160-161 Drury Lane, London Borough of Camden

Framework Travel Plan

Curtins Ref: 69524

Revision: 04

Issue Date: 10 April 2019

Client Name: Palmyra Property Investments Limited

BIM Reference: 69524-CUR-00-XX-RP-TS-00001-V04_Travel Plan

Curtins
40 Compton Street
London, EC1V 0BD
Tel: 020 7324 2240
www.curtins.com

Control Sheet

This report has been prepared for the sole benefit, use, and informing of the client. The liability of Curtins with respect to the information contained in the report will not extend to any third party.

Author	Signature	Date
Caitlin Turley BEng (Hons), MICHT Transport Planner		10 April 2019

Reviewed	Signature	Date
Irene O'Riordan MSc BSc (Hons) Principal Transport Planner		10 April 2019

Authorised	Signature	Date
Ben Dawson BSc (Hons) MCIHT Associate – Transport Planning		10 April 2019

Table of contents

Figures

Tables

Appendices

1.0 Introduction

1.1 Introduction

1.1.1 Curtins have been appointed by Palmyra Property Investments Limited to prepare a Framework Travel Plan (FTP) to accompany the detailed planning application for the redevelopment of 160 -161 Drury lane, located in the administrative boundary of the London Borough of Camden (LBC).

1.1.2 The development proposals include the extension and refurbishment of an existing mixed-use building.

1.1.3 Alongside this FTP, Curtins have prepared an accompanying Transport Statement (TS). This document should be read in conjunction with all relevant submitted documentation including the Design and Access Statement (DAS), prepared by Ian Chalk Architects.

1.1.4 Details of the relevant contact for this FTP are provided in **Table 1** below.

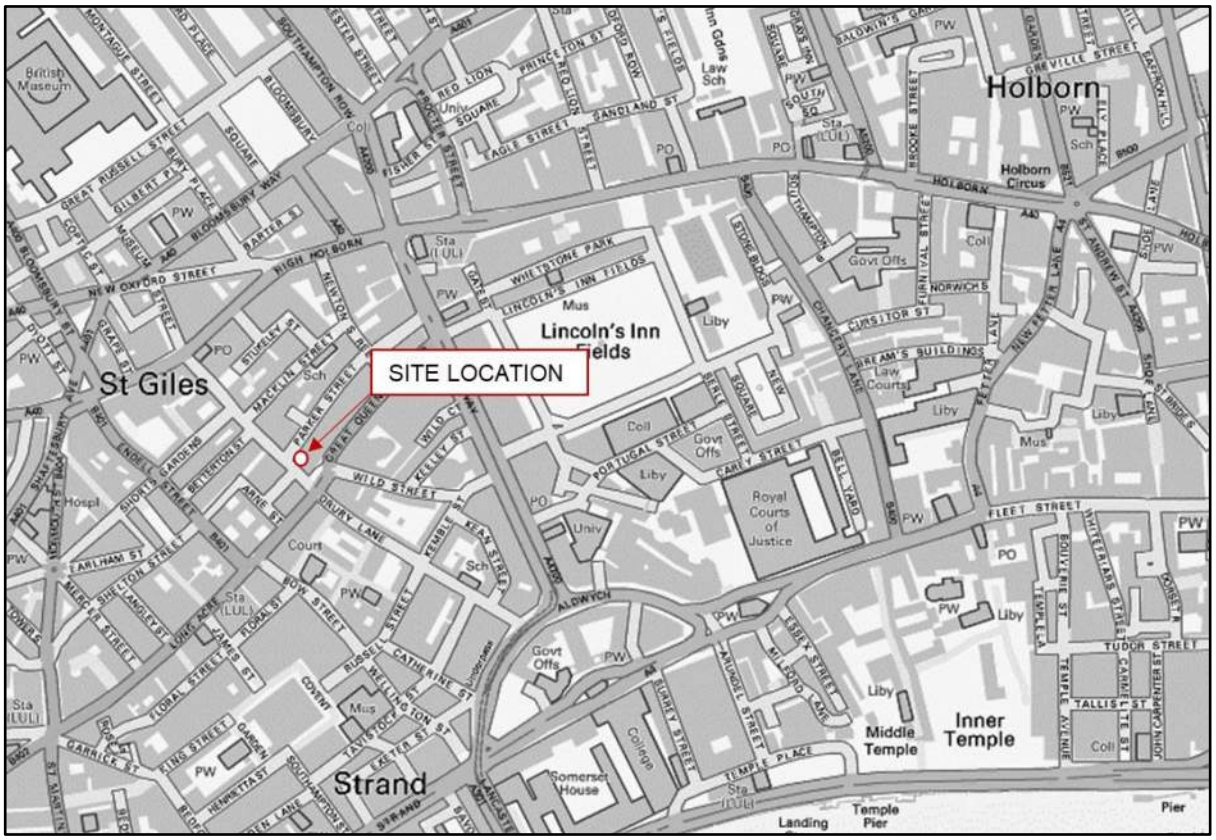
Table 1.1 – Travel Plan Contacts

Development Address	Travel Plan Coordinator (TPC)	Travel Plan Author
160 – 161 Drury Lane, London Borough of Camden	TBC	Caitlin Turley Caitlin.turley@curtins.com

1.1 Site Location

1.1.5 The site is positioned on the corner of the junction of Parker Street and Drury Lane and is bound by surrounding commercial / office buildings. **Figure 1** illustrates the location of the site in the context of the surrounding area.

Figure 1-1 - Site Location



1.2 Development proposals

1.2.1 The development description is set out below:

"Demolition of existing fourth floor, replacement of fourth floor and erection of an additional two storeys to the site, full re-skinning of the facades, ground floor alterations including new entrances, single storey extension to existing rear closet wing, reconfiguration of existing external fire escape stair to the rear, reconfiguration of existing external roof plant and introduction of additional plant contained within the volume of the proposed sixth storey extension and all other enabling works in connection with the use of the building as offices (Class B1) at part ground floor and first to seventh floor levels and flexible B1/A1/A3 floorspace at basement and part ground floor level and flexible B1/A1 floorspace at part ground floor level."

1.2.2 No car parking is proposed as part of the development proposals and delivery and servicing arrangements will remain the same as the current building.

1.2.3 Cycle parking will be provided in line with the adopted London Plan. The long stay cycle parking will be provided as 2-tiered Josta cycle racks. Short stay cycle parking will be in the form of Sheffield stands. A cycle store, wash rooms and shower facilities will be located at the rear of the building at the ground floor.

1.2.4 Pedestrian access to the retail unit will be taken via an entrance on Drury Lane. Access to the office lobby and ground flexible A1/A3/B1 unit will be taken via Parker Street.

1.3 Travel Plan History

1.3.1 This Framework Travel Plan is primarily aimed at the staff of the offices and proposed flexible retail units; however, measures have also been proposed for visitors and for deliveries to the development.

1.3.2 A number of documents and resources have been consulted in the production of this FTP. The primary document is TfL's *Travel Planning for new development in London*. Other documents and guidance used in the production of this FTP include:

- The Department for Transport, "The Essential Guide to Travel Planning", (2008); and
- The Department for Transport, "Good Practice Guidelines: Delivering Travel Plans through the Planning Process", (2009)

1.3.3 The site receives a PTAL an excellence accessibility score of 6b.

1.4 Travel Plan History

1.4.1 Following this introduction, Section 2 of the report sets out the aims and objectives of the FTP. This includes the background and benefits of the FTP.

1.4.2 Section 3 reviews the accessibility of the site within the context of pedestrian, cycle and public transport modes and an audit of the supporting sustainable transport infrastructure in the vicinity of the site.

1.4.3 Section 4 summarises the intended initiatives and measures suggested with the aim of reducing the need to travel, dependency on car use and to encourage a more sustainable mode of transport. This section also outlines the approach to reducing emissions and raising awareness in a transport context.

1.4.4 Section 5 details the Targets to be set as part of the FTP process.

1.4.5 Section 6 details the monitoring and review processes that are to be introduced to ensure the success of this TP.

2.0 Aims and Objectives

2.1 Background to Travel Plans

2.1.1 In essence, a FTP is intended to encourage people to choose alternative transport modes over single occupancy car use and where possible choose alternative healthier modes of transport. Such a plan should include a range of measures designed to achieve these goals.

2.1.2 Following the 2007 United Nations Climate Change Conference the need to promote sustainable travel methods, especially alternatives to private car travel, has been reinforced. Central government has issued a number of policy documents and initiatives to help promote sustainable travel. These include:

- National Planning Policy Framework 2;
- Road Traffic Reduction Act (1997);
- The Climate Change Act (2008);
- Environment Act (1995); and
- Department for Communities and Local Government, "Travel Plans, Transport Assessments and Statements" (2014).

2.1.3 The policies and guidance provided by these documents all support the aims of travel plans.

2.1.4 The National Planning Policy Framework 2 (NPPF 2) was adopted in July 2018 and outlines the potential benefits and requirements for the production of Travel Plans. It states that Travel Plans are "key tools" to facilitate development.

2.1.5 Section 9, Promoting Sustainable Transport, of the NPPF 2 outlines the important role that considering development applications should ensure that:

- *'appropriate opportunities to promote sustainable transport can be – or have been – taken up, given the type of development and its location; and*
- *Safe and suitable access to the site can be achieved for all users.'*

2.1.6 Paragraph 110 of the NPPF 2 states applications for development should: '

a) 'Give priority to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services and appropriate facilities that encourage public transport use;

b) Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter and respond to local character and design standards;

d) Allow for the efficient delivery of goods and access by service and emergency vehicles; and

2.1.7 *Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.*

2.2 Travel Planning in London

2.2.1 Both the London Plan and the Mayor's Transport Strategy developed the approaches originally set out within PPG13 and aim to achieve a 'sustainable city'. Policy 6.1 of the London Plan States that,

- "*The Mayor will work with all relevant partners to encourage the closer integration of transport and development through the schemes and proposals shown in Table 6.1 and by:*
- *a encouraging patterns and nodes of development that reduce the need to travel, especially by car – boroughs should use the standards set out in Table 6.2 in the Parking Addendum to this chapter to set maximum car parking standards in DPDs*
- *b seeking to improve the capacity and accessibility of public transport, walking and cycling, particularly in areas of greatest demand – boroughs should use the standards set out in Table 6.3 in the Parking Addendum to set minimum cycle parking standards in DPDs*
- *c supporting development that generates high levels of trips at locations with high levels of public transport accessibility and/or capacity, either currently or via committed, funded improvements including, where appropriate, those provided by developers through the use of planning obligations (See Policy 8.2).*
- *d improving interchange between different forms of transport, particularly around major rail and Underground stations, especially where this will enhance connectivity in outer London (see Policy 2.3)*
- *e seeking to increase the use of the Blue Ribbon Network, especially the Thames, for passenger and freight use*
- *f facilitating the efficient distribution of freight whilst minimising its impacts on the transport network*
- *g supporting measures that encourage shifts to more sustainable modes and appropriate demand management*

- *h promoting greater use of low carbon technology so that carbon dioxide and other contributors to global warming are reduced*

- *i promoting walking by ensuring an improved urban realm j seeking to ensure that all parts of the public transport network can be used safely, easily and with dignity by all Londoners,* including by securing step-free access where this is appropriate and practicable.

- *B The Mayor will, and boroughs should, take an approach to the management of streetspace that takes account of the different roles of roads for neighbourhoods and road users in ways that support the policies in this Plan promoting public transport and other sustainable means of transport (including policies 6.2, 6.7, 6.9 and 6.10) and a high quality public realm. Where appropriate, a corridor-based approach should be taken to ensure the needs of street users and improvements to the public realm are co-ordinated*."

2.2.2 Policy 6.3 of the London Plan goes on to state that,

"Development proposals should ensure that impacts on transport capacity and the transport network, at both a corridor and local level, are fully assessed. Development should not adversely affect safety on the transport network.

B Where existing transport capacity is insufficient to allow for the travel generated by proposed developments, and no firm plans exist for an increase in capacity to cater for this, boroughs should ensure that development proposals are phased until it is known these requirements can be met, otherwise they may be refused. The cumulative impacts of development on transport requirements must be taken into account.

C Transport assessments will be required in accordance with TfL's Transport Assessment Best Practice Guidance for major planning applications. Workplace and/or residential travel plans should be provided for planning applications exceeding the thresholds in, and produced in accordance with, the relevant TfL guidance. Construction logistics plans and delivery and servicing plans should be secured in line with the London Freight Plan1 and should be co-ordinated with travel plans."

2.3 The Aims of the Travel Plan

2.3.1 In line with Central Government Policies and Guidance, the aims of the FTP are to:

- Reduce the need to travel;

- Discourage the use of unsustainable modes of transport and enable users of the site to make travel choices that benefit themselves and their community;

- Maximise social inclusion by making the site accessible to all members of the community; and

- Raise awareness of alternative modes of transport and thus encourage a modal shift towards more sustainable travel modes.

2.3.2 This FTP has been prepared to:

- Show its commitment to addressing the access needs of occupiers and visitors alike;
- Support the Government's environmental and sustainable development initiatives;
- Remain in harmony with, and responsive to, changes to planning and fiscal policies regarding transport;
- Ensure that a formal monitoring process is in place;
- Work with others to ensure the availability of high quality alternatives to the car and thereby reduce environmental impacts, and
- Maximise the efficiency of the transport and property resources.

2.4 Benefits of a Travel Plan

2.4.1 The most easily identifiable benefits are those that are directly related to reductions in vehicle use; namely significantly less congestion, noise, air pollution and accidents. However, there is also a broader range of more intangible benefits that can occur from the implementation of Travel Plan initiatives. These benefits include:

- Improved health (i.e. increased fitness and reduced stress and obesity);
- A reduction in travel costs;
- A cleaner local environment;
- Meeting an organisation's environmental standards;
- Increase business efficiency and equality;
- Improved accessibility to local services;
- Increased road safety;
- Reduced travel times;
- Improved travel choice;
- Reduced congestion and demand for parking spaces; and
- A reduction in the need to travel.

3.0 Site Accessibility

3.1 Site Location

3.1.1 The site benefits from a PTAL of 6b and is the highest achievable level relating to 'excellent' accessibility.

3.1.2 A site-specific transport survey has been carried out assessing the accessibility of the site by sustainable modes of travel including:

- Pedestrian Accessibility;
- Cycle Accessibility; and
- Public Transport Accessibility.

3.2 iTRACE

3.2.1 iTRACE is an internet based Travel Plan management system. It has been built and designed based on requirements set out by TfL and WESTRANS, (The West London Transport Strategy Group). It comprises of two main elements:

- A range of tools including online site audits, online/paper based staff travel surveys and Travel Plan templates which organisations may use to develop their Travel Plan; and
- A Travel Plan Project Management Application for use by London Borough Travel Plan Officers. This enables a range of data on individual sites to be inputted into the system and accessed by borough officers.

3.2.2 The document "Guidance for workplace Travel Planning for development" produced by TfL states that all development related Travel Plans in London should use a standardised approach.

3.2.3 Upon occupation it is proposed than an iTRACE compatible survey will be undertaken as a basis for providing initial data upon which the Travel Plan and future initiatives may be developed.

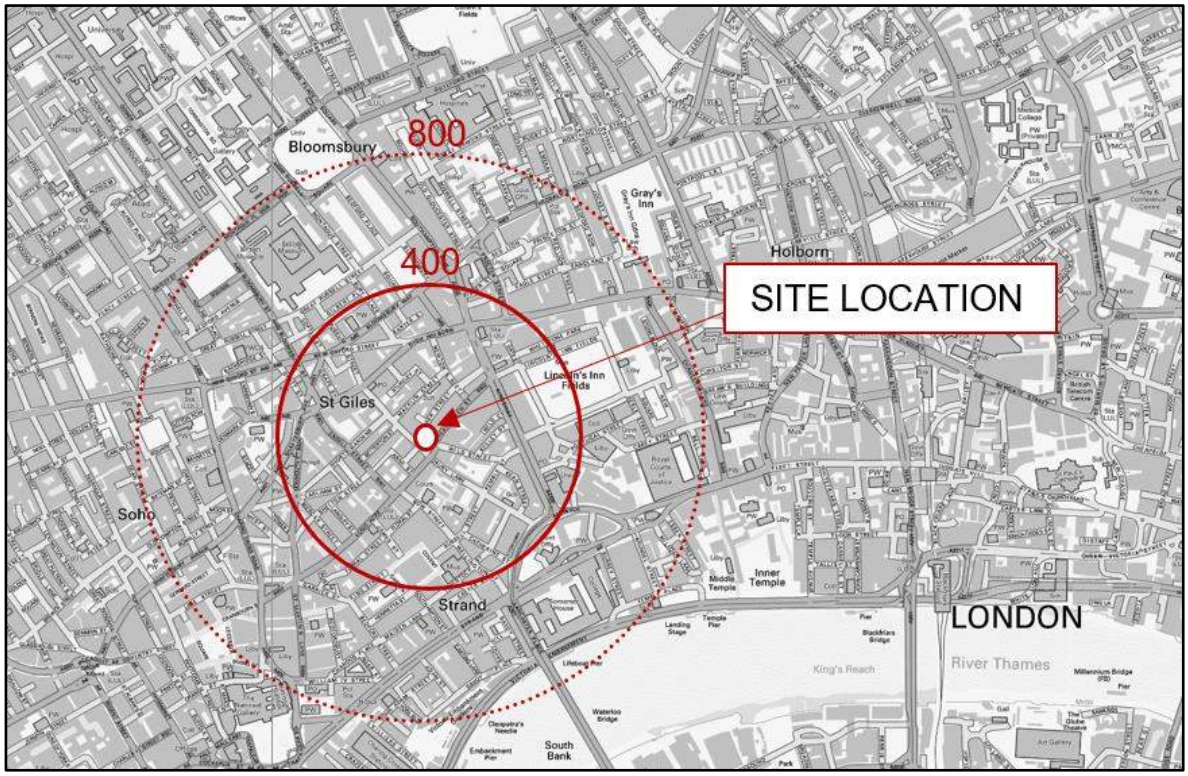
3.3 Walking Accessibility

3.3.1 In the context of the availability and quality of walking infrastructure, it is noted that the site lies within a highly urbanised and central location and, as such, benefits from a well-formed network of pedestrian footways that facilitate connectivity between the site and the surrounding area. Subsequently, pedestrian infrastructure in the vicinity of the site is considered to be of a good standard.

3.3.2 Wide, lit footways are located on both sides of Drury Lane and Parker Street. Tactile paving and dropped kerbs are provided at the junction of Parker Street and Drury Lane. The nearest formal pedestrian crossing to the site is a zebra crossing located approximately 40m south of the site adjacent to the junction between Drury Lane and Great Queen Street.

3.3.3 **Figure 3.1** provides 400m (5minute) and 800m (10minute) walking isochrones measured from the centre of the site.

Figure 3-1 - Pedestrian Isochrones

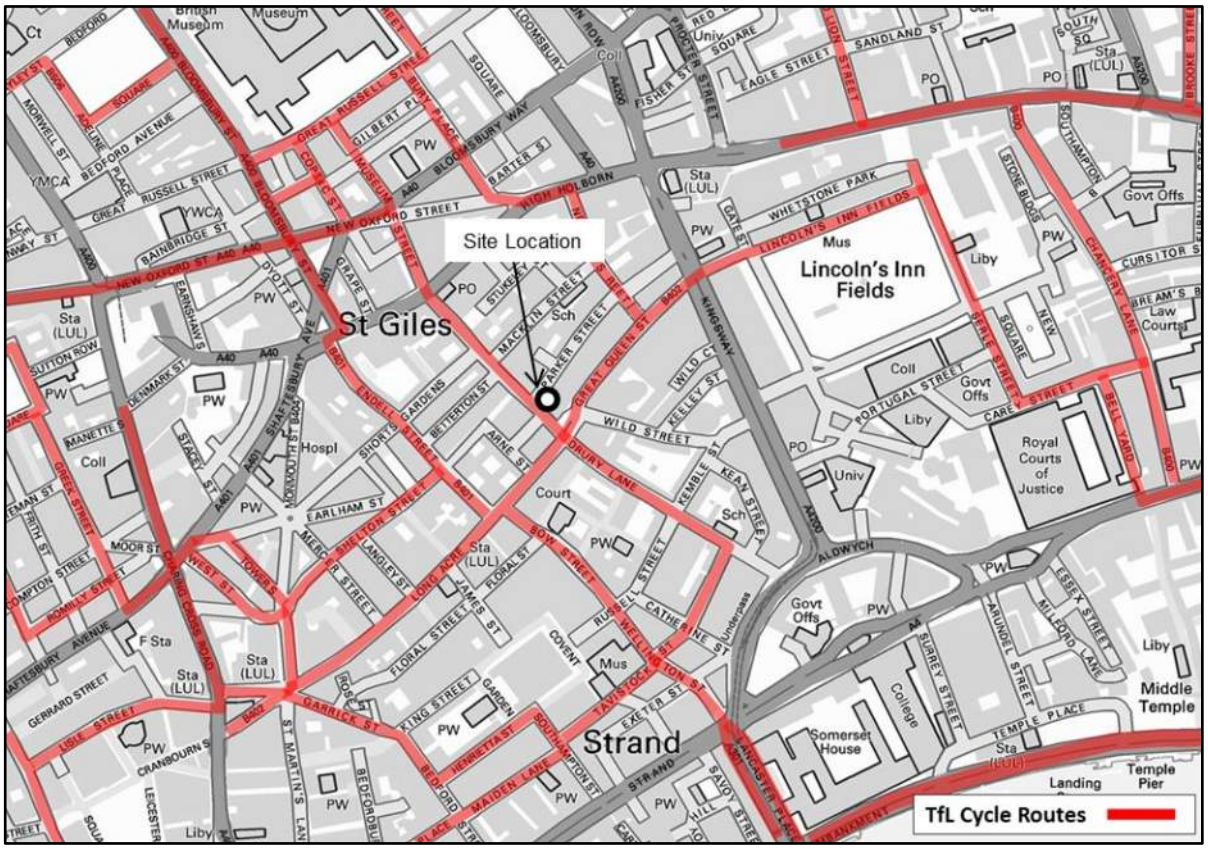


3.3.4 **Figure 3.1** illustrates that the site is highly accessible by foot, with areas such as Soho, the Strand and Bloomsbury all accessible within a 10-minute walk.

3.4 Cycling Accessibility

3.4.1 There are several TfL advisory cycle routes in the vicinity of the site as shown in **Figure 2.2**. These include Drury Lane, Shelton Street Long Acre, Bow Street and Endell Street which are all marked as ‘routes signed or marked for use by cyclists on a mixture of quiet or busier roads’.

Figure 3-2 - TfL Cycle Routes



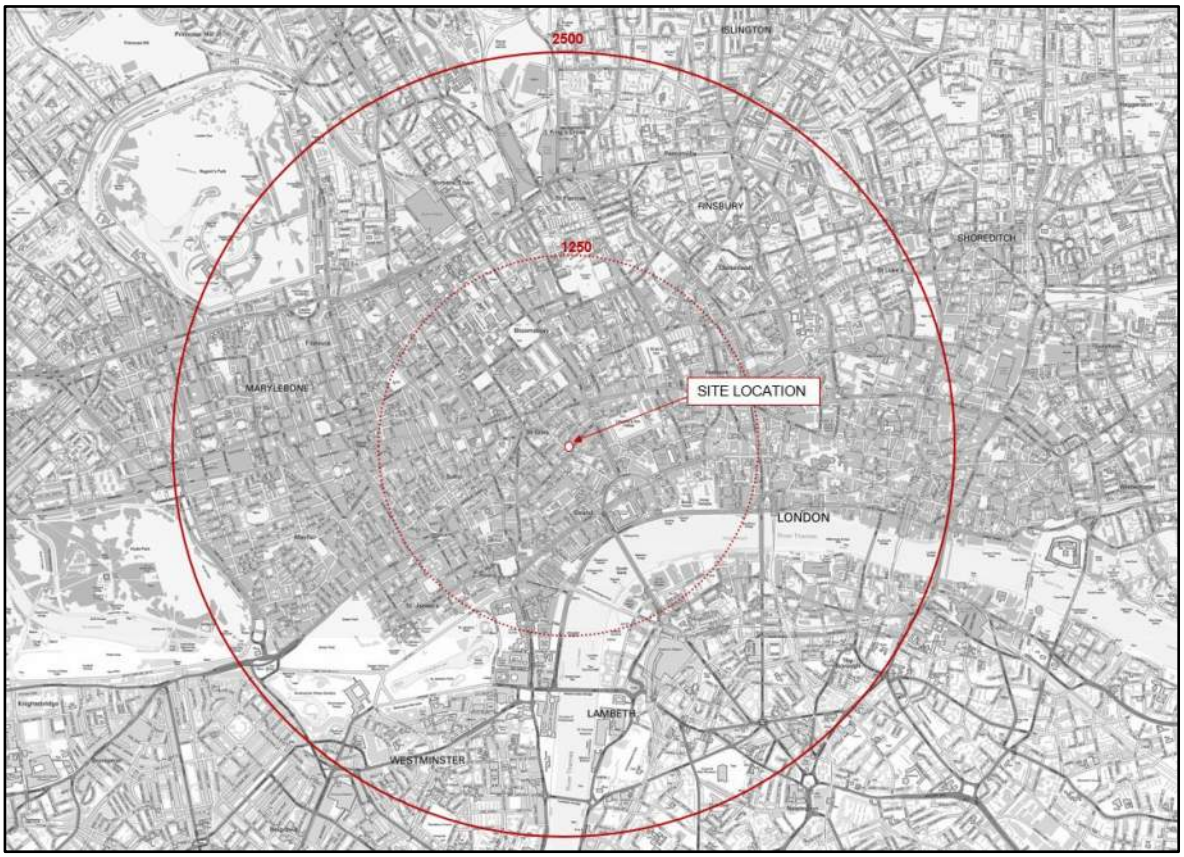
3.4.2 The nearest national cycle route to the site is National Cycle Network (NCN) Route 4 (on road) which runs through central London along Chelsea Embankment (A3212), Lambeth Palace Road, Belvedere Road, Upper Ground, Southwark Street (A3200) on the south side of the River Thames. Upper Ground, approximately 1.3 km to the southeast of the site on the south side of the river, is the closest point to NCN Route 4.

3.4.3 The closest Cycle Superhighway (CS) to the site is CS8 which runs between Westminster and Wandsworth. Westminster Bridge, approximately 1.7 km to the south of the site is the closest point to CS8 from the proposed site.

3.4.4 The Mayor's Central London cycle hire scheme was implemented in 2010 and is managed by TfL. A cycle hire docking station is located adjacent to the site, providing 25 bikes.

3.4.5 **Figure 3.3** provides 1.25km (10 minute) and 2.5km (20 minute) cycle distance from the site.

Figure 3-3 - Cycle Isochrones



3.4.6 **Figure 3.3** illustrates that the site is highly accessible via bike. Kings Cross, Finsbury, Marylebone and London Bridge are all accessible within a 20-minute cycle of the site.

3.5 Public Transport

Public Transport Accessibility Level

3.5.1 Public Transport Accessibility Levels (PTALs) is an established method of for the calculation of public transport access in London.

3.5.2 This calculation considers bus stops in the local area located within a 640m walk threshold of the site and underground and railway stations within 960m and categorises the density of public transport services from an identified point.

3.5.3 The rating of accessibility is a grade from 1–6 (including sub-divisions 1a, 1b, 6a and 6b), where a PTAL of 1a indicates poor access to the location by public transport, and a PTAL of 6b indicates excellent access by public transport.

3.5.4 Using the Transport for London (TfL) Planning Information Database, it has been determined that the site has a PTAL rating of 6B which is described as ‘excellent’. **Appendix A** includes a copy of TfL’s PTAL.

Bus

3.5.5 The site is well served by bus, with 37 routes accessible from the site within the 640m PTAL walking distance threshold. The routes provide access to a variety of destinations throughout London and together provide more than 340 buses per hour in each direction. The closest bus stop to the site is on Kingsway, which is approximately 280m north of the site.

London Underground

3.5.6 Covent Garden Station is the closest London Underground station to the development, situated approximately 270m from the site. This station is on the Piccadilly line between Leicester Square and Holborn. Other nearby London Underground stations within walking distance of the site include Holborn (450m), Tottenham Court Road (650m), Leicester Square (650m) and Temple (900m) which provide access to the Northern, Circle, District, Central and Piccadilly Lines.

3.5.7 These stations combined provide access to 207 services in the AM peak hour and 206 services in the PM peak hour.

National Rail

3.5.8 The nearest National Rail Station is Charing Cross, approximately 1km from the site and hence 40m beyond the 960km threshold. In reality, some people travelling to/from the site will choose to walk the 1km to this station.

3.5.9 Charing Cross provides access to Southeastern train services to and from Hastings, Dartford, Ramsgate, Dover Priory and Ashford (Kent).

3.5.10 In the AM peak hour there are approximately 43 services (23 arrivals and 20 departures). In the PM peak hour there are approximately 44 services (19 arrivals and 25 departures).

3.6 Summary

3.6.1 This section has demonstrated that the site is highly accessible by a range of sustainable modes of travel. The accessibility of the site by sustainable modes of travel has been assessed in detail, with the most significant findings set out below:

- There is significant pedestrian infrastructure accommodating pedestrian movements to key areas, and facilities throughout the area surrounding the site;
- The site is positioned close to cycle hire stations and identified cycle routes;
- The site is close to Covent Garden, Holborn and Tottenham Court Road underground stations;
- There are a large number of bus services accessible directly outside of the site and from surrounding streets; and

- The provision of cycle parking well in excess of policy together with restrictive car parking provision, provides a sound basis for encouraging non-care modes of transport.

4.0 Travel Plan Measures and Initiatives

4.1 Introduction

4.1.1 This section of the FTP sets out measures and initiatives that will be considered to encourage sustainable modes of travel and reduce dependence on the private car. In addition, single occupancy vehicle trips will be discouraged. As the site is be car free, the measures and initiatives focus on encouraging both greater use of public transport and active travel, such as walking and cycling. The measures and initiatives have been designed to assist in both the management of the FTP and promoting the use of sustainable modes of travel.

4.1.2 The 'measures' have been developed as a result of the information collected and analysed on the predicted travel profiles. It is worth noting that the developer of this scheme will not be based at this site, it will be leased to a separate company.

4.2 Production of Staff Induction Packs

4.2.1 All staff will receive a copy of the final Travel Plan, with an induction pack, when they are first employed at the site. Induction packs can be critical in influencing travel patterns. The contents of the packs could include:

- Introduction to the TP concept detailing objectives and aspirations;
- Literature on the health benefits of walking, cycling and environmental benefits of sustainable modes of transport;
- Maps showing local walking / cycling routes and places of interest;
- Regularly updated details of public transport services, including timetables and routes; and
- Details of the Travel Plan Co-ordinator (TPC).

4.3 Measures to Promote Walking

4.3.1 Walking is the most sustainable and accessible mode of travel. Any individual in relatively fair health can incorporate walking into part of their journey. Furthermore, 30 minutes of moderate activity 5 or more times per week is likely to enhance the health and fitness of the individual. In order to encourage walking a number of measures will be considered:

- Promotion of a 'walking buddy' scheme for staff;
- Promotion of Walkit.com (www.walkit.com/london), Walk4life find a walk. http://www.walk4life.info/find-a-walk and TfL Journey planner https://tfl.gov.uk/modes/walking/

- Promotion of leisure routes and strategic routes on Walk London;
- Promotion of National Walking Month;
- Information on the local pedestrian routes;
- Make information on local pedestrian routes and facilities available; and
- Raise awareness of the health benefits of walking.

4.4 Measures to Promote Cycling

4.4.1 To encourage staff to cycle, the following measures will be implemented or considered:

- Promotion of cycle parking and showers/changing facilities on site;
- Promotion of cycle training and membership organisations such as LCC, CTC (Cycling UK), British Cycling (and related programmes to engage people in cycling),
- Promotion of cycle skills courses and related social media work undertaken by Camden Council (www.facebook.com/cyclingcamden);
- Information on the local cycle network routes made available through Induction Packs;
- Promotion of Bike Week events in Camden and nearby boroughs, Cycle to Work Day, 'Lets Ride' British Cycling Initiatives including led rides, Breeze and Ride Social Rides, Ride London,
- Promotion of London Cycle Guides, Cycle Streets Journey Planner, and TfL Cycle Journey Planner;
- Promotion of cycle security and bike marking schemes to reduce bike theft;
- Promotion of HGV/cycle safety;
- Promote Cycle scheme salary sacrifice scheme to promote bike ownership;
- Promotion of Love to Ride (London Cycle Challenge);
- Promotion of E-bike advantages for those with a longer commute/carrying loads;
- Local cycle clubs/forums to be invited to take part in Travel Plan promotional events to raise awareness of this mode of travel;
- Setting up of a Bicycle User Group (BUG);

- The provision of 21 secure on-site cycle parking spaces;
- The provision of shower and changing facilities;
- The provision of staff lockers;
- Promotion of events such as “National Bike Week”;
- Provide alternative transport home in the event of an emergency; and
- Access to sheltered secure cycle parking.

4.5 Measures to Promote Public Transport

4.5.1 Increased accessibility to, and use of, public transport is considered to be a key element of any TP. As demonstrated in the previous section, the proximity of local bus stops and Underground stations ensures that public transport is an attractive option for people accessing the site.

- Provide up to date public transport information including timetables and contact information in Induction Packs and on staff notice boards;
- Staff will be made aware of the Transport for London (TfL) travel alert service. This is a free service provided by TfL, which users can register to be alerted if there are delays on the tube and DLR routes before starting their journey
- Promotion of TfL’s Safer Travel at Night campaign relating to safety on public transport and the use of licensed Private Hire and Black Cabs;
- Promotion of timetables and ticketing, spider maps for bus services including night buses;
- Promotion of apps to facilitate mobile handset planning of public transport trips and awareness of network issues and problems; and
- Provide alternative transport home in the event of an emergency.

4.5.2 Furthermore, season ticket loans could be made available for staff wishing to travel to work via public transport, where a monthly deduction is made from their pay packet.

4.6 Measures to Promote Operational Related Transport Efficiencies

Delivery and Servicing

4.6.1 The primary operational transport related to office and retail development is the delivery of goods and the removal of waste.

4.6.2 Once occupied a full audit could be undertaken of workplace deliveries with a view to reducing the number of trips by either having consolidated deliveries or reducing the number of waste collections.

4.6.3 This will involve encouraging suppliers and delivery contractors to partake in the FORS scheme, which provides a quality and performance benchmark for deliveries to the site. Additionally, managing the timings and number of the deliveries, and limiting the size of vehicles delivering to the site, will be undertaken.

Taxi Drop-off/Pick-up

4.6.4 Taxis will be able to stop on the single yellow lines nearby the site when picking or dropping people off.

5.0 Travel Plan Targets

5.1 Introduction

5.1.1 As identified within the previous sections of this report, the measures that will be introduced will aim to encourage sustainable forms of travel. The impact of vehicles generated by the development has sought to be reduced.

5.1.2 As a direct result of the 'measures' to be introduced and local travel behaviour, a number of targets aimed at reducing single occupancy car travel and encouraging sustainable forms of travel have been detailed below.

5.2 Targets

5.2.1 The FTP indicative targets are based on SMART principles:

- Specific (identify what is to be achieved);
- Measurable (over the target period);
- Achievable (linked to overall objectives and aims);
- Realistic (must be achievable over time allocated); and
- Timed (a defined action plan including dates for achievement).

5.2.2 Setting SMART targets is essential to provide a purpose and focus for the TP. A number of targets have been adopted. These targets are divided amongst those relating to delivering outputs and those related to achieving outcomes as explained below;

- **Output targets** – These targets relate to the implementation of the measures to be introduced as part of the Travel Plan (TP). They will help to ensure that the TPC remains on course with the delivery of the different measures contained within this TP; and
- **Outcome targets** (modal shift) – These targets relate to the effect of implementing the TP measures, and will include for example reducing the overall proportion of journeys being undertaken from the site by car.

5.3 Output Targets

5.3.1 **Table 5.1** details the output targets, responsibilities for delivery, and associated timescales.

Table 5.1 – Output targets, Responsibilities and Timescales

Output Target	Responsibility	Timescale
Appoint and fund a site Travel Plan Coordinator (TPC)	Applicant	Upon appointment of TPC
Promote travel planning measures	TPC	Upon appointment of TPC
Undertake first travel survey	TPC	Within 6 months of occupation
Analyse results of travel survey and provide reports	TPC	Following monitoring phase
Inform staff of sustainable travel modes to the site and display travel information in strategic area visible to all staff	TPC	Upon appointment of TPC
Continue to promote the travel plan and it's aims and objectives through various channels, to reach to 100% of the staff	TPC	Upon appointment of TPC and ongoing
Provide in yearly sustainable travel campaigns	TPC	Upon appointment of TPC and ongoing

5.4 Outcome Targets

5.4.1 The initial travel survey, following the appointment of the TPC, will gather information that will provide a base year modal split for journeys to and from the site. This base year information will then be used to derive modal split targets for site.

5.4.2 Until such a time when travel surveys can be undertaken, interim modal split targets based on previous census data will be used as the baseline to set future targets for staff.

5.4.3 To establish staff mode splits in the absence of site specific data, method of travel to work (2001 specification) Census data (E02000193 : Camden 028 - super output area - middle layer) has been extracted and used as the baseline mode split.

5.4.4 The journey to work mode splits, which shows how people within the borough travel to work within and outside the borough, is presented in **Table 5.2**.

5.4.5 An travel survey will be carried out in years 1, 3 and 5, in order to monitor the progress and act as an indicator of whether the targets are being achieved and whether adjustments are necessary.

5.5 Future Mode Split Targets

5.5.1 The suggested targets represent what is considered to be an achievable increase in sustainable travel by staff as a result of the introduction of the Full Travel Plan.

Table 5.2 – Staff Travel Mode Split Targets

Mode	Existing Mode Splits %	Year 1 %	Year 3 %	Year 5 %	Targets %
Underground, metro, light rail or tram	22%	20%	18%	16%	-6%
Train	7%	7%	7%	7%	0%
Bus, minibus or coach	15%	14%	12%	10%	-5%
Taxi	1%	1%	1%	1%	0%
Motorcycle, scooter or moped	1%	1%	1%	1%	0%
Driving a car or van	5%	4%	2%	0%	-5%
Passenger in a car or van	0%	0%	0%	0%	0%
Bicycle	4%	5%	7%	9%	+5%
On foot	44%	47%	51%	55%	+11%
Other method of travel to work	1%	1%	1%	1%	0%
All categories	**100%**	**100%**	**100%**	**100%**	

5.5.2 The targets above are estimated to reduce private car mode for staff by 5% and increase sustainable travel modes by 16% (walking and cycling) by the end of year 5.

5.6 Conclusion

5.6.1 In summary, the above targets have been set to reduce the reliance on private car and to encourage sustainable forms of travel for all staff of the site. The site receives an excellent PTAL rating and therefore it is highly accessible by sustainable modes of transport.

6.0 Monitoring & Review

6.1 Introduction

6.1.1 Overall responsibility for the FTP will lie with the TPC. This section of the FTP describes the management and co-ordination processes that are to be introduced to support the FTP measures.

6.1.2 The TPC will engage with occupiers to promote the TP.

6.2 Travel Plan Coordinator

6.2.1 The site TPC will be the building manager, their details will be confirmed and circulated to the council upon appointment, and prior to the first date of occupation should the TPC change the council will be notified and the details of the incumbent TPC provided.

6.2.2 The TPC will have overall responsibility for the day to day management and implementation of the FTP. They will be the first point of contact in relation to travel issues.

6.2.3 The main mechanisms of promoting the FTP that will be enforced by the TPC are summarised as follows:

1. Promotion and marketing of sustainable modes of travel and in particular, the specific measures and initiatives designed to incentivise staff to utilise sustainable modes;
2. Collate and provide travel information on sustainable travel to staff;
3. Promotion of the aims and objectives of the FTP;
4. Provide up-to-date information on changes to pedestrian or cycle routes and infrastructure, bus and train timetables and infrastructure as necessary;
5. Monitor the TP in accordance with agreed procedures;
6. Regularly up-date on the progress towards implementation of the FTP and towards meeting the targets of the FTP;
7. Undertake travel surveys in accordance with agreed monitoring procedures (i.e. year 1,3 and 5);
8. Liaise with TPC's for surrounding developments to coordinate events;
9. Analyse the results of any surveys undertaken and report them to LBC in accordance with agreed monitoring procedures; and
10. Liaise with the relevant officers at LBC to ensure that the FTP is implemented effectively.

6.3 Monitoring and Update of the Travel Plan

6.3.1 The monitoring of travel behaviour is vital to measure progress towards targets.

6.3.2 The TPC will organise consultation with the occupiers involving meetings to promote the concept of the FTP, as well as identifying a common set of objectives for encouraging sustainable travel modes and reducing private car usage.

6.3.3 Monitoring surveys will be conducted at 6 months (year 0), years 1, 3 and 5 following occupation of the development. The TPC will organise surveys aimed at obtaining updated information on the travel patterns of the staff. The FTP will be updated on the receipt of survey results.

6.3.4 An Action Plan of measures for implementation in the forthcoming monitoring period will be agreed in the context of the results of the monitoring surveys.

6.3.5 The TPC will be responsible for monitoring on-site and off-site facilities for sustainable modes. It will be the duty of the TPC to report any significant issues observed or any useful comments received from staff on either on or off-site facilities.

6.4 Implementation Plan

6.4.1 **Table 6.1** sets out the implementation plan for this FTP. It is intended to explain the management structure for the FTP, the responsibility and the implementation of stated measures and initiatives, monitoring procedures and promotion of the FTP.

Table 6.1 - TP Implementation					
Theme	**Action**	**Responsibility**	**Timing/ Completion Date**	**Monitoring Progress Towards**	**Cost**
Travel Plan Management	Write up the pre-occupation Travel Plan	Owner/Consultant	No later than 6 months prior to occupation	Successful implementation of Travel Plan	Low
	Travel Plan Co-ordinator	Owner	Prior to occupation	Successful implementation of Travel Plan	Moderate
	Detailed funding mechanisms	TPC	Upon appointment	Successful implementation of Travel Plan	Moderate
	Travel Plan Steering Group	TPC	Within one month of first occupation	Successful implementation of Travel Plan	Low
	Draft Travel Survey	TPC	Within 3 months of occupation	Successful implementation of Travel Plan	Low
	Initial baseline surveys	TPC	Following 6 months of first occupation or at 75%, whichever comes first	Successful implementation of Travel Plan	Moderate
	Set revised modal split targets	TPC	Upon completion of the initial travel surveys	Successful implementation of Travel Plan	Low
	Subsequent Travel Surveys	TPC	Years one, three and five and as required	Successful implementation of Travel Plan	Moderate
	Monitoring Reports	TPC	Upon completion of the initial travel surveys	Successful implementation of Travel Plan	Moderate
	Updating the Travel Plan	TPC	Ongoing/once travel surveys have been completed in Years one, three and five.	Successful implementation of Travel Plan	Moderate
	Stakeholder/user groups	TPC	Ongoing	Successful implementation of Travel Plan	Low

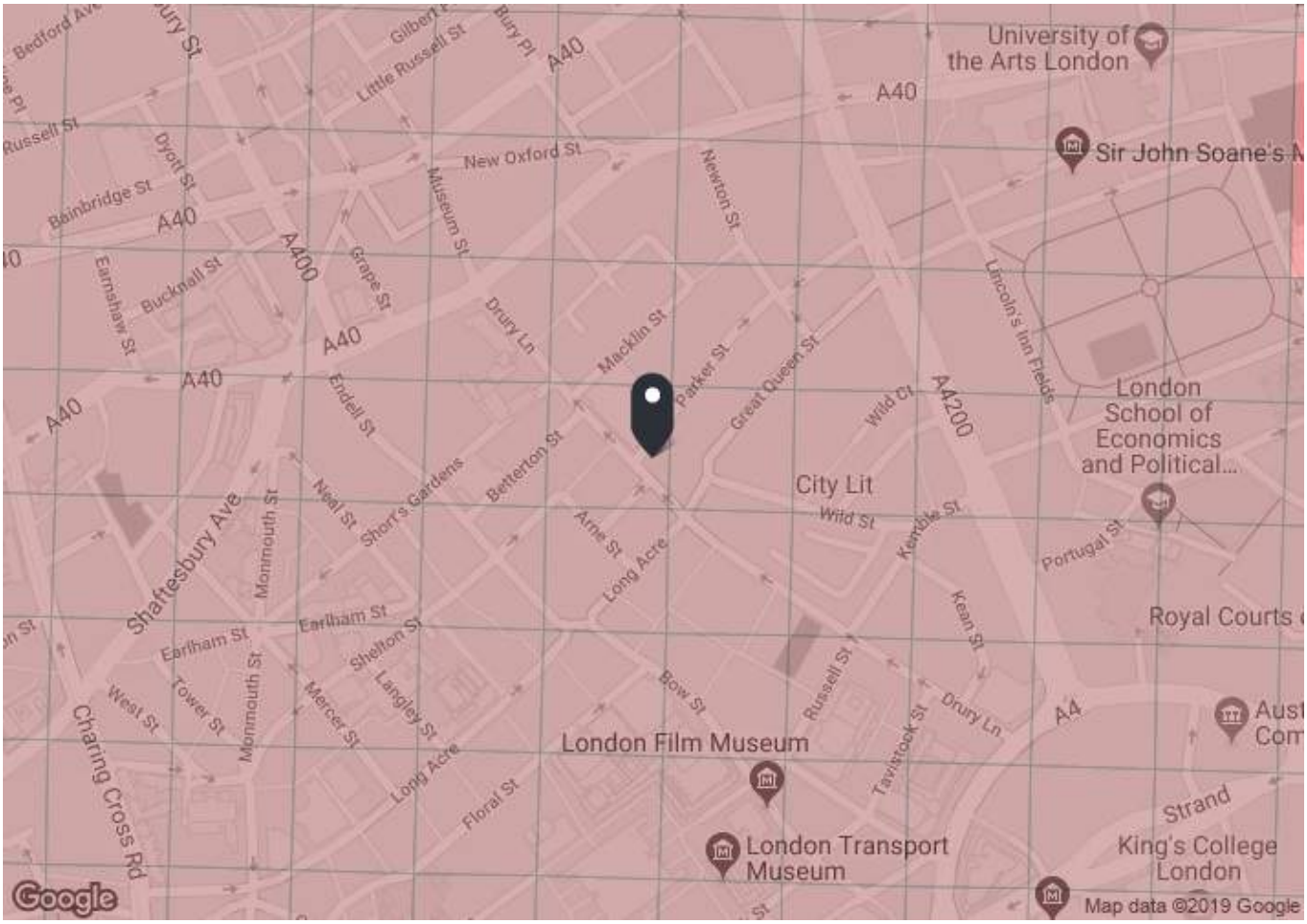
Table 6.1 - TP Implementation					
Theme	**Action**	**Responsibility**	**Timing/ Completion Date**	**Monitoring Progress Towards**	**Cost**
Promotion/ Marketing	Staff Travel Guide - Produce a Staff Travel Guide, which will provide information to Staff on travelling to, from home	TPC	Within 6 months of occupation and ensure it is up to date quarterly	Successful implementation of Travel Plan	Low
	Travel Plan Inductions - Provide individual occupiers with training and support to give their employees Travel Plan inductions	TPC	Ongoing	Successful implementation of Travel Plan	Low
Walking	Promotion of walking resources (websites, tools and events)	TPC	Ongoing	Progress towards walking mode share target	Low
Cycling	Cycle skills training run by Camden	TPC	Ongoing	Progress towards cycling mode share target	Low
	Cycling events (Bike Week, Cycle to Work day, Let's Ride etc)	TPC	Ongoing	Progress towards cycling mode share target	Low
	Local cycling guides and journey planners	TPC	Ongoing	Progress towards cycling mode share target	Low
	Cycle security, marking and registration schemes with the Police	TPC	Ongoing	Progress towards cycling mode share target	Low
	Safety courses run by TfL and FORS for cyclists and HGV drivers	TPC	Ongoing	Progress towards cycling mode share target	Low

Table 6.1 - TP Implementation					
Theme	**Action**	**Responsibility**	**Timing/ Completion Date**	**Monitoring Progress Towards**	**Cost**
	Bicycle purchase Loan	TPC	Ongoing	Progress towards cycling mode share target	Low
	Promote Santander Hire Bikes use.	TPC	Ongoing	Progress towards cycling mode share target	Low
	Bicycle User Group (BUG)	TPC/BUG	Ongoing	Progress towards cycling mode share target	Low
	Cycle Buddy Scheme	TPC/BUG	Ongoing	Progress towards cycling mode share target	Low
	Individual Cycling Advice	TPC/BUG	Ongoing	Progress towards cycling mode share target	Low
	Bike Maintenance Lessons	TPC/BUG	Ongoing	Progress towards cycling mode share target	Low
	Regular 'Dr Bike' maintenance and repair sessions	TPC/BUG	Ongoing	Progress towards cycling mode share target	Moderate
Public Transport	Journey planners including mobile phone apps	TP	Ongoing	Progress towards mode share target	Low
	Timetables, bus spider maps and information on night services	TPC	Ongoing	Progress towards mode share target	Low
	Investigate the possibility of flexible working arrangement	TPC	Ongoing	Progress towards mode share target	Low

Table 6.1 - TP Implementation					
Theme	**Action**	**Responsibility**	**Timing/ Completion Date**	**Monitoring Progress Towards**	**Cost**
Car Trip Reduction	Car-free development (with no residents permits issued)	TPC to monitor	Ongoing	Progress towards car reduction	Low
	Encourage Car Club use	TPC	Ongoing	Progress towards car reduction	Low

Appendix A – PTAL Summary

TRANSPORT FOR LONDON



PTAL output for Base Year
6b

160-161 Drury Ln, Camden Town, London WC2B 5PN, UK
Easting: 530383, Northing: 181234

Grid Cell: 84323

Report generated: 16/01/2019

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	ALDWYCH WEST ARM	11	454.23	7.5	5.68	6	11.68	2.57	0.5	1.28
Bus	ALDWYCH WEST ARM	23	454.23	8	5.68	5.75	11.43	2.63	0.5	1.31
Bus	ALDWYCH WEST ARM	9	454.23	12	5.68	4.5	10.18	2.95	0.5	1.47
Bus	ALDWYCH WEST ARM	26	454.23	7.5	5.68	6	11.68	2.57	0.5	1.28
Bus	ALDWYCH WEST ARM	13	454.23	8	5.68	5.75	11.43	2.63	0.5	1.31
Bus	ALDWYCH WEST ARM	4	454.23	6	5.68	7	12.68	2.37	0.5	1.18
Bus	ALDWYCH WEST ARM	15	454.23	7.5	5.68	6	11.68	2.57	0.5	1.28
Bus	ALDWYCH WEST ARM	341	454.23	6	5.68	7	12.68	2.37	0.5	1.18
Bus	ALDWYCH WEST ARM	76	454.23	7.5	5.68	6	11.68	2.57	0.5	1.28
Bus	ALDWYCH WEST ARM	87	454.23	10	5.68	5	10.68	2.81	0.5	1.4
Bus	ALDWYCH WEST ARM	172	454.23	6	5.68	7	12.68	2.37	0.5	1.18
Bus	ALDWYCH WEST ARM	6	454.23	10	5.68	5	10.68	2.81	0.5	1.4
Bus	COVENT GARDEN RUSSELL STREET	RV1	388.64	6	4.86	7	11.86	2.53	0.5	1.26
Bus	HOLBORN STATION KINGSWAY	59	338.23	10	4.23	5	9.23	3.25	0.5	1.63
Bus	HOLBORN STATION KINGSWAY	243	338.23	11	4.23	4.73	8.96	3.35	0.5	1.68
Bus	HOLBORN STATION KINGSWAY	521	338.23	27	4.23	3.11	7.34	4.09	1	4.09
Bus	HOLBORN STATION KINGSWAY	91	338.23	9	4.23	5.33	9.56	3.14	0.5	1.57
Bus	HOLBORN STATION KINGSWAY	68	338.23	9	4.23	5.33	9.56	3.14	0.5	1.57
Bus	HOLBORN STATION KINGSWAY	X68	338.23	4	4.23	9.5	13.73	2.19	0.5	1.09
Bus	HOLBORN STATION KINGSWAY	188	338.23	8	4.23	5.75	9.98	3.01	0.5	1.5
Bus	HOLBORN STATION KINGSWAY	168	338.23	9	4.23	5.33	9.56	3.14	0.5	1.57
Bus	BLOOMSBURY NEW OXFORD ST	8	295.1	10	3.69	5	8.69	3.45	0.5	1.73
Bus	BLOOMSBURY NEW OXFORD ST	38	295.1	10	3.69	5	8.69	3.45	0.5	1.73
Bus	BLOOMSBURY NEW OXFORD ST	25	295.1	8	3.69	5.75	9.44	3.18	0.5	1.59
Bus	BLOOMSBURY NEW OXFORD ST	19	295.1	8	3.69	5.75	9.44	3.18	0.5	1.59
Bus	BLOOMSBURY NEW OXFORD ST	171	295.1	7.5	3.69	6	9.69	3.1	0.5	1.55
Bus	BLOOMSBURY NEW OXFORD ST	55	295.1	10	3.69	5	8.69	3.45	0.5	1.73
Bus	HIGH HOLBORN POST OFFICE	242	202.63	6.5	2.53	6.62	9.15	3.28	0.5	1.64
Bus	HIGH HOLBORN POST OFFICE	1	202.63	8	2.53	5.75	8.28	3.62	0.5	1.81
Bus	BLOOMSBURY ST SHAFTESBURY AVE	24	340.05	10	4.25	5	9.25	3.24	0.5	1.62
Bus	BLOOMSBURY ST SHAFTESBURY AVE	134	340.05	12	4.25	4.5	8.75	3.43	0.5	1.71
Bus	BLOOMSBURY ST SHAFTESBURY AVE	29	340.05	15	4.25	4	8.25	3.64	0.5	1.82
Bus	BLOOMSBURY ST SHAFTESBURY AVE	176	340.05	8.5	4.25	5.53	9.78	3.07	0.5	1.53
Bus	BLOOMSBURY ST SHAFTESBURY AVE	14	340.05	13	4.25	4.31	8.56	3.51	0.5	1.75
Bus	BLOOMSBURY STREET	10	572.08	4.5	7.15	8.67	15.82	1.9	0.5	0.95
Bus	BLOOMSBURY STREET	390	572.08	8	7.15	5.75	12.9	2.33	0.5	1.16
Bus	BLOOMSBURY STREET	73	572.08	18	7.15	3.67	10.82	2.77	0.5	1.39
Bus	GT RUSSELL ST MUSEUM ST	98	441.07	9	5.51	5.33	10.85	2.77	0.5	1.38
LUL	Covent Garden	'Cockfosters-LHRT4LT'	325.11	4.67	4.06	7.17	11.24	2.67	0.5	1.33
LUL	Covent Garden	'RayLane-Cockfosters'	325.11	3.67	4.06	8.92	12.99	2.31	0.5	1.15
LUL	Covent Garden	'LHRT4LT-ArnosGrove'	325.11	4.67	4.06	7.17	11.24	2.67	0.5	1.33
LUL	Covent Garden	'ArnosGrove-RayLane'	325.11	0.33	4.06	91.66	95.72	0.31	0.5	0.16
LUL	Covent Garden	'ArnosGrove-Nthfields'	325.11	3	4.06	10.75	14.81	2.03	0.5	1.01
LUL	Covent Garden	'Oakwood-RayLane'	325.11	0.33	4.06	91.66	95.72	0.31	0.5	0.16
LUL	Covent Garden	'Nthfields-Cockfoster'	325.11	1	4.06	30.75	34.81	0.86	0.5	0.43
LUL	Covent Garden	'LHRT5-Cockfosters'	325.11	6	4.06	5.75	9.81	3.06	1	3.06
LUL	Covent Garden	'Uxbridge-Cockfosters'	325.11	3.67	4.06	8.92	12.99	2.31	0.5	1.15
LUL	Covent Garden	'Ruislip-Cockfosters'	325.11	2.33	4.06	13.63	17.69	1.7	0.5	0.85
LUL	Covent Garden	'ArnosGrove-Uxbridge'	325.11	1	4.06	30.75	34.81	0.86	0.5	0.43
LUL	Covent Garden	'Oakwood-Uxbridge'	325.11	0.33	4.06	91.66	95.72	0.31	0.5	0.16
LUL	Covent Garden	'Oakwood-Ruislip'	325.11	0.33	4.06	91.66	95.72	0.31	0.5	0.16
LUL	Temple	'Edgware-Hammersmith'	930.57	6	11.63	5.75	17.38	1.73	0.5	0.86
LUL	Temple	'Upminster-EalingBwy'	930.57	5	11.63	6.75	18.38	1.63	0.5	0.82
LUL	Temple	'TowerHill-EalingBwy'	930.57	0.33	11.63	91.66	103.29	0.29	0.5	0.15
LUL	Temple	'EalingBwy-Barking'	930.57	1.33	11.63	23.31	34.94	0.86	0.5	0.43
LUL	Temple	'Upminster-Richmond'	930.57	6	11.63	5.75	17.38	1.73	0.5	0.86
LUL	Temple	'Richmond-DagEast'	930.57	0.67	11.63	45.53	57.16	0.52	0.5	0.26
LUL	Temple	'Wimbledon-Upminster'	930.57	4	11.63	8.25	19.88	1.51	0.5	0.75

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
LUL	Temple	'Wimbledon-DagEast'	930.57	1	11.63	30.75	42.38	0.71	0.5	0.35
LUL	Temple	'Barking-Wimbledon'	930.57	0.67	11.63	45.53	57.16	0.52	0.5	0.26
LUL	Temple	'TowerHill-Wimbledon'	930.57	2.67	11.63	11.99	23.62	1.27	0.5	0.64
LUL	Temple	'DagEast-EalingBwy'	930.57	0.67	11.63	45.53	57.16	0.52	0.5	0.26
Rail	Charing Cross	'BRNHRST-CHRX 1C90'	916.33	0.67	11.45	45.53	56.98	0.53	0.5	0.26
Rail	Charing Cross	'GRVSEND-CHRX 1D50'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'GLNGHMK-CHRX 1D52'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'GLNGHMK-CHRX 1D54'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'CHRX-HASTING 1H10'	916.33	0.67	11.45	45.53	56.98	0.53	0.5	0.26
Rail	Charing Cross	'CHRX-HASTING 1H24'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'HASTING-CHRX 1H52'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'OREE-CHRX 1H68'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'HASTING-CHRX 1H90'	916.33	0.67	11.45	45.53	56.98	0.53	0.5	0.26
Rail	Charing Cross	'OREE-CHRX 1H92'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'HAYS-CHRX 1K90'	916.33	1.33	11.45	23.31	34.76	0.86	0.5	0.43
Rail	Charing Cross	'ASHFKY-CHRX 1W90'	916.33	0.67	11.45	45.53	56.98	0.53	0.5	0.26
Rail	Charing Cross	'DOVERP-CHRX 1W92'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'RAMSGTE-CHRX 1W94'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'GLNGHMK-CHRX 2A08'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'GRVSEND-CHRX 2A22'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'SLADEGN-CHRX 2B14'	916.33	2	11.45	15.75	27.2	1.1	0.5	0.55
Rail	Charing Cross	'GRVSEND-CHRX 2C06'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'DARTFD-CHRX 2C08'	916.33	2.33	11.45	13.63	25.08	1.2	1	1.2
Rail	Charing Cross	'DARTFD-CHRX 2D10'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'GRVSEND-CHRX 2D12'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'GLNGHMK-CHRX 2D14'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'SIDCUP-CHRX 2D16'	916.33	1	11.45	30.75	42.2	0.71	0.5	0.36
Rail	Charing Cross	'GLNGHMK-CHRX 2D22'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'SVNOAKS-CHRX 2F06'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'ORPNGTN-CHRX 2F10'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'SVNOAKS-CHRX 2F20'	916.33	0.67	11.45	45.53	56.98	0.53	0.5	0.26
Rail	Charing Cross	'ORPNGTN-CHRX 2F88'	916.33	1.33	11.45	23.31	34.76	0.86	0.5	0.43
Rail	Charing Cross	'ORPNGTN-CHRX 2F94'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'ORPNGTN-CHRX 2F98'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'CHRX-TUNWELL 2H08'	916.33	1.67	11.45	18.71	30.17	0.99	0.5	0.5
Rail	Charing Cross	'CHRX-TUNWELL 2H10'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'TUNWELL-CHRX 2H56'	916.33	1	11.45	30.75	42.2	0.71	0.5	0.36
Rail	Charing Cross	'TUNWELL-CHRX 2H60'	916.33	1.67	11.45	18.71	30.17	0.99	0.5	0.5
Rail	Charing Cross	'HAYS-CHRX 2K08'	916.33	1	11.45	30.75	42.2	0.71	0.5	0.36
Rail	Charing Cross	'CHRX-GLNGHMK 2L10'	916.33	1.67	11.45	18.71	30.17	0.99	0.5	0.5
Rail	Charing Cross	'CHRX-GLNGHMK 2L12'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'CHRX-CRFD 2M10'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'CHRX-DARTFD 2M14'	916.33	1.33	11.45	23.31	34.76	0.86	0.5	0.43
Rail	Charing Cross	'CHRX-SLADEGN 2M16'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'CHRX-GRVSEND 2N12'	916.33	1.67	11.45	18.71	30.17	0.99	0.5	0.5
Rail	Charing Cross	'CHRX-GRVSEND 2N14'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'CHRX-DOVERP 2R10'	916.33	1	11.45	30.75	42.2	0.71	0.5	0.36
Rail	Charing Cross	'CHRX-RAMSGTE 2R12'	916.33	0.67	11.45	45.53	56.98	0.53	0.5	0.26
Rail	Charing Cross	'CHRX-RAMSGTE 2R18'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'CHRX-ASHFKY 2R20'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'CHRX-TONBDG 2R90'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'CHRX-SVNOAKS 2S10'	916.33	1.67	11.45	18.71	30.17	0.99	0.5	0.5
Rail	Charing Cross	'CHRX-SVNOAKS 2S12'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'CHRX-ORPNGTN 2S92'	916.33	0.67	11.45	45.53	56.98	0.53	0.5	0.26
Rail	Charing Cross	'CHRX-HAYS 2V10'	916.33	2	11.45	15.75	27.2	1.1	0.5	0.55
Rail	Charing Cross	'RAMSGTE-CHRX 2W10'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'RAMSGTE-CHRX 2W12'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'RAMSGTE-CHRX 2W20'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Rail	Charing Cross	'CNTBW-CHRX 2W22 '	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
Rail	Charing Cross	'STROOD-CHRX 2D56 '	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
LUL	Charing Cross	'QueensPk-El&Castle '	916.33	11.01	11.45	3.47	14.93	2.01	0.5	1
LUL	Charing Cross	'El&Castle-Harrow&W'	916.33	5.67	11.45	6.04	17.5	1.71	0.5	0.86
LUL	Charing Cross	'StbridgePk-El&Castle'	916.33	5	11.45	6.75	18.2	1.65	0.5	0.82
LUL	Charing Cross	'Waterloo-QueensPk'	916.33	1	11.45	30.75	42.2	0.71	0.5	0.36
LUL	Charing Cross	'Waterloo-Harrow&W'	916.33	0.33	11.45	91.66	103.11	0.29	0.5	0.15
LUL	Tottenham Court Road	'Epping-NActon '	622.89	1	7.79	30.75	38.54	0.78	0.5	0.39
LUL	Tottenham Court Road	'Hainault-NP-Northolt'	622.89	1	7.79	30.75	38.54	0.78	0.5	0.39
LUL	Tottenham Court Road	'Morden-Edgware '	622.89	4.67	7.79	7.17	14.96	2.01	0.5	1
LUL	Tottenham Court Road	'HighBarnet-Morden '	622.89	0.33	7.79	91.66	99.45	0.3	0.5	0.15
LUL	Tottenham Court Road	'Kennington-Edgware '	622.89	14.67	7.79	2.79	10.58	2.84	0.5	1.42
LUL	Tottenham Court Road	'HighBarnet-Kenningt '	622.89	5.33	7.79	6.38	14.16	2.12	0.5	1.06
LUL	Tottenham Court Road	'MillHill-Morden '	622.89	1.67	7.79	18.71	26.5	1.13	0.5	0.57
LUL	Tottenham Court Road	'MillHillE-Kenningt '	622.89	1.67	7.79	18.71	26.5	1.13	0.5	0.57
LUL	Holborn	'Ealing-Epping '	381.7	3	4.77	10.75	15.52	1.93	0.5	0.97
LUL	Holborn	'Epping-Wruislip '	381.7	3	4.77	10.75	15.52	1.93	0.5	0.97
LUL	Holborn	'RuislipGar-Epping '	381.7	1	4.77	30.75	35.52	0.84	0.5	0.42
LUL	Holborn	'WhiteCity-Epping '	381.7	0.33	4.77	91.66	96.43	0.31	0.5	0.16
LUL	Holborn	'Northolt-Epping '	381.7	0.67	4.77	45.53	50.3	0.6	0.5	0.3
LUL	Holborn	'Debden-WRuislip '	381.7	0.33	4.77	91.66	96.43	0.31	0.5	0.16
LUL	Holborn	'WhiteCity-Debden '	381.7	0.33	4.77	91.66	96.43	0.31	0.5	0.16
LUL	Holborn	'Debden-Northolt '	381.7	1	4.77	30.75	35.52	0.84	0.5	0.42
LUL	Holborn	'RuislipGdns-Debden '	381.7	0.33	4.77	91.66	96.43	0.31	0.5	0.16
LUL	Holborn	'Loughton-WRuislip '	381.7	1	4.77	30.75	35.52	0.84	0.5	0.42
LUL	Holborn	'NActon-Loughton '	381.7	0.67	4.77	45.53	50.3	0.6	0.5	0.3
LUL	Holborn	'RuislipGdns-Loughton'	381.7	0.67	4.77	45.53	50.3	0.6	0.5	0.3
LUL	Holborn	'Loughton-WhiteCity'	381.7	0.67	4.77	45.53	50.3	0.6	0.5	0.3
LUL	Holborn	'Loughton-Northolt '	381.7	0.33	4.77	91.66	96.43	0.31	0.5	0.16
LUL	Holborn	'Ealing-Loughton '	381.7	1	4.77	30.75	35.52	0.84	0.5	0.42
LUL	Holborn	'Ealing-NewburyPark'	381.7	0.67	4.77	45.53	50.3	0.6	0.5	0.3
LUL	Holborn	'WRuislip-NewburyPark'	381.7	0.33	4.77	91.66	96.43	0.31	0.5	0.16
LUL	Holborn	'NActon-NewburyPark'	381.7	0.33	4.77	91.66	96.43	0.31	0.5	0.16
LUL	Holborn	'Ealing-Hainault '	381.7	5	4.77	6.75	11.52	2.6	0.5	1.3
LUL	Holborn	'Hainault-Nacton '	381.7	1.33	4.77	23.31	28.08	1.07	0.5	0.53
LUL	Holborn	'Hainault-WRuislip '	381.7	3.33	4.77	9.76	14.53	2.06	0.5	1.03
LUL	Holborn	'RuislipGdns-NP-Hain '	381.7	0.67	4.77	45.53	50.3	0.6	0.5	0.3
LUL	Holborn	'Hainault-WhiteCity'	381.7	1.67	4.77	18.71	23.49	1.28	0.5	0.64
LUL	Holborn	'GrangeHill-WD-Eal '	381.7	1	4.77	30.75	35.52	0.84	0.5	0.42
LUL	Holborn	'GrangeHill-Wdfd-Whit'	381.7	0.67	4.77	45.53	50.3	0.6	0.5	0.3
LUL	Holborn	'GrangeHill-Wdfd-WRsp'	381.7	0.67	4.77	45.53	50.3	0.6	0.5	0.3
									Total Grid Cell AI:	**109.5**

Our Locations

Birmingham
2 The Wharf
Bridge Street
Birmingham
B1 2JS
T. 0121 643 4694
birmingham@curtins.com

Bristol
Quayside
40-58 Hotwell Road
Bristol
BS8 4UQ
T. 0117 302 7560
bristol@curtins.com

Cambridge
50 Cambridge Place
Cambridge
CB2 1NS
T. 01223 631 799
cambridge@curtins.com

Cardiff
3 Cwrt-y-Parc
Earlswood Road
Cardiff
CF14 5GH
T. 029 2068 0900
cardiff@curtins.com

Douglas
Varley House
29-31 Duke Street
Douglas
Isle of Man
IM1 2AZ
T. 01624 624 585
douglas@curtins.com

Dublin
39 Fitzwilliam Square
Dublin 2
Ireland
T. 00353 1 507 9447
dublin@curtins.com

Edinburgh
1a Belford Road
Edinburgh
EH4 3BL
T. 0131 225 2175
edinburgh@curtins.com

Glasgow
Queens House
29 St Vincent Place
Glasgow
G1 2DT
T. 0141 319 8777
glasgow@curtins.com

Kendal
28 Lowther Street
Kendal
Cumbria
LA9 4DH
T. 01539 724 823
kendal@curtins.com

Leeds
Rose Wharf
Ground Floor
Leeds
L29 8EE
T. 0113 274 8509
leeds@curtins.com

Liverpool
51-55 Tithebarn Street
Liverpool
L2 2SB
T. 0151 726 2000
liverpool@curtins.com

London
40 Compton Street
London
EC1V 0BD
T. 020 7324 2240
london@curtins.com

Manchester
Merchant Exchange
17-19 Whitworth Street West
Manchester
M1 5WG
T. 0161 236 2394
manchester@curtins.com

Nottingham
56 The Ropewalk
Nottingham
NG1 5DW
T. 0115 941 5551
nottingham@curtins.com