CANEPARO ASSOCIATES
Transport Planning & Highway Design

## Pakenham Investments Limited

# THE PAKENHAM, 1 PAKENHAM STREET, MOUNT PLEASANT, LONDON

## Proposed Change of Use from Use Class A4 (Drinking Establishment) to Use Class B1 (Offices) or Use Class A1 (Retail)

Transport Statement

November 2016

Caneparo Associates Limited
131-151 Great Titchfield Street
London W1W 5BB
Tel: 020 3542 4840

www.caneparoassociates.com

Registered in England: 9930032

# Contents



## Figures



## Appendices

# Introduction

1. Caneparo Associates Limited is retained by Pakenham Investments Limited (hereafter referred to as 'the applicant') to provide highways and transportation planning advice in relation to the proposed change of use of the commercial space located across the ground and basement floor levels of the former public house, The Pakenham, at 1 Pakenham Street, Mount Pleasant, London (WC1X 0LA).

2. The existing / permitted use of the space is Use Class A4 drinking establishment. The applicant is seeking permission to change the use to Use Class B1 business / offices or Use Class A1 non-food or food retail / shops.

3. The change of use from Use Class A4 to Use Class A1 would normally be sought under Class A, Part 3 of the Permitted Development Rights. However, the Local Planning Authority (LPA), the London Borough of Camden, has issued an Article 4(1) Direction requiring planning permission for the change of use to be sought and for a Transport Statement to be submitted. It is understood that the Article 4(1) Direction was not introduced as a result of any concerns the council have relating to the potential impact of the proposed uses on the local transport network.

## This Document

4. This Transport Statement (TS) considers the transport and highways implications relating to the proposed change of use from c.232sqm drinking establishment to offices or retail and demonstrates that the implications of either change of use are acceptable in the context of planning policy.

5. The existing access to the commercial space from the local highway network would be retained and no modifications to the building envelope are proposed. The existing residential dwellings on the upper floors would be retained along with the dedicated residential access from Pakenham Street. The existing ground and basement floor layout plans are presented at **Appendix A**.

6. This TS examines the accessibility of the site by sustainable transport modes including walking, cycling and public transport. It considers the existing off-site parking provisions and the servicing requirements for the proposed uses. It estimates the trip generation for the proposed uses, compares this with the trip generation for the existing use and considers the potential effects on the local transport network.

7. This TS has been written with reference to best practice guidance from the Department for Transport (DfT), Manual for Streets (MfS) and MfS 2, and with previous experience of advising on a significant number of schemes in London.

# The Site and Surrounding Area

## Site Location

8. The 'site' comprises the existing commercial space located at the ground and basement floor levels of the former public house, The Pakenham. The site is located at the junction of Pakenham Street and Calthorpe Street and adjacent to the London Borough of Islington boundary. The location of the site is shown in a local context in **Figure 1**.

## Surrounding Area

9. The site is bounded by Pakenham Street to the north east, Calthorpe Street to the south east, and adjacent buildings largely comprising residential uses to the north west and south west. Further to the south east lies the former 'Mount Pleasant' Royal Mail Sorting Office site, which is set to deliver c.700 new homes and a mix of retail uses (subject to planning permission).

10. The rest of the surrounding area is predominantly residential in nature with a mix of commercial uses; including a hotel to the north east, Exmouth Market to the south east, and a number of office developments off Gray's Inn Road.

11. The site is located within comfortable walking distance of a wide range of existing and proposed local services and amenities, bus stops and within approximately 900 metres walking distance of Russell Square London Underground station and within approximately 1 kilometre walking distance of Kings Cross station.

## Site Access Arrangements

12. The existing commercial space at ground floor level can be accessed off Calthorpe Street and off the corner of Calthorpe Street and Pakenham Street. The commercial space at basement floor level is accessed via a stair located internally towards the northern edge of the building. A trapdoor / service access to the basement space is located along the Calthorpe Street frontage within the site curtilage.

### Local Highway Network and Traffic Management

13. The 4-arm junction of Pakenham Street, Calthorpe Street and Phoenix Place is priority controlled. Calthorpe Street forms part of the B502 which provides access to the A5200 Gray's Inn Road to the west and the A201 King's Cross Road / Farringdon Road to the east. Both the A201 and the A5200 provide connections to the A501 'The London Inner Ring Road' to the north. To the south lies the A401 and Rosebery Avenue which can be accessed via Farringdon Road or Phoenix Place and Mount Pleasant.

14. The roads within the immediate vicinity of the site are subject to single yellow line and single kerb line restrictions. Nearby plates indicate that waiting and loading from the single yellow lines is prohibited between 08:30 and 18:30 Monday to Friday and between 08:30 and 13:30 Saturday. Loading is permitted from the single yellow lines along Calthorpe Street between the junction with Gray's Inn Road and the width restriction located west of the site frontage. The width restriction on Calthorpe Street is located approximately 5 metres west of the Calthorpe Street site frontage.

### Off-Site Parking Provisions

15. The site lies within London Borough of Camden, Controlled Parking Zone (CPZ) 'CA-D' and adjacent to London Borough of Islington CPZ 'A'. Restrictions apply Monday to Friday 08:30 to 18:30 and Saturday 08:30 to 13:30 within both zones. There are a number of resident permit holder bays and a limited number of pay by phone bays (maximum stay 2 hours) in the area including on Pakenham Street, Wren Street and Calthorpe Street.

16. The nearest publicly available car park is located off Bowling Green Lane approximately 600 metres walking distance to the south east of the site. This car park is open 24 hours and is operated by NCP. It comprises 294 spaces including 7 disabled bays.

## Accessibility

17. As illustrated below, the site is accessible by a broad range of transport modes.

### Walking

18. It is commonly accepted that walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres. The 2-

kilometre walk catchment includes a large area of north east London including parts of Barnsbury, Kings Cross and St Pancras to the north, Pentonville to the east, Clerkenwell to the south east, the City of London to the south, and Fitzrovia to the west.

19. A wide range of amenities and local services can be accessed within 2 kilometres walking distance of the site, including shops, hotels, educational uses, restaurants, drinking establishments, banks, post offices, museums, libraries, exhibition centres, and cinemas. Also included within the walk catchment are a significant number of bus stops, and London Underground and railway stations.

20. Safe and efficient pedestrian movement is well catered for within the vicinity of the site and the majority of nearby streets include street lighting and footways that connect the site with local amenities. Dropped kerbs and tactile paving are provided at pedestrian crossing points along the key pedestrian desire lines in the local area.

## Cycling

21. Accessibility guidance indicates that cycling has the potential to substitute for short car trips, particularly those less than 5 kilometres and to form part of a longer journey by public transport.

22. According to Transport for London's (TfL) cycle map, the majority of key routes in the area surrounding the site are either designated as '*routes signed or marked for use by cyclists on a mixture or quiet or busier roads*' (such as Pakenham Street and the north east section of Calthorpe Street) or '*other roads that have been recommended by cyclists, may connect other route sections*' (such as the south west section of Calthorpe Street and Phoenix Place). It is noted that cycle lanes are provided on the north east section of Calthorpe Street which link to the cycle lane facilities on Farringdon Road to the east of the site.

23. The routes mentioned above connect the site to the wider cycle network which in turn provides access to a wide range of facilities and local amenities in the area.

24. In addition, there are a number of TfL / Santander cycle hire stations within comfortable walking distance of the site; including on the corner of Wren Street and Gray's Inn Road to the south west of the site (approximately 200 metres walking distance), on Gray's Inn Road near the junction of Sidmouth Street to the north west of the site (approximately 450 metres walking distance), and on Margery Street to the east of the site (approximately 200 metres walking distance).

25. The three cycle hire stations referred to above provide a combined total of 70 cycles / spaces. On Friday 18th November 2016 at approximately 13:00 it was observed that a significant number of Santander bikes were available at the above hire stations. Also at approximately 11:30 on Tuesday 22nd November 2016 around 55 Santander bikes were available at the above stations.

26. The 5 kilometre catchment covers a large part of London including a significant population. As such, it is considered the site is accessible by bicycle.

## Public Transport

Public Transport Accessibility Level (PTAL)

27. Public Transport Accessibility Levels (PTAL) are a theoretical measure of accessibility of a given point to the public transport network, taking into account walk access time and service availability.

28. The site benefits from a PTAL rating of 6b, measured from the centre of the site in accordance with best practice, meaning it has an excellent (the highest available) level of accessibility to public transport. The PTAL report is presented at **Appendix B**.

Bus Services

29. The site benefits from being located within a short walk of bus stops on Gray's Inn Road (approximately 230 metres walking distance), Rosebery Avenue (approximately 400 metres walking distance) and Farringdon Road (approximately 250 metres walking distance).

30. Around 7 bus routes can be accessed from the bus stops mentioned above. Local bus stops generally have sheltered seating and timetable information. Real-time bus travel information is available online. The above bus routes are summarised in **Table 1** below.

| Table 1: Local Bus Services | | | | |
|---|---|---|---|---|
| **Service No.** | **Route** | **Peak Daytime Frequency (minutes)** | | |
| | | **Monday – Friday** | **Saturday** | **Sunday** |
| **17** | Holloway – London Bridge | 5-9 | 9-12 | 15 |
| **19** | Finsbury Park Interchange – Parkgate Road | 6-10 | 6-10 | 15 |
| **38** | Clapton Pond – Victoria Bus Station | 2-6 | 2-6 | 2-6 |
| **45** | St Pancras International Station – Atkins Road / New Park Road | 7-11 | 8-12 | 15 |
| **46** | Lancaster Gate Station – St Bartholomew'S Hospital | 7-11 | 10-14 | 15 |
| **63*** | Forest Hill Tavern – King's Cross Station / York Way | 3-7 | 5-9 | 7-9 |
| **341** | Glover Drive / Ikea – County Hall | 8-12 | 10-12 | 10-13 |
| Notes: * Monday to Friday Schooldays | | | | |

London Underground and National Rail Services

31. The nearest London Underground station to the site is Russell Square station, which is located approximately 900 metres walking distance from the site. London Underground Piccadilly Line services to Heathrow, Piccadilly Circus and Cockfosters and other major destinations be accessed from this station.

32. King's Cross railway station is situated within approximately 1 kilometre walking distance of the site. Virgin Trains East Coast, Great Northern, Hull Trains and Grande Central services can be accessed from this station providing connections to a wide range of destinations including, Scotland, Newcastle, York, Leeds, Peterborough, King's Lynn, Doncaster, Hull, Sunderland and Bradford.

33. In addition, the site is located approximately 900 metres walking distance from Farringdon Station where London Underground (Metropolitan, Hammersmith & City and Circle Line) services and Thameslink services can be accessed. In the near future, Crossrail Services will also operate from this station.

## Accessibility Summary

34. It is clear from the above review of existing bus and rail services and cycle and pedestrian facilities that the site is very accessible by non-car and active modes of transport.

## Transport Implications of Proposed Change of Use

35. Overall, there would not be a noticeable impact on the local transport network as a result of either proposed change of use, particularly when considered in the context of the significant number of existing trips that are already taking place on the local transport network.

### Trip Generation

36. It is considered likely that the majority of trips to the existing drinking establishment use and the proposed A1 retail use would already be on the wider transport network, i.e. as part of multi-purpose journey to or from other nearby uses including local business, shops, and / or leisure uses, or diverted from other retail uses. As such, it is assumed the existing use and proposed A1 use would generate a negligible number of 'new' trips to the wider area during the traditional weekday peak periods. On this basis the trips associated with these uses have not been considered in detail in this report.

37. The proposed B1 office use would likely generate some 'new' trips on the local transport network but these would be offset by the trips associated with the existing A4 use, to some extent.

38. **Table 2** below summarises the potential trip generation for the commercial space if the change of use to B1 is permitted. A copy of the relevant Trip Rate Information Computer System (TRICS) data is included at **Appendix C**.

**Table 2: Potential B1 Office Use Multi-Modal Trip Generation Estimates**

| Main Mode | 08:00-09:00 | | | 17:00-18:00 | | |
|---|---|---|---|---|---|---|
| | In | Out | Total | In | Out | Total |
| **Total Vehicles** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Cycle** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Walk** | 1 | 0 | 1 | 0 | 1 | 1 |
| **Public Transport** | 4 | 0 | 4 | 0 | 3 | 3 |
| **Total People** | 6 | 0 | 6 | 1 | 5 | 6 |

Notes: Figures above are rounded to the nearest whole number. 'Total Vehicles' includes all vehicles entering and exiting the site (excluding pedal cycles). It includes vehicles dropping off and picking up and vehicles parking off-site – includes taxis and minicabs.

39. The above assessment illustrates that the proposed B1 office use would generate a very low number of trips to the site, particularly in the context of the significant number of existing trips that already take place on the local transport network.

40. It is likely that during the weekday evening peak that the existing A4 use would generate some trips to the site and therefore the 'net' impact of these trips on the transport network will be negligible.

41. It is considered that the very low number of trips associated with the site if either proposed use was implemented would not be noticeable to other road and public transport users or impact on the operation of the local transport network.

42. Given the above, it is not considered necessary to undertake detailed junction capacity assessments of nearby junctions or to assess the impacts of the proposals on passenger loading for local public transport services or the capacity of local bus stops on the basis that there are a significant number of bus services and bus stops located within close proximity of the site.

## Car Parking

43. There are no dedicated car parking facilities associated with the existing commercial space and there are no proposals to provide any on-site car parking spaces as part of either change of use. This is in line with policy guidance as demonstrated below and considered appropriate given the car parking demand associated with the proposed uses will be negligible.

44. With regard to car parking for the potential A1 retail use, the London Plan (March 2016) states '*the starting point for meeting parking demand for new retail development should be use of existing public off-street provision'*. It also states '*parking needs should be assessed taking into account of the reduction in demand associated with linked trips*'. As highlighted earlier in this report, if a change of use to A1 use was permitted, it is very likely that the majority of trips to the site would be linked with other uses and therefore the car parking demand for this use would be negligible, especially when compared with the car parking demand for the existing / permitted use.

45. The London Plan (March 2016) 'non-operational maximum standard for employment B1' uses in 'Central London' is 1 space per 1,000 to 1,500 sqm. As such, providing no on-site parking for the proposed B1 use is in accordance with the London Plan standards.

## Cycle Parking

46. As noted earlier, no modifications are proposed to the building envelope. As such, no on-site cycle facilities are proposed.

47. With reference to the London Plan (March 2016) cycle parking standards, the potential increased demand for cycle parking will be negligible as a result of the proposals (as highlighted in **Table 3** below) and therefore the proposals will have no 'net' impact.

**Table 3: London Plan (March 2016) Cycle Parking Standards**

| Use Class | London Plan Standards | London Plan Cycle Parking Requirements / Demand |
|---|---|---|
| **Existing A4** | 1 space per 175sqm | 2 |
| **Potential A1 Food Retail** | 1 space per 175sqm | 2 |
| **Potential A1 Non-Food Retail** | 1 space per 1,000sqm | 1 |
| **Potential B1 offices** | 1 space per 90sqm | 3 |

48. The above assessment illustrates that the potential additional demand for cycle parking resulting from the potential change of use will be negligible.

49. As demonstrated earlier in this report, there are a wide range of existing cycle facilities within the vicinity of the site and it is considered that these existing facilities would meet any potential additional demand for cycle parking associated with the proposed uses.

## Access

50. It is not proposed to change the existing site access arrangements for pedestrians. The site will therefore continue to be served by the accesses off Calthorpe Street.

## Deliveries and Refuse Collection

Servicing and Delivery Arrangements

51. The servicing, refuse and recycling collection regime for the proposed A1 and B1 uses will be undertaken from the street in accordance with the existing situation.

52. As highlighted earlier in this report, loading is restricted to between 18:30 and 08:30 Monday to Friday and between 13:30 and 08:30 Saturday and any time Sunday within the immediate vicinity

of the site. However, goods vehicles would be able to load / unload any time from the single yellow lines on Calthorpe Street west of the width restriction referred to earlier.

Servicing and Delivery Trips

53. As illustrated below, the proposed uses would not generate a significant number of additional servicing and delivery trips to the site.

54. The servicing and delivery vehicle demand for the existing / permitted and proposed A1 uses has been based on data contained within the TRICS Research and Development Technical Note entitled 'Servicing Vehicle Requirements' dated August 2006.

55. This Technical Note provides estimated service vehicle trip rates for A1, A3, D1 and D2 land uses. The estimated service vehicle trip generation for the existing / permitted and proposed A1 uses based on the above note is set out in **Table 4** below.

| **Table 4: Servicing and Delivery Vehicle Trip Rates and Trip Generation Estimates** | | |
|---|---|---|
| **Existing / Permitted A4 Use and Proposed A1 Use** | | |
| **Vehicle Type** | **Daily Trip Rates (per 100sqm GFA)** | **Daily Trip Generation (c.232sqm GIA)** |
| **Light Goods Vehicle (LGV)** | 0.49 | 1 |
| **Heavy Goods Vehicle (HGV)** | 0.13 | 0 |
| **TOTAL** | | **1** |

56. Based on survey data contained within TRICS, the proposed B1 office use would likely to generate circa 3 servicing / delivery trips per week (assuming approximately 0.25 deliveries / servicing trips per day per 100sqm). As such, and with reference to the information contained within the table above, the proposed uses would not significantly increase the number of servicing and delivery trips to the area.

57. Given the relatively small scale of the commercial space, it is expected that the majority of deliveries to the potential A1 and B1 uses would be undertaken by small to medium sized vehicles e.g. transit vans, with the occasional requirements to accommodate larger vehicles such as an 8 metre long box van.

58. Overall, it is considered that the servicing requirements for the proposed uses would not be significantly different from the existing / permitted use and therefore there will be no adverse impacts arising.

# Summary and Conclusion

## Summary

59. This Transport Statement supports the proposed change of use from Use Class A4 drinking establishment (c.232sqm) to Use Class A1 retail or Use Class B1 offices at the former public house, The Pakenham, 1 Pakenham Street, London Borough of Camden.

60. This Transport Statement follows the introduction of an Article 4(1) Direction by the council requiring planning permission for the change of use to be sought. However, it is understood that the Article 4(1) Direction was not introduced as a result of any concerns the council have relating to the potential impact of the proposed uses on the local transport network.

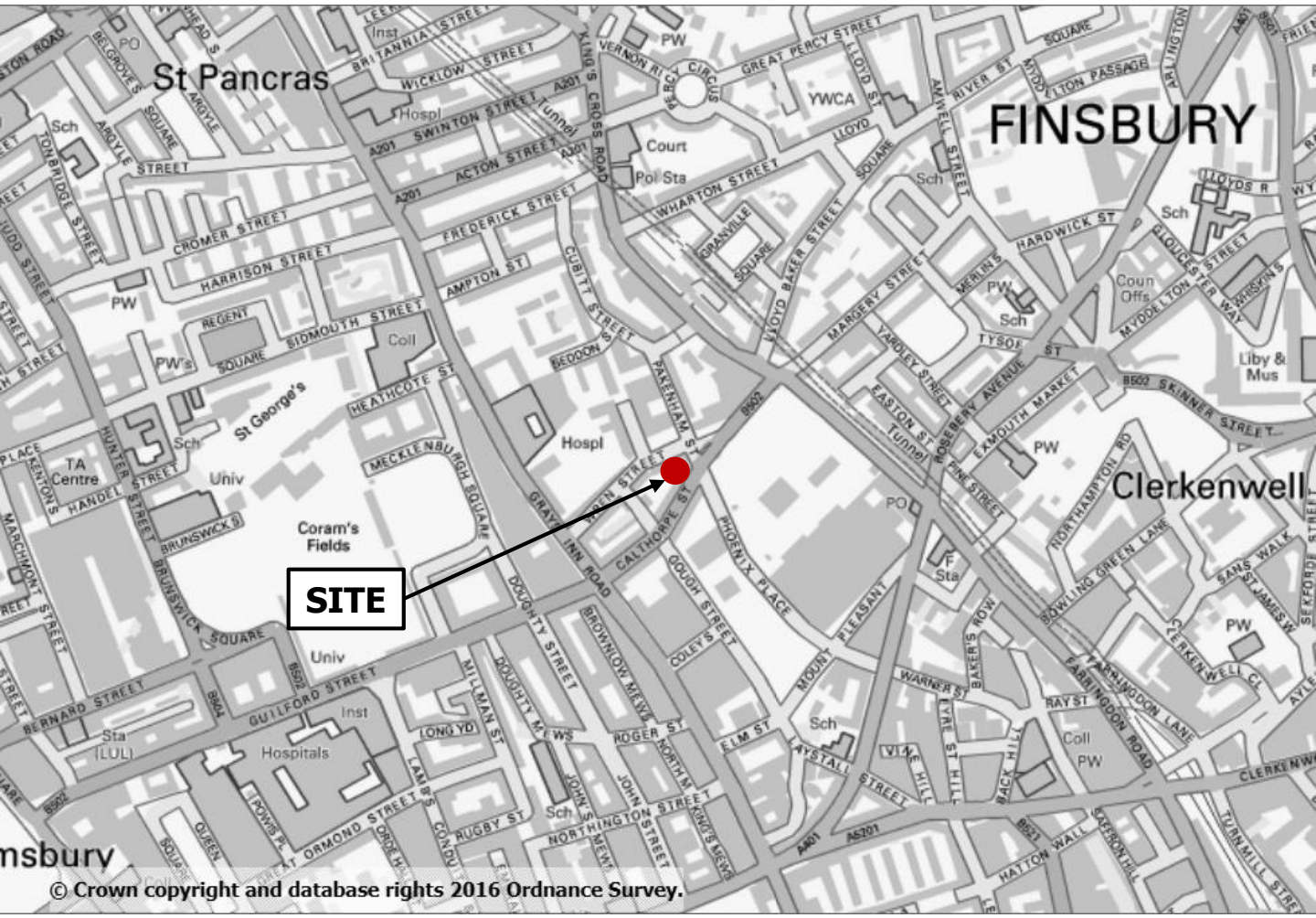
61. The proposals have been considered in this report and the findings can be summarised as follows:

- The site is easily accessible by foot, cycle and public transport.
- The car and cycle parking demand associated with the proposed uses would be negligible.
- The existing access arrangements will be retained with no changes proposed.
- The proposed uses would not result in a material change in delivery and servicing trips to the site.
- The proposed uses would not significantly increase the number of trips to the site.

## Conclusion

62. In conclusion, the proposals are reasonable and appropriate for the location, and can be considered sustainable in accordance with the aims and objectives of National Planning Policy Guidance. In addition, the proposals are considered acceptable in transport terms as the residual cumulative transport impacts would be negligible. Therefore, there are no traffic or transport reasons why the proposals should not be approved.

**Figure 1**






TITLE:

Site Location Plan

PROJECT:

The Pakenham, Pakenham Street, London

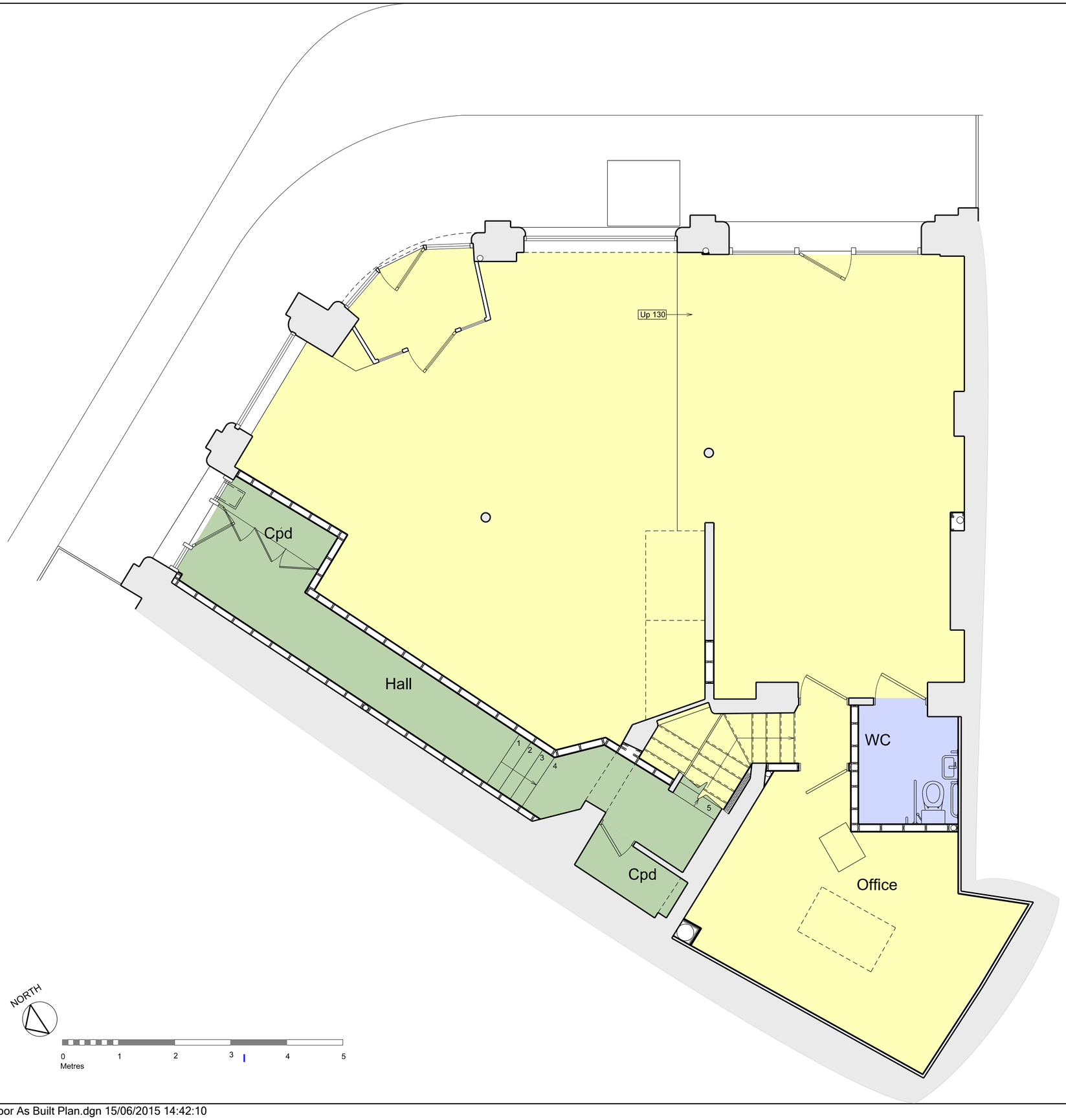
CLIENT:

Pakenham Investments Limited

CANEPARO ASSOCIATES
Transport Planning & Highway Design
131 – 151 Great Titchfield Street
London W1W 5BB
Tel: 020 3542 4840
www.caneparoassociates.com
Registered in England: 9930032

| DRAWN: | CHECKED: | DATE: | SCALE: | DRAWING REFERENCE: | REVISION: |
|---|---|---|---|---|---|
| DR | . | 01.12.16 | NTS | Figure 1 | . |

# Appendix A




BASEMENT:
Gross Area: 1,249 sq. ft.

GROUND FLOOR:
Gross Area: 1,496 sq. ft.
Commercial Unit: 1,249 sq. ft.

FIRST FLOOR:
Gross Area: 1,152 sq. ft.
Flat 1: 645 sq. ft.
Flat 2: 355 sq. ft.

SECOND FLOOR:
Gross Area: 1,071.sq. ft.
Flat 3: 570 sq. ft.
Flat 4: 344 sq. ft.

TOTALS:
Gross Area: 4,968 sq. ft.
Commercial: 2,498 sq. ft.
Residential: 1,914 sq. ft.

PAKENHAM ARMS,
1 PAKENHAM STREET,
LONDON WC1X 0LA

GROUND FLOOR PLAN
AS BUILT

BRILL OWEN
CHARTERED ARCHITECTS
Grove House, 2B Lichfield Grove, London N3 2JP
Telephone: 020 8349 0037 Fax: 020 8349 0092
E-mail: architects@brillowen.co.uk

SCALE 1:50 @ A2
DATE Jun 15
DRAWN SCM
DRG.NO. 13/808/C12

MH 2

SVP

1
2
3
4
5
6
7
8
9
10

BASEMENT
Gross Area: 1,249 sq.ft.

PAKENHAM ARMS,
1 PAKENHAM STREET,
LONDON WC1X 0LA

BASEMENT PLAN
AS BUILT

NORTH

0 1 2 3 4 5
Metres

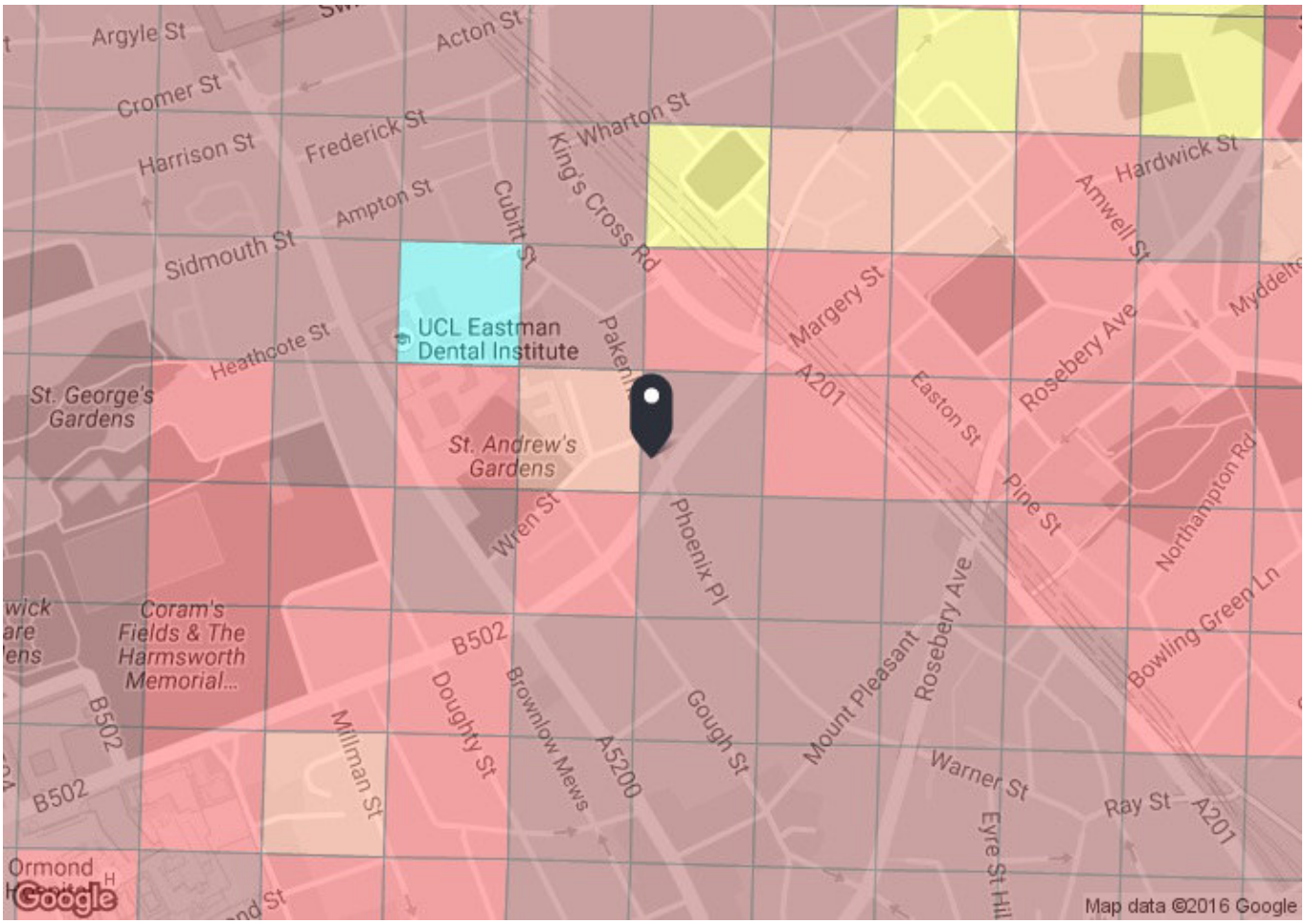
BRILL OWEN
CHARTERED ARCHITECTS
Grove House, 2B Lichfield Grove, London N3 2JP
Telephone: 020 8349 0037 Fax: 020 8349 0092
E-mail: architects@brillowen.co.uk

| | |
|---|---|
| SCALE | 1:50@A3 |
| DATE | Jun 15 |
| DRAWN | SCM |
| DRG.NO. | 13/808/C11 |

C 11 Basement As Built Plan.dgn 15/06/2015 14:29:59

# Appendix B

TRANSPORT FOR LONDON




PTAL output for 2011 (Base year)

**6b**

Pakenham Arms, 1 Pakenham St, London WC1X 0LA, UK

Easting: 530907, Northing: 182421

Grid Cell: 90420

Report generated: 21/11/2016

**Map key - PTAL**

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

**Map layers**

PTAL (cell size: 100m)

Calculation Parameters

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

Calculation data

| Mode | Stop | Route | Distance (metres) | Frequency(vph) | Walk Time (mins) | SWT (mins) | TAT (mins) | EDF | Weight | AI |
|---|---|---|---|---|---|---|---|---|---|---|
| Bus | CLERKENWELL R LEATHER LN | 243 | 623.87 | 11 | 7.8 | 4.73 | 12.53 | 2.4 | 0.5 | 1.2 |
| Bus | CLERKENWELL R LEATHER LN | 55 | 623.87 | 10 | 7.8 | 5 | 12.8 | 2.34 | 0.5 | 1.17 |
| Bus | GRAYS INN RD GUILFORD S | 46 | 229.05 | 6 | 2.86 | 7 | 9.86 | 3.04 | 0.5 | 1.52 |
| Bus | GRAYS INN RD GUILFORD S | 17 | 229.05 | 7.5 | 2.86 | 6 | 8.86 | 3.38 | 0.5 | 1.69 |
| Bus | GRAYS INN RD GUILFORD S | 45 | 229.05 | 7 | 2.86 | 6.29 | 9.15 | 3.28 | 0.5 | 1.64 |
| Bus | MOUNT PLEASANT | 38 | 317.87 | 10 | 3.97 | 5 | 8.97 | 3.34 | 0.5 | 1.67 |
| Bus | MOUNT PLEASANT | 341 | 317.87 | 6 | 3.97 | 7 | 10.97 | 2.73 | 0.5 | 1.37 |
| Bus | MOUNT PLEASANT | 19 | 317.87 | 8 | 3.97 | 5.75 | 9.72 | 3.09 | 0.5 | 1.54 |
| Bus | FARRINGDON R CALTHORPE S | 63 | 137.38 | 12 | 1.72 | 4.5 | 6.22 | 4.83 | 1 | 4.83 |
| Rail | Farringdon Turnmill | 'BEDFDM-SVNOAKS 1E62' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-BROMLYS 1E83' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-ORPNGTN 1L60' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-SUTTON 1O13' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-KENTHOS 1S85' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-BRGHTN 1T11' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-BRGHTN 1T15' | 901.88 | 0.67 | 11.27 | 45.53 | 56.8 | 0.53 | 0.5 | 0.26 |
| Rail | Farringdon Turnmill | 'BRGHTN-BEDFDM 1T83' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-SUTTON 1V23' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-SUTTON 1V82' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BRGHTN-BEDFDM 1W06' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BRGHTN-BEDFDM 1W81' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-BRGHTN 1W84' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-BRGHTN 1W86' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'STALBCY-SVNOAKS 2E11' | 901.88 | 1 | 11.27 | 30.75 | 42.02 | 0.71 | 1 | 0.71 |
| Rail | Farringdon Turnmill | 'BEDFDM-SVNOAKS 2E19' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'LUTON-SVNOAKS 2E21' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'STALBCY-SVNOAKS 2E95' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SUTTON-LUTON 2O00' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SUTTON-BEDFDM 2O04' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SUTTON-STALBCY 2O06' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SUTTON-LUTON 2O10' | 901.88 | 1 | 11.27 | 30.75 | 42.02 | 0.71 | 0.5 | 0.36 |
| Rail | Farringdon Turnmill | 'LUTON-SUTTON 2O17' | 901.88 | 0.67 | 11.27 | 45.53 | 56.8 | 0.53 | 0.5 | 0.26 |
| Rail | Farringdon Turnmill | 'STALBCY-SUTTON 2O21' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'STALBCY-SUTTON 2O29' | 901.88 | 0.67 | 11.27 | 45.53 | 56.8 | 0.53 | 0.5 | 0.26 |
| Rail | Farringdon Turnmill | 'LUTON-BCKNHMJ 2S91' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'STALBCY-BROMLYS 2S93' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BRGHTN-BEDFDM 2T02' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BRGHTN-BEDFDM 2T04' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-BRGHTN 2T15' | 901.88 | 1 | 11.27 | 30.75 | 42.02 | 0.71 | 0.5 | 0.36 |
| Rail | Farringdon Turnmill | 'BEDFDM-BRGHTN 2T25' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BRGHTN-LUTON 2T99' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SUTTON-STALBCY 2V02' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SUTTON-STALBCY 2V08' | 901.88 | 0.67 | 11.27 | 45.53 | 56.8 | 0.53 | 0.5 | 0.26 |
| Rail | Farringdon Turnmill | 'BEDFDM-SUTTON 2V15' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SUTTON-BEDFDM 2V16' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'LUTON-SUTTON 2V19' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SUTTON-KNTSHTN 2V20' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'STALBCY-SUTTON 2V27' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'LUTON-SUTTON 2V31' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BRGHTN-BEDFDM 2W08' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BRGHTN-BEDFDM 2W12' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BRGHTN-BEDFDM 2W16' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'ASHFKY-BEDFDM 1E61' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'ASHFKY-BEDFDM 1E63' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'RCHT-BEDFDM 1E67' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SVNOAKS-BEDFDM 1E69' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BROMLYS-BEDFDM 1E82' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BCKNHMJ-BEDFDM 1G65' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |

| Mode | Stop | Route | Distance (metres) | Frequency(vph) | Walk Time (mins) | SWT (mins) | TAT (mins) | EDF | Weight | AI |
|---|---|---|---|---|---|---|---|---|---|---|
| Rail | Farringdon Turnmill | 'KENTHOS-BEDFDM 1G71' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'ORPNGTN-STALBCY 2D93' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'ORPNGTN-LUTON 2D95' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SVNOAKS-STALBCY 2E59' | 901.88 | 0.67 | 11.27 | 45.53 | 56.8 | 0.53 | 0.5 | 0.26 |
| Rail | Farringdon Turnmill | 'SVNOAKS-LUTON 2E61' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SVNOAKS-WHMPSTM 2E63' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SVNOAKS-KNTSHTN 2E65' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'SVNOAKS-KNTSHTN 2E67' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BROMLYS-LUTON 2E93' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'ORPNGTN-LUTON 2L59' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'ORPNGTN-KNTSHTN 2L65' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-ELPHNAC 1J87' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| Rail | Farringdon Turnmill | 'BEDFDM-ELPHNAC 1J88' | 901.88 | 0.33 | 11.27 | 91.66 | 102.93 | 0.29 | 0.5 | 0.15 |
| LUL | Farringdon Turnmill | 'Hammersmith-Edgware' | 901.88 | 6 | 11.27 | 5.75 | 17.02 | 1.76 | 0.5 | 0.88 |
| LUL | Farringdon Turnmill | 'Barking-Hammersmith' | 901.88 | 6.34 | 11.27 | 5.48 | 16.76 | 1.79 | 1 | 1.79 |
| LUL | Farringdon Turnmill | 'Hammersmith-Plaistow' | 901.88 | 1 | 11.27 | 30.75 | 42.02 | 0.71 | 0.5 | 0.36 |
| LUL | Farringdon Turnmill | 'Aldgate-AmerFast' | 901.88 | 1 | 11.27 | 30.75 | 42.02 | 0.71 | 0.5 | 0.36 |
| LUL | Farringdon Turnmill | 'Ches-AldgateFast' | 901.88 | 2 | 11.27 | 15.75 | 27.02 | 1.11 | 0.5 | 0.56 |
| LUL | Farringdon Turnmill | 'Uxbridge-AldSlow' | 901.88 | 5.33 | 11.27 | 6.38 | 17.65 | 1.7 | 0.5 | 0.85 |
| LUL | Farringdon Turnmill | 'Watford-AldSfast' | 901.88 | 3.67 | 11.27 | 8.92 | 20.2 | 1.49 | 0.5 | 0.74 |
| LUL | Farringdon Turnmill | 'Aldg-WatfordSlow' | 901.88 | 3.67 | 11.27 | 8.92 | 20.2 | 1.49 | 0.5 | 0.74 |
| LUL | Farringdon Turnmill | 'Ald-HarrowHill' | 901.88 | 1.33 | 11.27 | 23.31 | 34.58 | 0.87 | 0.5 | 0.43 |
| LUL | Russel Square | 'Cockfosters-LHRT4LT' | 900.12 | 4.67 | 11.25 | 7.17 | 18.43 | 1.63 | 0.5 | 0.81 |
| LUL | Russel Square | 'RayLane-Cockfosters' | 900.12 | 3.67 | 11.25 | 8.92 | 20.18 | 1.49 | 0.5 | 0.74 |
| LUL | Russel Square | 'ArnosGrove-LHRT4LT' | 900.12 | 4 | 11.25 | 8.25 | 19.5 | 1.54 | 0.5 | 0.77 |
| LUL | Russel Square | 'ArnosGrove-RayLane' | 900.12 | 0.33 | 11.25 | 91.66 | 102.91 | 0.29 | 0.5 | 0.15 |
| LUL | Russel Square | 'ArnosGrove-Nthfields' | 900.12 | 3 | 11.25 | 10.75 | 22 | 1.36 | 0.5 | 0.68 |
| LUL | Russel Square | 'Oakwood-RayLane' | 900.12 | 0.33 | 11.25 | 91.66 | 102.91 | 0.29 | 0.5 | 0.15 |
| LUL | Russel Square | 'Nthfields-Cockfoster' | 900.12 | 1 | 11.25 | 30.75 | 42 | 0.71 | 0.5 | 0.36 |
| LUL | Russel Square | 'LHRT5-Cockfosters' | 900.12 | 6 | 11.25 | 5.75 | 17 | 1.76 | 0.5 | 0.88 |
| LUL | Russel Square | 'Uxbridge-Cockfosters' | 900.12 | 3.67 | 11.25 | 8.92 | 20.18 | 1.49 | 0.5 | 0.74 |
| LUL | Russel Square | 'Ruislip-Cockfosters' | 900.12 | 2.33 | 11.25 | 13.63 | 24.88 | 1.21 | 0.5 | 0.6 |
| LUL | Russel Square | 'ArnosGrove-Uxbridge' | 900.12 | 1 | 11.25 | 30.75 | 42 | 0.71 | 0.5 | 0.36 |
| LUL | Russel Square | 'Oakwood-Uxbridge' | 900.12 | 0.33 | 11.25 | 91.66 | 102.91 | 0.29 | 0.5 | 0.15 |
| LUL | Russel Square | 'Oakwood-Ruislip' | 900.12 | 0.33 | 11.25 | 91.66 | 102.91 | 0.29 | 0.5 | 0.15 |
| | | | | | | | | | **Total Grid Cell AI:** | **40.71** |

# Appendix C

Calculation Reference: AUDIT-358901-161121-1105

**TRIP RATE CALCULATION SELECTION PARAMETERS:**

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
**MULTI-MODAL VEHICLES**

*Selected regions and areas:*

| | | | |
|---|---|---|---|
| **01** | **GREATER LONDON** | | |
| | CI | CITY OF LONDON | 2 days |
| | WH | WANDSWORTH | 1 days |

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

**Filtering Stage 2 selection:**

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

| | |
|---|---|
| Parameter: | Gross floor area |
| Actual Range: | 1215 to 9803 (units: sqm) |
| Range Selected by User: | 408 to 17187 (units: sqm) |

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/08 to 14/06/16

*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 | 2 days |

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

*Selected survey types:*

| | |
|---|---|
| Manual count | 3 days |
| Directional ATC Count | 0 days |

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

*Selected Locations:*

| | |
|---|---|
| Town Centre | 3 |

*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:*

| | |
|---|---|
| Commercial Zone | 2 |
| Built-Up Zone | 1 |

*This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.*

**Filtering Stage 3 selection:**

*Use Class:*

| | |
|---|---|
| B1 | 3 days |

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

*Population within 1 mile:*

| | |
|---|---|
| 10,001 to 15,000 | 1 days |
| 50,001 to 100,000 | 2 days |

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

*Population within 5 miles:*

| | |
|---|---|
| 250,001 to 500,000 | 1 days |
| 500,001 or More | 2 days |

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

*Car ownership within 5 miles:*

| | |
|---|---|
| 0.5 or Less | 2 days |
| 0.6 to 1.0 | 1 days |

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

*Travel Plan:*

| | |
|---|---|
| No | 3 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.*

*LIST OF SITES relevant to selection parameters*

**1 CI-02-A-02 OFFICES CITY OF LONDON**
GRACECHURCH STREET
MONUMENT
CITY OF LONDON
Town Centre
Commercial Zone
Total Gross floor area: 9803 sqm
*Survey date: FRIDAY* *29/11/13* *Survey Type: MANUAL*

**2 CI-02-A-03 OFFICES CITY OF LONDON**
MONUMENT STREET
MONUMENT
CITY OF LONDON
Town Centre
Commercial Zone
Total Gross floor area: 1951 sqm
*Survey date: FRIDAY* *29/11/13* *Survey Type: MANUAL*

**3 WH-02-A-02 OFFICES WANDSWORTH**
BATTERSEA PARK ROAD

BATTERSEA
Town Centre
Built-Up Zone
Total Gross floor area: 1215 sqm
*Survey date: THURSDAY* *10/05/12* *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 |
|---|---|
| BT-02-A-02 | on-site parking available |
| CI-02-A-01 | on-site parking available |
| CN-02-A-01 | on-site parking available |
| CN-02-A-02 | on-site parking available |
| IS-02-A-01 | on-site parking available |
| SK-02-A-02 | on-site parking available |

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

## MULTI-MODAL VEHICLES

## Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period**

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 3 | 4323 | 0.062 | 3 | 4323 | 0.031 | 3 | 4323 | 0.093 |
| 08:00 - 09:00 | **3** | **4323** | **0.162** | 3 | 4323 | 0.039 | 3 | 4323 | 0.201 |
| 09:00 - 10:00 | 3 | 4323 | 0.069 | 3 | 4323 | 0.023 | 3 | 4323 | 0.092 |
| 10:00 - 11:00 | 3 | 4323 | 0.046 | 3 | 4323 | 0.054 | 3 | 4323 | 0.100 |
| 11:00 - 12:00 | 3 | 4323 | 0.069 | 3 | 4323 | 0.046 | 3 | 4323 | 0.115 |
| 12:00 - 13:00 | 3 | 4323 | 0.062 | 3 | 4323 | 0.054 | 3 | 4323 | 0.116 |
| 13:00 - 14:00 | 3 | 4323 | 0.031 | 3 | 4323 | 0.031 | 3 | 4323 | 0.062 |
| 14:00 - 15:00 | 3 | 4323 | 0.039 | 3 | 4323 | 0.046 | 3 | 4323 | 0.085 |
| 15:00 - 16:00 | 3 | 4323 | 0.039 | 3 | 4323 | 0.069 | 3 | 4323 | 0.108 |
| 16:00 - 17:00 | 3 | 4323 | 0.023 | 3 | 4323 | 0.069 | 3 | 4323 | 0.092 |
| 17:00 - 18:00 | 3 | 4323 | 0.054 | **3** | **4323** | **0.154** | **3** | **4323** | **0.208** |
| 18:00 - 19:00 | 3 | 4323 | 0.023 | 3 | 4323 | 0.046 | 3 | 4323 | 0.069 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.679 | | | 0.662 | | | 1.341 |

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

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

### Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 1215 - 9803 (units: sqm) |
| Survey date date range: | 01/01/08 - 14/06/16 |
| Number of weekdays (Monday-Friday): | 3 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 6 |

*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 02 - EMPLOYMENT/A - OFFICE

## MULTI-MODAL CYCLISTS

## Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period**

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 3 | 4323 | 0.031 | 3 | 4323 | 0.008 | 3 | 4323 | 0.039 |
| 08:00 - 09:00 | **3** | **4323** | **0.062** | 3 | 4323 | 0.000 | **3** | **4323** | **0.062** |
| 09:00 - 10:00 | 3 | 4323 | 0.000 | 3 | 4323 | 0.008 | 3 | 4323 | 0.008 |
| 10:00 - 11:00 | 3 | 4323 | 0.008 | 3 | 4323 | 0.000 | 3 | 4323 | 0.008 |
| 11:00 - 12:00 | 3 | 4323 | 0.000 | 3 | 4323 | 0.008 | 3 | 4323 | 0.008 |
| 12:00 - 13:00 | 3 | 4323 | 0.015 | 3 | 4323 | 0.015 | 3 | 4323 | 0.030 |
| 13:00 - 14:00 | 3 | 4323 | 0.015 | 3 | 4323 | 0.000 | 3 | 4323 | 0.015 |
| 14:00 - 15:00 | 3 | 4323 | 0.000 | 3 | 4323 | 0.008 | 3 | 4323 | 0.008 |
| 15:00 - 16:00 | 3 | 4323 | 0.023 | 3 | 4323 | 0.015 | 3 | 4323 | 0.038 |
| 16:00 - 17:00 | 3 | 4323 | 0.008 | 3 | 4323 | 0.023 | 3 | 4323 | 0.031 |
| 17:00 - 18:00 | 3 | 4323 | 0.000 | **3** | **4323** | **0.054** | 3 | 4323 | 0.054 |
| 18:00 - 19:00 | 3 | 4323 | 0.000 | 3 | 4323 | 0.023 | 3 | 4323 | 0.023 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.162 | | | 0.162 | | | 0.324 |

*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: | 1215 - 9803 (units: sqm) |
| Survey date date range: | 01/01/08 - 14/06/16 |
| Number of weekdays (Monday-Friday): | 3 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 6 |

*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 02 - EMPLOYMENT/A - OFFICE

## MULTI-MODAL PEDESTRIANS

### Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period**

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 3 | 4323 | 0.093 | 3 | 4323 | 0.015 | 3 | 4323 | 0.108 |
| 08:00 - 09:00 | 3 | 4323 | 0.324 | 3 | 4323 | 0.039 | 3 | 4323 | 0.363 |
| 09:00 - 10:00 | 3 | 4323 | 0.339 | 3 | 4323 | 0.093 | 3 | 4323 | 0.432 |
| 10:00 - 11:00 | 3 | 4323 | 0.216 | 3 | 4323 | 0.208 | 3 | 4323 | 0.424 |
| 11:00 - 12:00 | 3 | 4323 | 0.123 | 3 | 4323 | 0.231 | 3 | 4323 | 0.354 |
| 12:00 - 13:00 | 3 | 4323 | 0.802 | **3** | **4323** | **1.087** | **3** | **4323** | **1.889** |
| 13:00 - 14:00 | **3** | **4323** | **1.141** | 3 | 4323 | 0.740 | 3 | 4323 | 1.881 |
| 14:00 - 15:00 | 3 | 4323 | 0.540 | 3 | 4323 | 0.301 | 3 | 4323 | 0.841 |
| 15:00 - 16:00 | 3 | 4323 | 0.231 | 3 | 4323 | 0.270 | 3 | 4323 | 0.501 |
| 16:00 - 17:00 | 3 | 4323 | 0.147 | 3 | 4323 | 0.409 | 3 | 4323 | 0.556 |
| 17:00 - 18:00 | 3 | 4323 | 0.077 | 3 | 4323 | 0.478 | 3 | 4323 | 0.555 |
| 18:00 - 19:00 | 3 | 4323 | 0.031 | 3 | 4323 | 0.139 | 3 | 4323 | 0.170 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 4.064 | | | 4.010 | | | 8.074 |

*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: | 1215 - 9803 (units: sqm) |
| Survey date date range: | 01/01/08 - 14/06/16 |
| Number of weekdays (Monday-Friday): | 3 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 6 |

*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 02 - EMPLOYMENT/A - OFFICE

## MULTI-MODAL PUBLIC TRANSPORT USERS

## Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period**

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 3 | 4323 | 0.409 | 3 | 4323 | 0.023 | 3 | 4323 | 0.432 |
| 08:00 - 09:00 | **3** | **4323** | **1.912** | 3 | 4323 | 0.008 | **3** | **4323** | **1.920** |
| 09:00 - 10:00 | 3 | 4323 | 0.702 | 3 | 4323 | 0.039 | 3 | 4323 | 0.741 |
| 10:00 - 11:00 | 3 | 4323 | 0.239 | 3 | 4323 | 0.100 | 3 | 4323 | 0.339 |
| 11:00 - 12:00 | 3 | 4323 | 0.239 | 3 | 4323 | 0.440 | 3 | 4323 | 0.679 |
| 12:00 - 13:00 | 3 | 4323 | 0.185 | 3 | 4323 | 0.463 | 3 | 4323 | 0.648 |
| 13:00 - 14:00 | 3 | 4323 | 0.239 | 3 | 4323 | 0.247 | 3 | 4323 | 0.486 |
| 14:00 - 15:00 | 3 | 4323 | 0.208 | 3 | 4323 | 0.185 | 3 | 4323 | 0.393 |
| 15:00 - 16:00 | 3 | 4323 | 0.062 | 3 | 4323 | 0.339 | 3 | 4323 | 0.401 |
| 16:00 - 17:00 | 3 | 4323 | 0.262 | 3 | 4323 | 0.817 | 3 | 4323 | 1.079 |
| 17:00 - 18:00 | 3 | 4323 | 0.077 | **3** | **4323** | **1.480** | 3 | 4323 | 1.557 |
| 18:00 - 19:00 | 3 | 4323 | 0.023 | 3 | 4323 | 0.308 | 3 | 4323 | 0.331 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 4.557 | | | 4.449 | | | 9.006 |

*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: | 1215 - 9803 (units: sqm) |
| Survey date date range: | 01/01/08 - 14/06/16 |
| Number of weekdays (Monday-Friday): | 3 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 6 |

*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 02 - EMPLOYMENT/A - OFFICE

## MULTI-MODAL TOTAL PEOPLE

## Calculation factor: 100 sqm

**BOLD print indicates peak (busiest) period**

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 3 | 4323 | 0.617 | 3 | 4323 | 0.077 | 3 | 4323 | 0.694 |
| 08:00 - 09:00 | **3** | **4323** | **2.491** | 3 | 4323 | 0.085 | 3 | 4323 | 2.576 |
| 09:00 - 10:00 | 3 | 4323 | 1.110 | 3 | 4323 | 0.162 | 3 | 4323 | 1.272 |
| 10:00 - 11:00 | 3 | 4323 | 0.509 | 3 | 4323 | 0.362 | 3 | 4323 | 0.871 |
| 11:00 - 12:00 | 3 | 4323 | 0.440 | 3 | 4323 | 0.717 | 3 | 4323 | 1.157 |
| 12:00 - 13:00 | 3 | 4323 | 1.064 | 3 | 4323 | 1.627 | **3** | **4323** | **2.691** |
| 13:00 - 14:00 | 3 | 4323 | 1.434 | 3 | 4323 | 1.018 | 3 | 4323 | 2.452 |
| 14:00 - 15:00 | 3 | 4323 | 0.802 | 3 | 4323 | 0.547 | 3 | 4323 | 1.349 |
| 15:00 - 16:00 | 3 | 4323 | 0.378 | 3 | 4323 | 0.709 | 3 | 4323 | 1.087 |
| 16:00 - 17:00 | 3 | 4323 | 0.455 | 3 | 4323 | 1.326 | 3 | 4323 | 1.781 |
| 17:00 - 18:00 | 3 | 4323 | 0.216 | **3** | **4323** | **2.221** | 3 | 4323 | 2.437 |
| 18:00 - 19:00 | 3 | 4323 | 0.077 | 3 | 4323 | 0.547 | 3 | 4323 | 0.624 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 9.593 | | | 9.398 | | | 18.991 |

*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: | 1215 - 9803 (units: sqm) |
| Survey date date range: | 01/01/08 - 14/06/16 |
| Number of weekdays (Monday-Friday): | 3 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 6 |

*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.*