- 3.8.1 The site has very good access to a wide range of services and facilities within the local area. In respect of land use and transport planning, the site is well located in close proximity to public transport facilities and therefore discourages the need to travel by car.
- 3.8.2 It is considered that the site has 'good' access to public transport as assessed by Transport for London and would offer many alternatives to the use of a private car to travel to local facilities thus encouraging the use to use different modes of sustainable transport making it a suitable proposed development.



4 OBJECTIVES AND AIMS

4.1 The aim of the travel plan

4.1.1 The principal aim of the Travel Plan is to reduce the number of motorised journeys, particularly by single occupancy car use and create opportunities for residents to use sustainable modes of travel. The plan is structured to achieve a series of objectives, given below.

4.2 Objectives

- 4.2.1 There are a number of benefits that the implementation of the Travel Plan can bring. Objectives are the high-level aims of the plan and the specific objectives of this plan are to:
 - raise awareness and increase the attractiveness of alternative modes of transport available to and from the Site for residents;
 - Generate fewer single-occupancy car trips by encouraging modal shift to more sustainable modes of travel;
 - Minimise the environmental impact by reducing the need for unnecessary journeys;
 - Influence travel behaviour of residents;
 - Promote active travel to improve the health of resident and visitors;
 - Accommodate for car journeys where there is no alternative.

4.3 Targets

4.3.1 Identifying modes of travel and destinations in advance of the occupation of the site is not possible, this plan therefore sets out initial targets for the development based on available modal data. Targets are goals by which progress will be assessed.

- 4.3.2 The key actions are set out below:
 - i) Appoint a Travel Plan Co-ordinator (TPC) three months prior to the occupation of the first units;
 - Provide Travel Pack, detailing the Measures set out in this document to residents;
 - Provide a sustainable transport noticeboard to be located in a prominent position of the reception area, etc. The noticeboard to be periodically updated so that it details up-to-date travel information.
 - iv) Undertake initial survey after 75% of full occupation is met or after 6 months of first occupation, whichever is sooner. Each monitoring survey will occur within one month of the anniversary of the first survey (as detailed in the Monitoring section);
- 4.3.3 For the purposes of this Travel Plan baseline modal split is calculated from the transport statement on the information provided in the census data for the output area. The percentage of modal split is tabulated below in Table 4.1 and the total daily movements have been provided based on total person trips from the TRICS data distributed by the percentages in the census data.

Method of Travel to Work	Total Person Movements AM Peak					
Method of Haverto work	Persons	Percentage				
All Categories: Method of Travel to Work	1,352	100.00%				
Work mainly at or from home	68	5.03%				
Underground, metro, light rail, tram	32	2.37%				
Train	269	19.90%				
Bus, minibus or coach	57	4.22%				
Taxi	0	0.00%				
Motorcycle, scooter or moped	10	0.74%				
Driving a car	246	18.20%				
Passenger in car	10	0.74%				
Bicycle	38	2.81%				
On foot	134	9.91%				
Other method of travel to work	4	0.30%				
Not in employment	484	35.80%				

Table 4.1 – Modal Split (2011 Census Data)



Method of Travel to	Tota Mov AN	l Person rements I Peak	Tota Mov PN	l Person ements I Peak	Total Person Movements Daily		
Work	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures	
Underground, metro, light rail, tram (2.37%)	0	1	1	0	5	5	
Train (19.90%)	2	8	6	4	47	45	
Bus, minibus or coach (4.22%)	0	2	1	1	10	10	
Taxi (0.00%)	0	0	0	0	0	0	
Motorcycle, scooter or moped (0.74%)	0	0	0	0	0	0	
Driving a car (18.94%)	2	8	5	3	44	42	
Bicycle (2.81%)	0	1	1	1	7	6	
On foot (9.91%)	1	4	3	2	23	22	

Table 4.2 – Estimated Person Trips

- 4.3.1 The table below uses the predicted modes of travel to set interim targets to be achieved at 1 and 3 years and the final 5-year targets at the end of the plan period.
- 4.3.2 Baseline figures in Table 4.2 were calculated using a combination of TRICS data for estimating person trips and census date for the local area to assess the modal split. Table 4.3 below sets out the proposed targets for changing travel patterns during first, third and fifth years of the travel plan.

Travel Plan Aim Targets													
		Modal Split											
Target	Indicator	Bas	seline	In	terim	Int	erim	Final					
		Ye	ear O	Y	ear 1	Ye	ar 2	Year 5					
		% All trips	Daily Peak Person Trips	% All trips	Daily Peak Person Trips	% All trips	Daily Peak Person Trips	% All trips	Daily Peak Person Trips				
Achieve an increase in cycling by 30%	Modal split monitoring from travel survey	2.8%	TBC	3.1%	TBC	3.4%	TBC	3.58%	TBC				
Achieve an increase in walking by 7%	Modal split monitoring from travel survey	9.9%	твс	10.2%	твс	10.4	ТВС	10.57%	твс				
Achieve an increase in public transport use by 3%	Modal split monitoring from travel survey	19.9%	TBC	20.0%	TBC	20.1%	TBC	20.3%	TBC				
Use of car club regularly	Modal split monitoring from travel survey	0.0%	TBC	2.0%	TBC	4.0%	TBC	5.0%	TBC				
Achieve 10% reduction in private car usage	Modal split monitoring from travel survey	18.9%	ТВС	18.2%	ТВС	%17.6%	ТВС	17.0%	твс				

Table 4.3 – Travel Plan Targets

5 TRAVEL PLAN MANAGEMENT AND ADMINISTRATION

5.1 Management Plan

- 5.1.1 In order to support the Travel Plan, a Travel Plan Co-ordinator (TPC) will be appointed to manage the plan and monitor measures to ensure they are current and fulfilling the needs of the development. The TPC may wish to compliment the measures within this plan but should include the following elements as the basis of this Travel Plan:
 - The implementation of measures as set out in the Travel Plan (including reviewing the Travel Pack and noticeboards to ensure they are up-to-date).
 - To undertake monitoring surveys in years 1, 3 and 5 and supply evidence of this to Richmond Borough Council;
 - To oversee the development and implementation of the Travel Plan;
 - Promoting the objectives and benefits of the Travel Plan;
 - To ensure the travel information available is up to date;
 - Liaison with London Borough of Richmond Borough Council;
 - Acting as the point of contact for information with occupants.
 - Review TP at regular intervals

5.2 The Travel Plan Co-ordinator

5.2.1 The TPC will be in place from the opening of the development. The TPC will be responsible for the Travel Plan for a 5-year period from first occupation of the development.



5.2.2 The TPC contact details are as follows: -

Name: - TBA

Telephone: -

Company: -

- 5.2.3 The TPC is to monitor arrangements on an annual basis and review the effectiveness of the Travel Plan for a period of 5 years. A TPC will be employed for the duration of the plan and will work in conjunction with the LPA, the local community and other interested parties for the continuing progression of the Travel Plan.
- 5.2.4 A TPC will be employed for the duration of the plan and will work in conjunction with the LPA, the local community and other interested parties for the continuing progression of the Travel Plan.
- 5.2.5 They will also encourage residents to suggest other potential solutions to encourage a move to more sustainable modes of travel. As part of the duties they will:
 - Promote and encourage the use of travel modes other than the car;
 - Ensure that relevant information, up-to-date travel and events are clearly displayed on the noticeboards;
 - Arrange for monitoring surveys to be undertaken as necessary;
 - Provide a point of contact for transport operators and Officers of the Council and, where necessary, facilitate meetings with interested parties; and
 - Hold regular meetings to discuss the Travel Plan and sustainable travel matters to highlight any positive and negative issues.

5.3 Provision of Travel Information

5.3.1 To encourage the change in modal split it is important to provide people with relevant information to inform them of any alternative modes of travel to the car.

- 5.3.2 Information to be provided via way of notice boards and leaflets which will include but not limited to;
 - the reasons for more sustainable travel modes;
 - public transport links;
 - bus/train timetables and contact information;
 - cycle routes and pedestrian access and
 - benefits of implementing a Travel Plan.
- 5.3.3 The information is to be reviewed periodically by the TPC to ensure that any changes in service are recorded and informed to the residents in the development.



6 TRAVEL PLAN MEASURES

6.1 Proposed Measures

6.1.1 To optimise the opportunities to shift the modal split to more sustainable travel modes there are several hard measures that can be implemented, softer measures to promote alternative modes of travel can also be used to encourage healthier ways to travel.

6.2 Hard Measures

- 6.2.1 The following hard measures will be in place before first occupation of the development;
 - Ensure cycle storage is in place prior to occupation;
 - Erect notice board in reception area prior to occupation;
 - Provide safe network of footways within the development to cycle store.

6.3 Soft Measures to Promote Alternatives

- 6.3.1 The site will provide the following facilities to encourage the use of cycling and walking to and from the site;
 - Provide travel packs for residents on occupation;
 - Encourage bicycle user group;
 - Encourage walking user group;
 - Provide information on safe walking routes as well as local street maps highlighting direct routes to public transport and cycle routes and
 - Provision of up-to-date public transport timetables and bus company contact information to all residents.
 - Free membership to car club for all residents for 2 years.

6.4 Barriers to using Sustainable Modes of Transport

6.4.1 Addressing the reasons that we choose not to walk, cycle or use public transport is a key way to encourage increased use of these modes of transport. The general barriers given for people not walking, cycling or using public transport more often for their journey are shown in Table 6.1 below.

Reasons for not using mode of transport	Walking	Cycling	Public Transport
Route not safe	~	\checkmark	√
Bad weather	~	✓	
Unfamiliar with route	~	~	~
Car is more convenient	~	~	~
Too tired to walk or cycle	√	~	
Habit	~	~	~
Distance perceived as too far	~	~	
Nowhere weatherproof to leave bicycle		~	
Nowhere safe to leave bicycle at destination		\checkmark	
Do not own a bicycle		~	

Table 6.1 – General barriers to not using sustainable modes of transport



6.4.2 Table 6.2 below shows how some of these issues have been addressed or can be addressed in the borough.

Reasons for not using mode of transport	Possible ways to address barriers to using sustainable modes of transport
Route not safe	Footpaths in the area are well lit and providing a good safe route for both cyclists and pedestrians
Bad weather	Sheltered places to wait for a bus are provided at the bus stops which have shelters and cycle stores on site provide a dry shelter for people to wait for heavy rainfalls to stop
Unfamiliar with route	Travel packs will be provided to residents to outline the various modes of transport i.e. cycle routes, walking routes, public transport services and timetables so residents will be able to plan routes
Car is more convenient	Membership of the local car club will provide residents with an alternative to owning a car
Too tired to walk or cycle	Walking and cycle groups can encourage to increase activity slowly and as stamina builds up people can walk or cycle once or twice a week and increase gradually

Habit	Encouraging bicycle user groups and walking buddy schemes to increase social activity
Distance perceived as too far	The travel plan coordinator can work with the residents to develop a plan that allows them to part walk and use public transport.
Nowhere weatherproof to leave bicycle	Secure sheltered cycle stands will be provided within the buildings
Nowhere safe to leave bicycle at destination	Secure sheltered cycle stands will be provided within the buildings

Table 6.2 – Addressing barriers to using sustainable modes of transport

6.5 Personal Travel Planning

- 6.5.1 Personal Travel Planning is a set of measures aimed at individuals to make them aware their travel patterns. The TPC will offer advice where residents can get information on different modes of travel to encouraged them to think about how they currently travel behaviour and to consider how this could be undertaken in a more sustainable way.
- 6.5.2 The provision of information on how to travel sustainably (for example, local bus network maps. Travel guide, walking and cycling routes) links to websites promoting alternative modes of travel.

6.6 Marketing and Communication

6.6.1 The marketing and communication of alternative modes of travel is an important part of this travel plan to ensure it is communicated adequately, details of initiatives, public transport information and promotional advertising detailing local events will be issued on an on-going basis as they become available.

- 6.6.2 Residents will receive a promotional travel pack with details of nearby bus routes, cycle routes, car club locations and suggested safe walking / cycle routes. These promotional packs will be updated regularly to ensure that all residents are made aware of the Travel Plan, the benefits of sustainable travel and how to access alternative travel modes to the private car, the following will be undertaken:
 - The TPC will liaise with resident to discuss transport related issues, ideas and initiatives;
 - The TPC will also liaise with other parties including stakeholders and Local Authorities etc;
 - Provide links to journey planning website to allow resident to plan ahead for their proposed journeys.
- 6.6.1 All residents will also be entitled to free membership of the local car club for 2 years following occupation, this will be provided alternative to owning a car but still maintain the befit of being able to use when needed.

6.7 Promoting Active Travel

- 6.7.1 Walking and cycling are fantastic ways of staying fit and healthy whilst having fun.They can also provide good opportunities in socializing, such as getting involved with community-based activities in your local area.
 - <u>Improving access for pedestrians</u> The TPC will promote and encourage the use of web-based and mobile apps for residents to provide guidance on how they walk to their destination. Encourage residents to sign up to walking campaigns in the area.
 - <u>Improve cycle access</u> Secured cycle parking will be provided as part of the development to encourage residents to cycle to work or to local facilities. Promote residents to join and participate in local cycling campaigns.

7 MONITORING AND REVIEW PROCESS

7.1 Review

- 7.1.1 One of the Travel Plans objectives is periodic review of the plan to ensure that there is an on-going improvement. The whole Travel Plan will be reviewed on an annual basis and modified where appropriate in consultation with the Council. Monitoring of the Travel Plan will be undertaken one month before the agreed review date to provide a comparison with the previous modes of travel.
- 7.1.2 The intention is that the plan will be a working document that will be reviewed and updated regularly. Formal reviews will be undertaken with representatives of the council on the first, third and fifth anniversary of the implementation of the plan and in agreement the targets will be reviewed and adjusted to suit conditions on site. Implementation of the plan being on 75% occupancy or 12 months from first occupancy which every is the soonest.

7.2 Monitoring

- 7.2.1 As part of the ongoing management of the Travel Plan, the Travel Plan Coordinator should monitor, for example;
 - The level of cycle stand usage
 - Level of car parking occupied and monitor abuse of the parking by non-residents or inconsiderate parking
 - The demand for additional cycle parking facilities
 - Comments received from residents
- 7.2.2 Formal reviews will be completed on the first, third and fifth anniversary, the surveys will collect data on the modal split of resident arriving and leaving the site.
- 7.2.3 All monitoring surveys will be reviewed by the TPC against proposed targets, if the reviews indicated the development is not meeting the targets then remedial measures will be considered on how to promote the benefits of the travel plan.

- 7.2.4 The TPC will be the point of contact for communication with the Local Authority.Findings from discussions with authority and reviews will be communicated to the residents.
- 7.2.5 At the final 5 year review the targets for modal split set in the previous reviews will be assessed against the recorded modal split, if the measures in the Travel Plan have failed to achieve the targets, the final review will set out further measures to meet the targets of the plan.

8 ROLES AND RESPONSIBILITIES

8.1 Developer

8.1.1 Until such time as the responsibility for managing the development is passed to a management company, the developer will have the overall responsibility for the delivery of this travel plan. It is the developer's responsibility to implement the travel plan in terms of ensuring that all infrastructure specified within this travel plan as being provided prior to first occupation has been provided as such.

8.2 Management Company

8.2.1 As mentioned above, if a management company is appointed, they will ultimately be responsible for the implementation of this travel plan, the management company will be updated on the aims and targets by the Travel Plan Coordinator for the duration of the plan.

8.3 The Travel Plan Coordinator (TPC)

- 8.3.1 The Travel Plan Coordinator (TPC) will be appointed by the developer or management company prior to the first occupation and maintained in post for the duration of the plan. All details will be provided to Richmond Borough Council within 1 month of appointment to ensure clear communication.
- 8.3.2 The TPC will be responsible for ensuring that all measures stated within the travel plan have or are being implemented within the development. It is also the responsibility of the TPC to carry out monitoring surveys etc. All results will be submitted to the Richmond Borough Council.

8.4 Travel Plan Management Group

- 8.4.1 A management group will be set up to oversee the Travel Plan. It is likely to comprise of the Travel Plan Coordinator, representatives of the residents, developer/management company and any other interested parties.
- 8.4.2 There are many ways in which this travel plan can be delivered to a high standard, one of which is working in partnership with other stakeholders, the TPC's role will be to maintain a strong working relationship for the benefit of all parties, including:



- Richmond Borough Council.
- Developers and Travel Plan Coordinators of nearby developments.
- Local providers of services, for example, cycle shops.
- Local transport providers.

9 ACTION PLAN

9.1 Proposed Measures

9.1.1 The table below describes how this travel plan is to be delivered once construction is complete.

Action	Timescale	Responsibility/Funding
Appoint Travel Plan Coordinator	Prior to first occupation	Developer
Establish Travel Plan Management Group	Prior to the initial survey	Travel Plan Coordinator
Prepare welcome packs	Prior to first occupation	Travel Plan Coordinator
Install Cycle Parking for both residents and visitors	Prior to first occupation	Developer
Install travel plan notice boards	Prior to first occupation	Developer
Update notice boards with valuable information	On going	Travel Plan Coordinator
Offer free personal travel planning advice	First 3 years of the development lifetime	Travel Plan Coordinator
Provide free membership of local car club for first 2 years after occupation	On occupation	Developer
Promote active travel by promoting nation events	On going	Travel Plan Coordinator
Undertake monitoring reviews	First survey is to be completed within 12 months of the first occupant or at 75% of full occupancy. The remaining two surveys are to be completed in year 3 and 5 of the development	Travel Plan Coordinator
Undertake travel plan reviews	Once the results of the surveys have been reviewed by the TPC, the TP will be reviewed and submitted to the council for further inspections.	Travel Plan Coordinator

Table 9.1 – Delivery of the Travel Plan



9.2 Securement and Funding

The leaser should be fully committed to the implementation of the Travel Plan and should provide all reasonably necessary funding to ensure that the agreed targets are achieved.



APPENDIX A

Drawing FLU.1191.3.02 – Existing Site Layout



Rev	Date	Description



Kingston Bridge House Church Grove, Hampton Wick

Existing Site Plan

Scale	Dwg
1:500 @ A3	F
Date 28.09.20	Rev
Drawn	

rg No.	
LU.1191.3.02	2

N.Millin



Drawing FLU.1191.3.10 – Proposed Site Plan



HIGH STREFT	
Home Park	
Ray	Rev Date Description
	ARCHITECTURAL DESIGN SERVICES
	FLUENT ARCHITECTURAL DESIGN SERVICES 69:71 Windmill Road, Sunbury, Middlesex, TW16 7DT TEL: 0B00 0438838 E-mail: INF0@fluent-ads.co.uk Web: fluent-ads.co.uk
	Kingston Bridge House Church Grove, Hampton Wick
	Proposed Site Plan
2	Scale Dwg No. 1:500 @ A3 FLU.1191.3.10 Date 07.10.20
	Drawn N.Millin H



APPENDIX B

Full PTAL Report



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PTAL output for Base Year 4		Map key-PTAL
KT1 4AG Kingston upon Thames KT1 4AG, UK Easting: 517494, Northing: 169388		1b 2 3 4 5 6a 6b (Best)
Grid Cell: 29680		Map layers
Report generated: 28/10/2020		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 ReliabilityFactor	0.75	
National Rail Station Max. Walk Access Time (mins)	12	
National Rail ReliabilityFactor	0.75	

Calculation data										
Mode	Stop	Route	Distance (metres)	Frequency (vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	A
Bus	HAMPTON WICK HIGH STREET	281	172.98	7.5	2.16	6	8.16	3.68	0.5	1.84
Bus	HAMPTON WICK HIGH STREET	285	172.98	6	2.16	7	9.16	3.27	0.5	1.64
Bus	HAMPTON WICK ROUNDABOUT	481	60.51	1	0.76	32	32.76	0.92	0.5	0.46
Bus	HAMPTON WICK ROUNDABOUT	411	60.51	4	0.76	9.5	10.26	2.93	0.5	1.46
Bus	HAMPTON WICK ROUNDABOUT	X26	60.51	2	0.76	17	17.76	1.69	0.5	0.84
Bus	HAMPTON WICK ROUNDABOUT	111	60.51	7	0.76	6.29	7.04	4.26	1	4.26
Bus	HAMPTON WICK ROUNDABOUT	216	60.51	3	0.76	12	12.76	2.35	0.5	1.18
Rail	Hampton Wick	'WATRLMN-SHEPRTN 2H09'	525.35	2	6.57	15.75	22.32	1.34	1	1.34
Rail	Hampton Wick	'SHEPRTN-WATRLMN 2H10'	525.35	2	6.57	15.75	22.32	1.34	0.5	0.67
Rail	Hampton Wick	'WDON-WATRLMN 2K03'	525.35	0.33	6.57	91.66	98.23	0.31	0.5	0.15
Rail	Hampton Wick	'WATRLMN-WATRLMN 2K09'	525.35	2	6.57	15.75	22.32	1.34	0.5	0.67
Rail	Hampton Wick	'WATRLMN-WATRLMN 2009'	525.35	2	6.57	15.75	22.32	1.34	0.5	0.67
Rail	Hampton Wick	'TEDNGTN-WATRLMN 2090'	525.35	0.33	6.57	91.66	98.23	0.31	0.5	0.15
Rail	Hampton Wick	'TWCKNHM-WATRLMN 2092'	525.35	0.67	6.57	45.53	52.09	0.58	0.5	0.29
									Total Grid Cell Al:	15.62



Drawing 201345/TS/01 – Walking Isochrones





Drawing 201345/TS/02 – Cycling Isochrones





Cycle Route Map





Bus Route Map

Buses from Hampton Wick



Route finder

Bus route	Towards	Bus stops
24hr Daily	Heathrow Terminals 2 & 3	0
	Kingston	0
216	Kingston	0
	Staines	0
281 24hr Daily	Hounslow	
	Tolworth	
285 24hr Daily	Heathrow Terminals 2 & 3	
	Kingston	
411	Kingston	0
	West Molesey	•
481	Kingston +	
	West Middlesex	0000
	University Hospital 🕇	

Other buses

Bus route	Towards	Bus stops
461	Addlestone	0
	Kingston	P
513	Downside	J
	Kingston ●	P
641 Sch	Teddington School	
0.11 00.11	West Molesey	
681 Sch	Hounslow	D

Key

0	Connections with London Underground
₹	Connections with National Rail
(^o) 🗢	Tube station with 24-hour service Friday and Saturday nights
+	Mondays to Saturdays except evenings
•	Monday to Friday daytime off-peak
Sch	School journeys

Ways to pay



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South Western Railway Network Map





APPENDIX C

TRICS Output

Thursday 29/10/20 Page 1

Licence No: 162301

Calculation Reference: AUDIT-162301-201029-1037

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas: 01

days
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:	30 to 86 (units:)
Range Selected by User:	9 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: 01/01/12 to 06/03/20

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

Selected survey days:	
Tuesday	1 days
Wednesday	4 days
Friday	1 days
Wednesday Friday	4 da 1 da

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

<u>Selected survey types:</u>	
Manual count	6 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:	
Town Centre	2
Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	1

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

Selected Location Sub Categories:	
Residential Zone	4
Built-Up Zone	1
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

6 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
25,001 to 50,000	2 days
50,001 to 100,000	2 days
100,001 or More	1 days

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

Population within 5 miles:	
125,001 to 250,000	1 days
500,001 or More	5 days

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

<u>Car owr</u>	nership	within	5	miles:
0.6 to 1	0			

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.

6 days

<u>Travel Plan:</u>	
Yes	1 days
No	5 days

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

PTAL Rating:	
3 Moderate	2 days
4 Good	1 days
5 Very Good	3 days

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

LIST OF SITES relevant to selection parameters

1	BE-03-C-01 CROOK LOG BEXLEYHEATH	BLOCKS OF FLATS		BEXLEY
2	Edge of Town Centre Residential Zone Total No of Dwellings <i>Survey date:</i> HG-03-C-02 HIGH ROAD WOOD GREEN WOODSIDE PARK Suburban Area (PPS)	S: WEDNESDAY BLOCK OF FLATS	79 19/09/18	Survey Type: MANUAL HARINGEY
3	Residential Zone Total No of Dwellings Survey date: HM-03-C-01 VANSTON PLACE FULHAM	S: WEDNESDAY BLOCK OF FLATS	30 <i>01/10/14</i>	Survey Type: MANUAL HAMMERSMITH AND FULHAM
4	Town Centre High Street Total No of Dwellings <i>Survey date:</i> HO-03-C-02 HIGH STREET BRENTFORD	s: WEDNESDAY BLOCK OF FLATS	42 16/07/14	Survey Type: MANUAL HOUNSLOW
5	Town Centre Built-Up Zone Total No of Dwellings <i>Survey date:</i> KN-03-C-03 ALLEN STREET KENSINGTON	s: WEDNESDAY BLOCK OF FLATS	86 03/09/14	Survey Type: MANUAL KENSINGTON AND CHELSEA
6	Edge of Town Centre Residential Zone Total No of Dwellings <i>Survey date:</i> WF-03-C-01 ERSKINE ROAD WALTHAMSTOW	FRIDAY BLOCKS OF FLATS	72 11/05/12	Survey Type: MANUAL WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings Survey date:	: TUESDAY	73 05/11/19	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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED **MULTI-MODAL TOTAL VEHICLES Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period**

		ARRIVALS			DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.026	6	64	0.071	6	64	0.097
08:00 - 09:00	6	64	0.031	6	64	0.092	6	64	0.123
09:00 - 10:00	6	64	0.021	6	64	0.042	6	64	0.063
10:00 - 11:00	6	64	0.052	6	64	0.045	6	64	0.097
11:00 - 12:00	6	64	0.050	6	64	0.052	6	64	0.102
12:00 - 13:00	6	64	0.042	6	64	0.037	6	64	0.079
13:00 - 14:00	6	64	0.045	6	64	0.058	6	64	0.103
14:00 - 15:00	6	64	0.034	6	64	0.042	6	64	0.076
15:00 - 16:00	6	64	0.065	6	64	0.050	6	64	0.115
16:00 - 17:00	6	64	0.073	6	64	0.047	6	64	0.120
17:00 - 18:00	6	64	0.102	6	64	0.071	6	64	0.173
18:00 - 19:00	6	64	0.055	6	64	0.042	6	64	0.097
19:00 - 20:00	2	76	0.112	2	76	0.066	2	76	0.178
20:00 - 21:00	2	76	0.053	2	76	0.046	2	76	0.099
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.761			0.761			1.522

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

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

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Parameter summary

Trip rate parameter range selected:	30 - 86 (units:)
Survey date date range:	01/01/12 - 06/03/20
Number of weekdays (Monday-Friday):	6
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.

Licence No: 162301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED **MULTI-MODAL TAXIS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period**

		ARRIVALS			DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.000	6	64	0.000	6	64	0.000
08:00 - 09:00	6	64	0.000	6	64	0.000	6	64	0.000
09:00 - 10:00	6	64	0.003	6	64	0.003	6	64	0.006
10:00 - 11:00	6	64	0.000	6	64	0.000	6	64	0.000
11:00 - 12:00	6	64	0.000	6	64	0.000	6	64	0.000
12:00 - 13:00	6	64	0.000	6	64	0.000	6	64	0.000
13:00 - 14:00	6	64	0.003	6	64	0.003	6	64	0.006
14:00 - 15:00	6	64	0.000	6	64	0.000	6	64	0.000
15:00 - 16:00	6	64	0.000	6	64	0.000	6	64	0.000
16:00 - 17:00	6	64	0.000	6	64	0.000	6	64	0.000
17:00 - 18:00	6	64	0.000	6	64	0.000	6	64	0.000
18:00 - 19:00	6	64	0.000	6	64	0.000	6	64	0.000
19:00 - 20:00	2	76	0.007	2	76	0.007	2	76	0.014
20:00 - 21:00	2	76	0.000	2	76	0.000	2	76	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.013			0.026

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED **MULTI-MODAL OGVS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period**

		ARRIVALS			DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.005	6	64	0.005	6	64	0.010
08:00 - 09:00	6	64	0.000	6	64	0.000	6	64	0.000
09:00 - 10:00	6	64	0.000	6	64	0.000	6	64	0.000
10:00 - 11:00	6	64	0.003	6	64	0.000	6	64	0.003
11:00 - 12:00	6	64	0.005	6	64	0.008	6	64	0.013
12:00 - 13:00	6	64	0.000	6	64	0.000	6	64	0.000
13:00 - 14:00	6	64	0.000	6	64	0.000	6	64	0.000
14:00 - 15:00	6	64	0.008	6	64	0.005	6	64	0.013
15:00 - 16:00	6	64	0.000	6	64	0.003	6	64	0.003
16:00 - 17:00	6	64	0.000	6	64	0.000	6	64	0.000
17:00 - 18:00	6	64	0.003	6	64	0.003	6	64	0.006
18:00 - 19:00	6	64	0.000	6	64	0.000	6	64	0.000
19:00 - 20:00	2	76	0.000	2	76	0.000	2	76	0.000
20:00 - 21:00	2	76	0.000	2	76	0.000	2	76	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.024			0.048

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED **MULTI-MODAL CYCLISTS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period**

		ARRIVALS			DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.000	6	64	0.005	6	64	0.005
08:00 - 09:00	6	64	0.003	6	64	0.008	6	64	0.011
09:00 - 10:00	6	64	0.003	6	64	0.003	6	64	0.006
10:00 - 11:00	6	64	0.003	6	64	0.003	6	64	0.006
11:00 - 12:00	6	64	0.000	6	64	0.000	6	64	0.000
12:00 - 13:00	6	64	0.000	6	64	0.000	6	64	0.000
13:00 - 14:00	6	64	0.008	6	64	0.000	6	64	0.008
14:00 - 15:00	6	64	0.000	6	64	0.000	6	64	0.000
15:00 - 16:00	6	64	0.000	6	64	0.000	6	64	0.000
16:00 - 17:00	6	64	0.005	6	64	0.005	6	64	0.010
17:00 - 18:00	6	64	0.003	6	64	0.003	6	64	0.006
18:00 - 19:00	6	64	0.010	6	64	0.008	6	64	0.018
19:00 - 20:00	2	76	0.000	2	76	0.000	2	76	0.000
20:00 - 21:00	2	76	0.000	2	76	0.000	2	76	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.035			0.070

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED **MULTI-MODAL VEHICLE OCCUPANTS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period**

		ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate	
00:00 - 01:00									L	
01:00 - 02:00										
02:00 - 03:00									L	
03:00 - 04:00									L	
04:00 - 05:00									I	
05:00 - 06:00									<u> </u>	
06:00 - 07:00										
07:00 - 08:00	6	64	0.034	6	64	0.092	6	64	0.126	
08:00 - 09:00	6	64	0.039	6	64	0.162	6	64	0.201	
09:00 - 10:00	6	64	0.029	6	64	0.050	6	64	0.079	
10:00 - 11:00	6	64	0.063	6	64	0.052	6	64	0.115	
11:00 - 12:00	6	64	0.065	6	64	0.063	6	64	0.128	
12:00 - 13:00	6	64	0.052	6	64	0.045	6	64	0.097	
13:00 - 14:00	6	64	0.063	6	64	0.081	6	64	0.144	
14:00 - 15:00	6	64	0.042	6	64	0.042	6	64	0.084	
15:00 - 16:00	6	64	0.131	6	64	0.073	6	64	0.204	
16:00 - 17:00	6	64	0.102	6	64	0.058	6	64	0.160	
17:00 - 18:00	6	64	0.128	6	64	0.086	6	64	0.214	
18:00 - 19:00	6	64	0.058	6	64	0.052	6	64	0.110	
19:00 - 20:00	2	76	0.138	2	76	0.086	2	76	0.224	
20:00 - 21:00	2	76	0.059	2	76	0.053	2	76	0.112	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			1.003			0.995			1.998	

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED **MULTI-MODAL PEDESTRIANS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period**

		ARRIVALS		[DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate	
00:00 - 01:00										
01:00 - 02:00										
02:00 - 03:00										
03:00 - 04:00										
04:00 - 05:00										
05:00 - 06:00										
06:00 - 07:00										
07:00 - 08:00	6	64	0.029	6	64	0.076	6	64	0.105	
08:00 - 09:00	6	64	0.037	6	64	0.178	6	64	0.215	
09:00 - 10:00	6	64	0.026	6	64	0.079	6	64	0.105	
10:00 - 11:00	6	64	0.045	6	64	0.073	6	64	0.118	
11:00 - 12:00	6	64	0.060	6	64	0.063	6	64	0.123	
12:00 - 13:00	6	64	0.050	6	64	0.029	6	64	0.079	
13:00 - 14:00	6	64	0.063	6	64	0.076	6	64	0.139	
14:00 - 15:00	6	64	0.058	6	64	0.047	6	64	0.105	
15:00 - 16:00	6	64	0.170	6	64	0.063	6	64	0.233	
16:00 - 17:00	6	64	0.094	6	64	0.081	6	64	0.175	
17:00 - 18:00	6	64	0.128	6	64	0.110	6	64	0.238	
18:00 - 19:00	6	64	0.107	6	64	0.073	6	64	0.180	
19:00 - 20:00	2	76	0.171	2	76	0.072	2	76	0.243	
20:00 - 21:00	2	76	0.092	2	76	0.053	2	76	0.145	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			1.130			1.073			2.203	

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED **MULTI-MODAL BUS/TRAM PASSENGERS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period**

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.005	6	64	0.136	6	64	0.141
08:00 - 09:00	6	64	0.013	6	64	0.154	6	64	0.167
09:00 - 10:00	6	64	0.013	6	64	0.055	6	64	0.068
10:00 - 11:00	6	64	0.021	6	64	0.034	6	64	0.055
11:00 - 12:00	6	64	0.021	6	64	0.018	6	64	0.039
12:00 - 13:00	6	64	0.024	6	64	0.018	6	64	0.042
13:00 - 14:00	6	64	0.018	6	64	0.029	6	64	0.047
14:00 - 15:00	6	64	0.016	6	64	0.026	6	64	0.042
15:00 - 16:00	6	64	0.092	6	64	0.029	6	64	0.121
16:00 - 17:00	6	64	0.071	6	64	0.029	6	64	0.100
17:00 - 18:00	6	64	0.102	6	64	0.031	6	64	0.133
18:00 - 19:00	6	64	0.099	6	64	0.037	6	64	0.136
19:00 - 20:00	2	76	0.125	2	76	0.033	2	76	0.158
20:00 - 21:00	2	76	0.039	2	76	0.020	2	76	0.059
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.659			0.649			1.308

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.

Licence No: 162301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED **MULTI-MODAL TOTAL RAIL PASSENGERS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period**

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.008	6	64	0.076	6	64	0.084
08:00 - 09:00	6	64	0.010	6	64	0.097	6	64	0.107
09:00 - 10:00	6	64	0.010	6	64	0.045	6	64	0.055
10:00 - 11:00	6	64	0.021	6	64	0.034	6	64	0.055
11:00 - 12:00	6	64	0.016	6	64	0.026	6	64	0.042
12:00 - 13:00	6	64	0.010	6	64	0.008	6	64	0.018
13:00 - 14:00	6	64	0.016	6	64	0.024	6	64	0.040
14:00 - 15:00	6	64	0.016	6	64	0.016	6	64	0.032
15:00 - 16:00	6	64	0.042	6	64	0.013	6	64	0.055
16:00 - 17:00	6	64	0.042	6	64	0.018	6	64	0.060
17:00 - 18:00	6	64	0.055	6	64	0.031	6	64	0.086
18:00 - 19:00	6	64	0.123	6	64	0.042	6	64	0.165
19:00 - 20:00	2	76	0.086	2	76	0.033	2	76	0.119
20:00 - 21:00	2	76	0.059	2	76	0.007	2	76	0.066
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.514			0.470			0.984

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.

Licence No: 162301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED **MULTI-MODAL PUBLIC TRANSPORT USERS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period**

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.013	6	64	0.212	6	64	0.225
08:00 - 09:00	6	64	0.024	6	64	0.251	6	64	0.275
09:00 - 10:00	6	64	0.024	6	64	0.099	6	64	0.123
10:00 - 11:00	6	64	0.042	6	64	0.068	6	64	0.110
11:00 - 12:00	6	64	0.037	6	64	0.045	6	64	0.082
12:00 - 13:00	6	64	0.034	6	64	0.026	6	64	0.060
13:00 - 14:00	6	64	0.034	6	64	0.052	6	64	0.086
14:00 - 15:00	6	64	0.031	6	64	0.042	6	64	0.073
15:00 - 16:00	6	64	0.134	6	64	0.042	6	64	0.176
16:00 - 17:00	6	64	0.113	6	64	0.047	6	64	0.160
17:00 - 18:00	6	64	0.157	6	64	0.063	6	64	0.220
18:00 - 19:00	6	64	0.223	6	64	0.079	6	64	0.302
19:00 - 20:00	2	76	0.211	2	76	0.066	2	76	0.277
20:00 - 21:00	2	76	0.099	2	76	0.026	2	76	0.125
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.176			1.118			2.294

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED **MULTI-MODAL TOTAL PEOPLE Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period**

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	64	0.076	6	64	0.385	6	64	0.461
08:00 - 09:00	6	64	0.102	6	64	0.599	6	64	0.701
09:00 - 10:00	6	64	0.081	6	64	0.230	6	64	0.311
10:00 - 11:00	6	64	0.152	6	64	0.196	6	64	0.348
11:00 - 12:00	6	64	0.162	6	64	0.170	6	64	0.332
12:00 - 13:00	6	64	0.136	6	64	0.099	6	64	0.235
13:00 - 14:00	6	64	0.168	6	64	0.209	6	64	0.377
14:00 - 15:00	6	64	0.131	6	64	0.131	6	64	0.262
15:00 - 16:00	6	64	0.435	6	64	0.178	6	64	0.613
16:00 - 17:00	6	64	0.314	6	64	0.191	6	64	0.505
17:00 - 18:00	6	64	0.416	6	64	0.262	6	64	0.678
18:00 - 19:00	6	64	0.398	6	64	0.212	6	64	0.610
19:00 - 20:00	2	76	0.520	2	76	0.224	2	76	0.744
20:00 - 21:00	2	76	0.250	2	76	0.132	2	76	0.382
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.341			3.218			6.559

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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