Malden Road, Camden

Transport Statement

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1 Introduction

1.1 Background

1.1.1 Lime Transport has been commissioned by Andreas Kypriandes to produce a Transport Statement in support of a planning application for the construction of a mixed-use residential and office building comprising 15 self-contained flats and 184m^2 of office space.

1.1.2 The site lies within the London Borough of Camden on land north of Malden Road. The site is presently occupied by an MOT garage and car wash. It is located approximately 750m south of Gospel Oak Overground Station and is shown in **Figure 1.1** below.

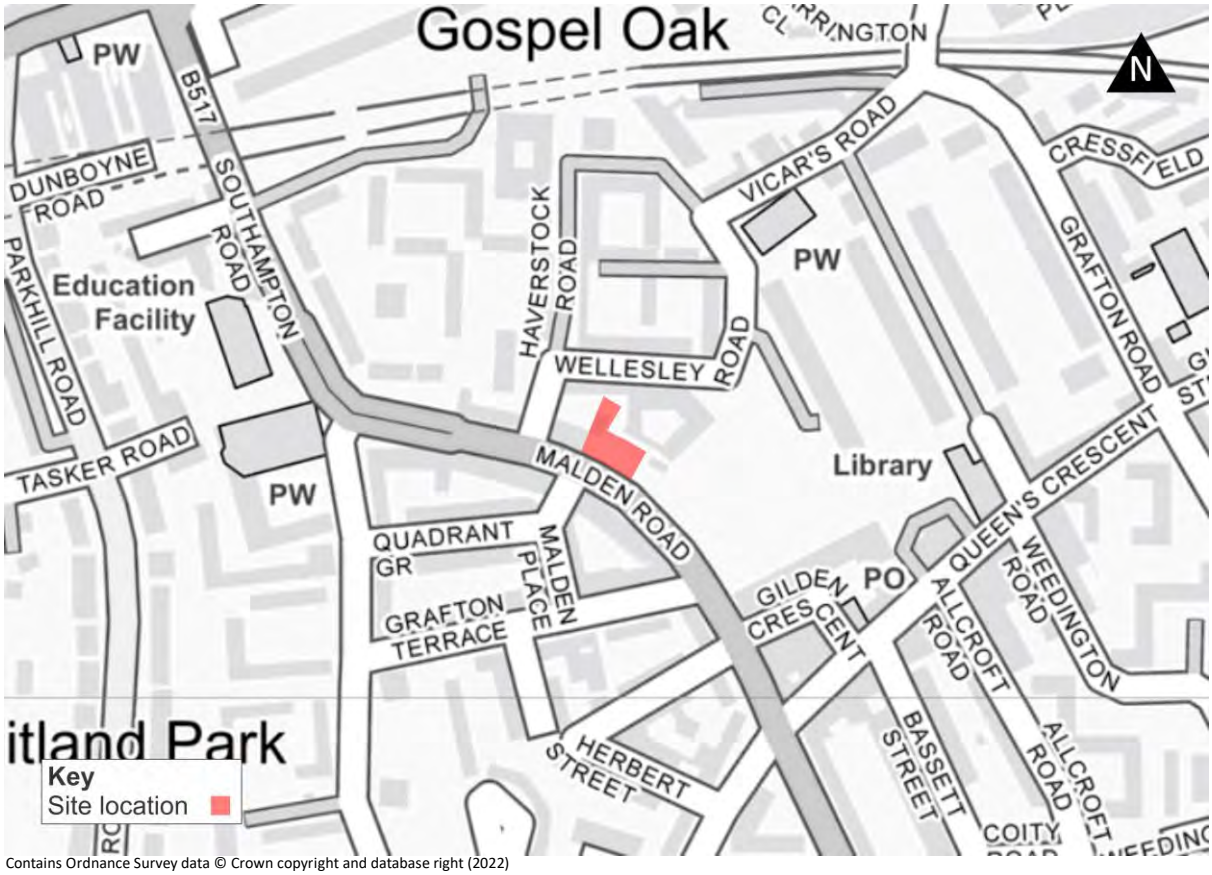

Figure 1.1 Site location

1.2 Policy compliance

1.2.1 The development supports the Mayor's Transport Strategy, Vision Zero and Healthy Streets as set out over the page:

Mayor's Transport Strategy

- Provides higher density mixed-use development;
- Provides development within easy walking distance of various facilities at Belsize Park (on Haverstock Hill to the west), Chalk Farm (on Haverstock Hill to the south) and Kentish Town Road (to the east);
- Considers the car-free routes to key local destinations including public transport, shopping and schools;
- Provides a car-free development; and,
- Provides high quality sheltered and secure cycle parking storage for residents.

Vision Zero

- Contributes towards the shift away from private vehicles with the promotion of travel by sustainable modes.

Healthy Streets

- Provides a car-free development for residents;
- Provides generous, high-quality and inclusive cycle parking for new residents; and,
- Considers pedestrian routes to public transport.

1.3 Scope of the Transport Statement

1.3.1 The purpose of this Transport Statement is to consider the transport characteristics of the proposed development, consider any impact on the surrounding transport network and identify any measures required to mitigate this impact.

1.4 Structure of the report

1.4.1 This report considers the highway and transport impact associated with the residential development and, following this introductory chapter, the remainder of the report is structured as follows:

- Section 2 sets out who the development is for, when they will travel and why;
- Section 3 details the sustainability of the area and access to facilities within the 20-minute Active Travel Zone;
- Section 4 details the development proposals and sets out the proposed access and cycle and car parking provision;
- Section 5 presents the travel characteristics of the development and considers the impact of the proposed development on the highway network;
- Section 6 sets out the results of the parking beat surveys; and,
- Section 7 provides a summary and concludes of the report.

2 Transport planning for people

2.1 Introduction

2.1.1 This section of the report considers who the development is for, when they will travel and why.

2.2 Who will use the new development?

2.2.1 The development will be used by new residents, their visitors and deliveries. The travel characteristics of the existing residents in the surrounding area and new residents is set out below

2.3 Travel characteristics of existing residents

2.3.1 2011 Census data has been used to establish the travel characteristics of the existing population surrounding the site, including travel to work and car ownership data (it should be noted that 2021 Census data will not be available until sometime later in 2022).

Travel to work

2.3.2 Travel to work data from the 2011 Census has been used to establish the mode of travel to work for existing residents in the area.

2.3.3 Lower super output areas are geographical areas built from contiguous output areas, which are consistent in population size. Between four to six output areas make up Lower Super Output Areas (LSOA), and between four to six LSOA areas make up Middle Super Output Areas (MSOA).

2.3.4 Table 2.1 overleaf shows the travel to work mode split for the output area for the Lower Super Output Area (LSOA 007B), the Middle Super Output Area (MSOA 007) and Camden borough as a whole. This data excludes those that work from home and those not in employment.

Table 2.1 Mode split for journey to work based on 2011 Census data

Mode	Mode split (%)		
	LSOA 007B	MSOA 007	Camden
Underground	18	25	37
Train	6	8	7
Bus, minibus or coach	27	24	16
Taxi	0	0	1
Motorcycle, scooter or moped	2	1	1
Driving a car or van	16	12	11
Passenger in a car or van	1	1	1
Cycle	7	10	7
Walk	22	18	18
Other	0	1	1
Total		100%	

2.3.5 It should be noted that Census travel to work data differs from the trip generation survey data, as the survey data records vehicle journeys for all purposes, not just work related.

2.3.6 It can be seen from the table above that 80% of the population within the LSOA travel to work by sustainable modes, including walking (22%), cycling (7%) or public transport (51%). Approximately 16% of existing residents travel to work by car, with a further 1% travelling as a passenger.

Car ownership

2.3.7 Car ownership data from the 2011 Census has been used to establish the local car ownership rates for existing residents.

2.3.8 In the LSOA in which the site is located, car ownership is 0.33 cars/vans per household. This is lower than the borough of Camden average at 0.48 cars/vans per household, as well as the MSOA at 0.38.

2.4 When will people travel and why?

Residential use

2.4.1 It is anticipated that the trip profiles of residents will fluctuate across the day with weekday peaks as follows:

- Morning (8am to 9am) – departures for employment and education;
- Mid-afternoon (3pm to 4pm) – arrivals for education; and,
- Evening (5pm to 7pm) – arrivals for employment and departures for retail and leisure.

2.4.2 During the weekend, trips will be more consistent across the day with trips for retail and leisure purposes.

2.4.3 **Figure 2.1** below shows the likely profile for weekday daytime trips based on comparable sites within the TRICS trip generation database.

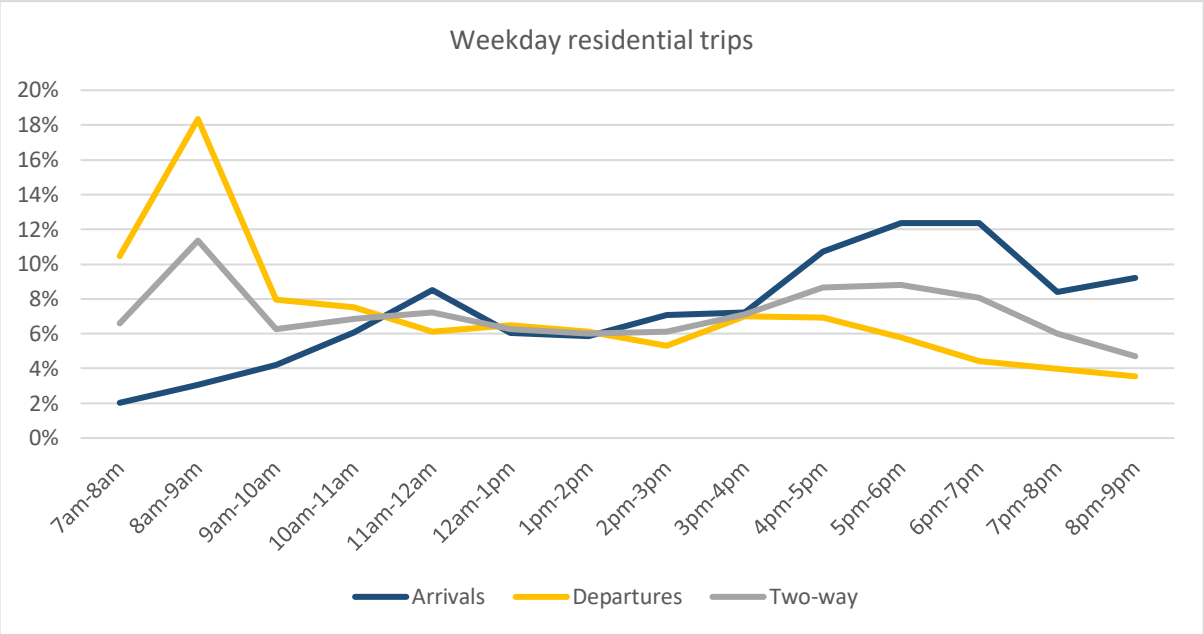

Figure 2.1 Profile of weekday trips for residential use

2.4.4 **Figure 2.2** below shows the residential trip purposes during the weekday daytime, based on the London Travel Demand Survey (2018/19).

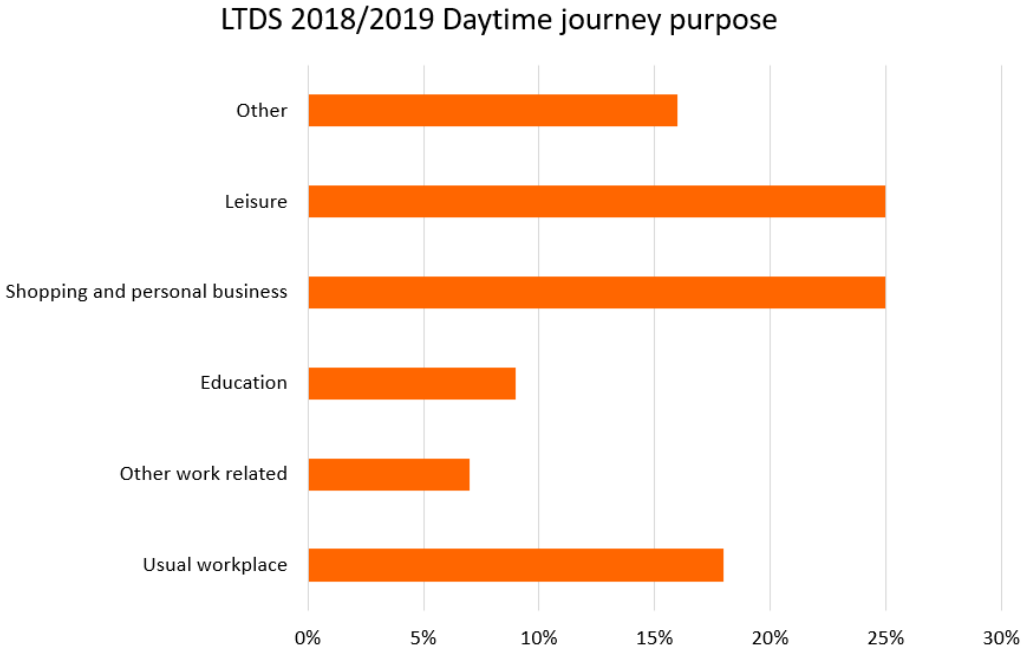

Figure 2.2 Journey purpose for residential use

Office use

2.4.5 It is anticipated that the trip profiles of office staff will fluctuate across the day with weekday peaks as follows:

- Morning (8am to 10am) – arrivals for employment;
- Mid-day (1pm to 2pm) – arrivals and departures of staff for lunch; and,
- Evening (5pm to 7pm) – departures for employment.

2.4.6 During the weekend, trips will be considerably lower as it is likely that the office will not generally be open to staff on weekends.

2.4.7 Figure 2.3 below shows the likely profile for weekday daytime trips based on comparable sites within the TRICS trip generation database.

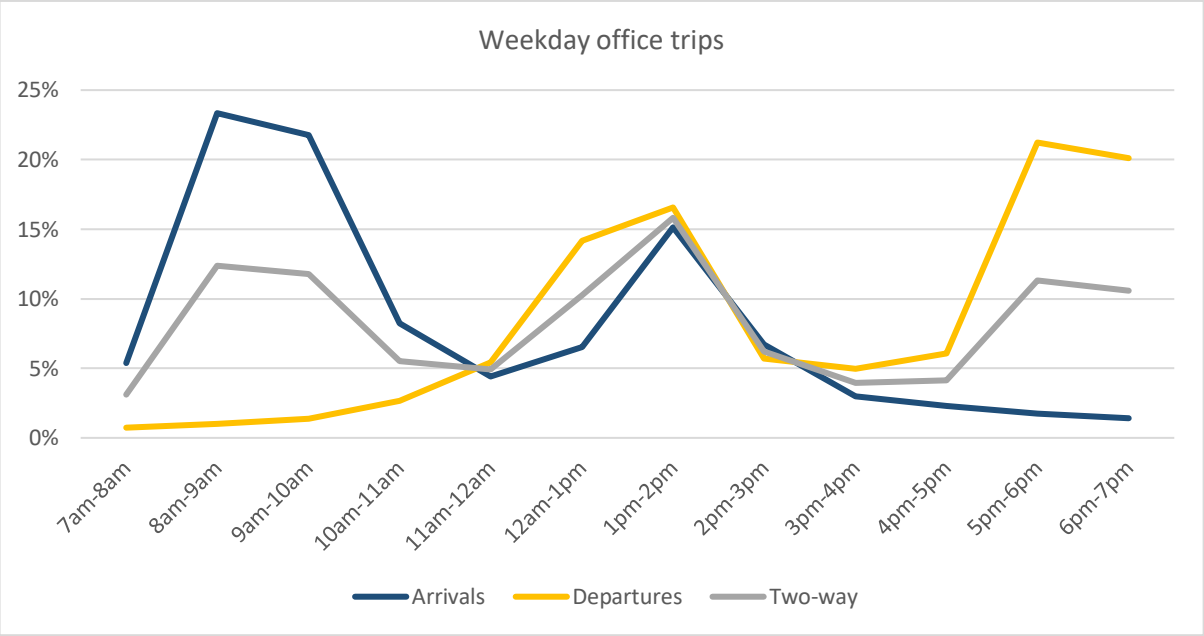

Figure 2.3 Profile of weekday trips for office use

3 Site and surroundings

3.1 Site location

3.1.1 This section summarises the existing transport facilities within the vicinity of the site, detailing accessibility by walking, cycling and public transport. It also provides a description of the local highway network and collision analysis along the car-free routes to key destinations.

3.1.2 The proposed development is located off Malden Road, within the London Borough of Camden. The site is bounded by:

- Wellesley Care Home to the north and east;
- Malden Road to the south; and,
- Commercial properties fronting Malden Road to the west.

3.2 Walking

3.2.1 Pedestrians are well provided for, with all streets within the vicinity of the site provided with footways on one or both sides of the carriageway and dropped kerb crossings provided on the approach to most junctions. In addition:

- Malden Road - there is a dropped kerb crossing with tactile paving and a pedestrian refuge island directly to the south of the site which provides immediate access for pedestrians to the southern footway along Malden Road.
- Malden Road - the closest formal crossing to the site is a zebra crossing situated approximately 20m to the west of the site. This crossing provides convenient access to the northbound bus stop along the southern side of Malden Road. There is also a zebra crossing to the east of the site (approximately 60m from the site).
- Mansfield Road - there are further formal crossings (zebra crossing and a pelican crossing) along Mansfield Road to the north of the site en route to Gospel Oak Overground Station.

3.2.2 There is a borough-wide implementation of a 20mph speed limit across the borough of Camden and all streets surrounding the site are subject to this limit.

3.2.3 The Chartered Institution of Highways and Transportation (CIHT) guidelines *'Providing for Journeys on Foot'* indicates that the desirable walking distance for commuting and school journeys is 500m, the acceptable walking distance is 1km and 2km is the preferred maximum. The CIHT guidelines indicate that the desirable walking distance for 'Elsewhere', including local amenities, is 400m, the acceptable walking distance is 800m and 1.2km is the preferred maximum.

3.2.4 The site is located in a highly sustainable location within easy walking distance of local facilities along Haverstock Hill (at both Belsize Park and Chalk Farm) and Queens Crescent. Kentish Town Road is also within a 1.2km walk distance from the site, which is a major local high street with a wide range of local facilities and services including retail, leisure and health.

3.2.5 The facilities within 1.2km of the site include:

- Public transport (bus stops, Underground and Overground rail services);
- Food and drink (restaurants, takeaways, cafes, bars, pubs);
- Leisure centres;
- Community centres;
- Education (nurseries, primary schools, secondary schools);
- Retail shops;
- Financial (Post Office, banks, building societies);
- Hairdressers and barbers;
- Places of worship; and,
- Health (Royal Free Hospital, pharmacies).

3.2.6 In addition, the site is located within acceptable cycle distance of the following:

- Retail, leisure and employment facilities in Camden Town – approximately 1.5km to the south;
- Primrose Hill and The Regent's Park – approximately 2km to the south;
- London Euston and Kings Cross St Pancras stations – approximately 3.5km to the south; and,
- Retail, employment and leisure facilities in Oxford Circus – approximately 5.3km to the south.

3.3 Cycling

3.3.1 The closest cycle lane to the site is an advisory cycle lane located immediately to the south of the development site along the northern edge of Malden Road. This runs from Southampton Road (to the north) to Prince of Wales Road (to the south).

3.3.2 The closest route on the London Cycleway Network is London Cycleway 6 (LC6), and this can be accessed approximately 1.5km to the south-east of the site along Kentish Town Road. The cycleway runs towards Elephant and Castle and follows some of the safer roads throughout London, providing convenient access for commuters into Central London.

3.3.3 There have been recent improvements to cycling infrastructure in the area surrounding the site, including the completion of a high-quality 2m wide cycle lane along Prince of Wales Road (approximately 600m to the south of the site). The eastern end of this new link connects through Castlehaven Road to the northern end of LC6 on Royal College Street.

3.4 Accessibility by public transport

Bus services

3.4.1 The closest bus stops to the site are located along Malden Road, with the southbound stop situated approximately 40m to the south-east of the site access, and the northbound stop approximately 130m to the west.

3.4.2 The southbound stop can be accessed directly via the footway along the northern side of Malden Road. The southbound stop can be reached via a zebra crossing across Malden Road approximately 100m east of the bus stop.

3.4.3 These stops are served by routes 24 and 46, which provide access to destinations across London including Paddington to the south-west, and Camden Town, Covent Garden, Westminster and Victoria to the south.

3.4.4 Additional bus stops are located 500m to the north along Agincourt Road, and 650m to the south on Prince of Wales Road. The services at these stops provide access to Brent Cross Shopping Centre, Stoke Newington, and Highbury and Islington.

Table 3.1 Summary of routes accessed at nearest stops

Route no.	Nearest bus stop (m)	Route	Frequency per hour
Grafton Terrace			
24	40	Grosvenor Road - Royal Free Hospital	5-7
46	40	Paddington Station - St Bartholomew's Hospital	5-7
Mansfield Road (along Agincourt Road)			
C11	500	Archway Station - Brent Cross Shopping Centre	4-6
Malden Road (along Prince of Wales Road)			
393	650	Upper Clapton Road - Chalk Farm Road	5

Rail Services

3.4.5 The closest railway station to the site is Gospel Oak Overground Station, located approximately 750m to the north of the site. The station and all trains serving it are operated by London Overground and it is situated on the North London Line. The typical off-peak service at the station is as follows:

- Barking Railway Station (four services per hour)
- Stratford Railway Station (eight services per hour)
- Clapham Junction Railway Station (four services per hour)
- Richmond Railway Station (four services per hour)

3.4.6 There are three 'CaMdem M' cycle stands provided at the entrance to the station which hold the capacity to store six bicycles. The station has step-free access from street to platform, and there is staff help available from the first service to the last, seven days a week.

3.4.7 Belsize Park and Chalk Farm Underground stations are also within walking distance. Both stations are located on the Northern Line and provide direct, frequent services to Central London including Kings Cross, Euston, Bank, London Bridge, Tottenham Court Road, Charing Cross and Waterloo.

Public Transport Accessibility Level

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

3.4.2 The PTAL is categorised in eight levels (1a to 6b), where 6b represents an excellent level of connectivity and 1a represents a poor level of connectivity.

3.4.3 The assessment methodology reflects:

- Walking time from the point of interest to the public transport access points;
- The reliability of the service modes available;
- The number of services available within the catchment; and,
- The level of service at the public transport access points – i.e., average waiting time.

3.4.4 An Equivalent Doorstep Frequency (EDF) is calculated for each of the public transport services accessible from the site based on the criteria described above. These individual EDF values are then weighted to provide an Accessibility Index (AI) value for each service accessible from the site. The sum of the Ais for each mode are then aggregated to provide a single measure of connectivity.

3.4.5 TfL's WebCAT online calculation tool identifies the site as having a PTAL rating of 3 indicating a moderate level of connectivity to public transport (accessibility index 13.79).

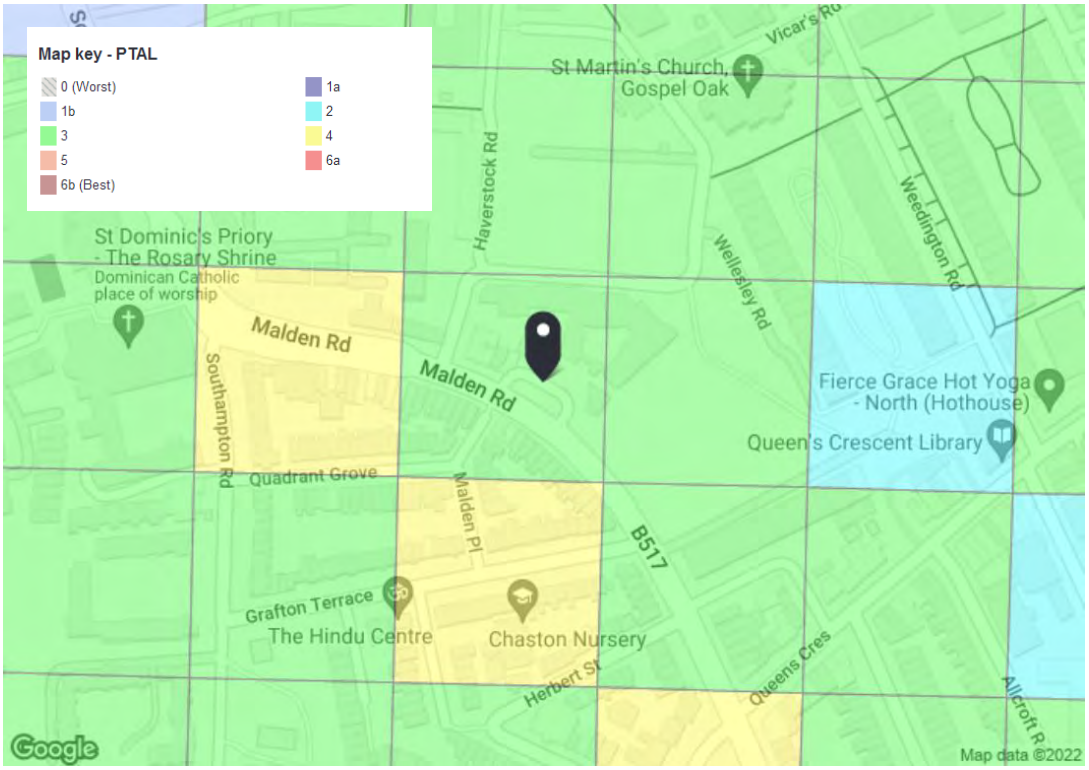

Figure 3.1 PTAL output for Base Year

3.4.6 TfL's PTAL rating is an excellent tool for identifying strategic issues related to public transport provision, however, its primary purpose is not the assessment of an individual site's sustainability as it does not consider the overall sustainability of the site but simply its connectivity to public transport in broad terms.

3.4.7 TfL recommends that a bespoke PTAL is carried out for a specific site using the TfL downloadable calculation spreadsheet, as:

- Pedestrian links can be missing;
- Bus routes can be missing;
- Rail/underground/overground stations can be missing; and,
- The standard calculation is based on a 100m grid square, which can affect whether a site is within the acceptable walking distance to public transport.

3.4.8 A bespoke PTAL calculation has been carried out from the centre of the site. The accessibility index (AI) increased from 13.79 to 17.00, resulting in a PTAL classification of 4 indicating a good level of connectivity to public transport. The key reason for this increase in accessibility was the fact that Belsize Park Underground Station was not included in the original PTAL calculation, whereas it does in fact fall within 950m walk distance from the centre of the site and can be included in the PTAL score.

3.5 Car clubs

3.5.1 Car club cars reduce the need to own a car and tend to be more energy efficient and cleaner than average cars. Car club members tend to cycle and use public transport more than the average Londoner.

3.5.2 It is considered that car clubs provide the following benefits:

- Relieve parking pressures within the area;
- Reduce the reliance on the private motor-vehicle by residents;
- Provide an attractive and convenient alternative to owning a car;
- Cost effective for those that drive fewer than 8,000 miles per year; and,
- Act as a catalyst to use sustainable modes of travel.

3.5.3 Zipcar and Enterprise are the current car club operators across the London Borough of Camden. Zipcar has recently introduced flexi car-club spaces, meaning that the cars are constantly moving around within the borough. With flexible car club spaces, the location of the cars can be tracked and dropped off anywhere within the borough.

3.5.4 In addition to flexible car club cars, there are round-trip vehicles, where the vehicles need to be returned to the point of origin. There are two round-trip car club vehicles (operated by Zipcar) on Parkhill Road, approximately 500m north-west of the site.

3.6 Local highway network

3.6.1 Table 3.2 below describes the existing highway network in the vicinity of the site.

Table 3.2 Local highway network

Road name	Description
Malden Road	
Description	Single carriageway local distributor road, with footways provided along both sides of the carriageway. Can be accessed via Southampton Road to the north-west and Prince of Wales Road to the south. There are a number of side roads along both sides of the carriageway.
Carriageway width	Approximately 10m-12m
Speed limit	20mph
Street lighting	Yes
Crossing facilities	Dropped kerbs provided on the approach to junctions, as well as zebra crossings and pedestrian refuge islands provided intermittently along the entirety of the road
Bus route	Yes
On-street parking	Yes – permit parking in laybys along the northern and southern sides of the carriageway
Character	The road is predominately occupied by residential units with some commercial units located to the north, with a small stretch of road fronted by a sports pitch and trees.

Haverstock Road	
Description	Single carriageway residential access road with footways provided on both sides of the carriageway at the southern end, and intermittent footway on the western side only at the northern end. Can be accessed via Malden Road to the south and Lismore Circus to the north, as well as Wellesley Road to the east.
Carriageway width	Approximately 5m-7m
Speed limit	20mph at the southern end, before reducing to 5mph where the road narrows to the north
Street lighting	Yes
Crossing facilities	Dropped kerbs provided at the junction with Malden Road, and dropped kerbs with tactile paving at the junction with Wellesley Road
Bus route	No
On-street parking	Yes – designated on-street parking bays along the western side of the carriageway at the southern end. Parking also observed in spaces associated with the block of flats and nursery that line the eastern side of the carriageway.
Character	Single carriageway road with two lanes to the south, before narrowing to a single-track road north of the junction with Wellesley Road. The majority of the eastern side of the carriageway is fronted by a building site, with the western side fronted by a low-rise apartment building and nursery.

3.7 The Active Travel Zone

3.7.1 The Active Travel Zone Assessment is a qualitative analysis of the walking and cycling infrastructure from the proposed development to key car-free destinations. Given that the development falls below the threshold for a Healthy Streets Transport Assessment, a simplified application has been adopted in this report.

3.7.2 The key spatial scales considered include 20-minute active travel zone, neighbourhood scale and neighbourhood healthy characteristics.

3.7.3 The prioritised active travel key destinations for pedestrians and cyclists within the Active Travel Zone Is based on the likely primary user of the development, in this case residents. The following destinations are prioritised as follows:

- Public transport services – high priority;
- Education – high priority;
- Employment – medium priority;
- Nearest town centre, retail and food shopping – high priority;
- Local cycle network – medium priority; and,
- Recreation – medium priority.

3.7.4 The 20-minute walk and cycle isochrones are shown in Figure 3.2 overleaf.

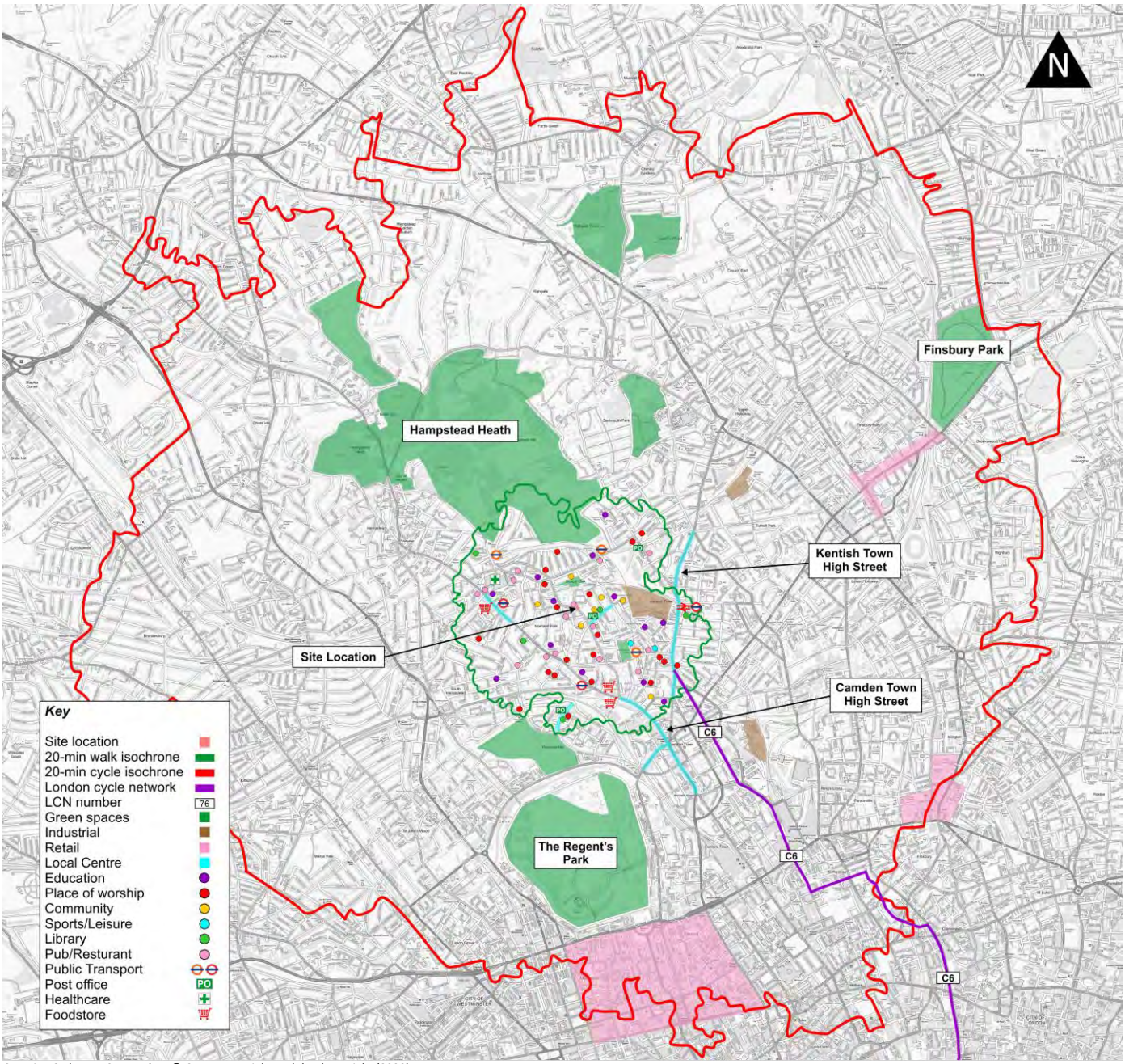

Figure 3.2 20-minute walk and cycle isochrones

3.8 Neighbourhood scale

3.8.1 The neighbourhood scale map remaps the Active Travel Zone to include the most important key destinations including the key routes as set out below:

- Route 1 – to Gospel Oak Overground Station
- Route 2 – to St Dominic Primary School via northbound bus stops

- **Route 3** – to Belsize Park Underground Station and local high street including nearest food store (Budgens)
- **Route 4** – to Haverstock Secondary School
- **Route 5** – to Talacre Open Space via southbound bus stop

3.8.2 The neighbourhood scale map identifies the routes to these key destinations and includes killed and seriously injured (KSI) collision data along these routes, refer to **Figure 3.3** below.

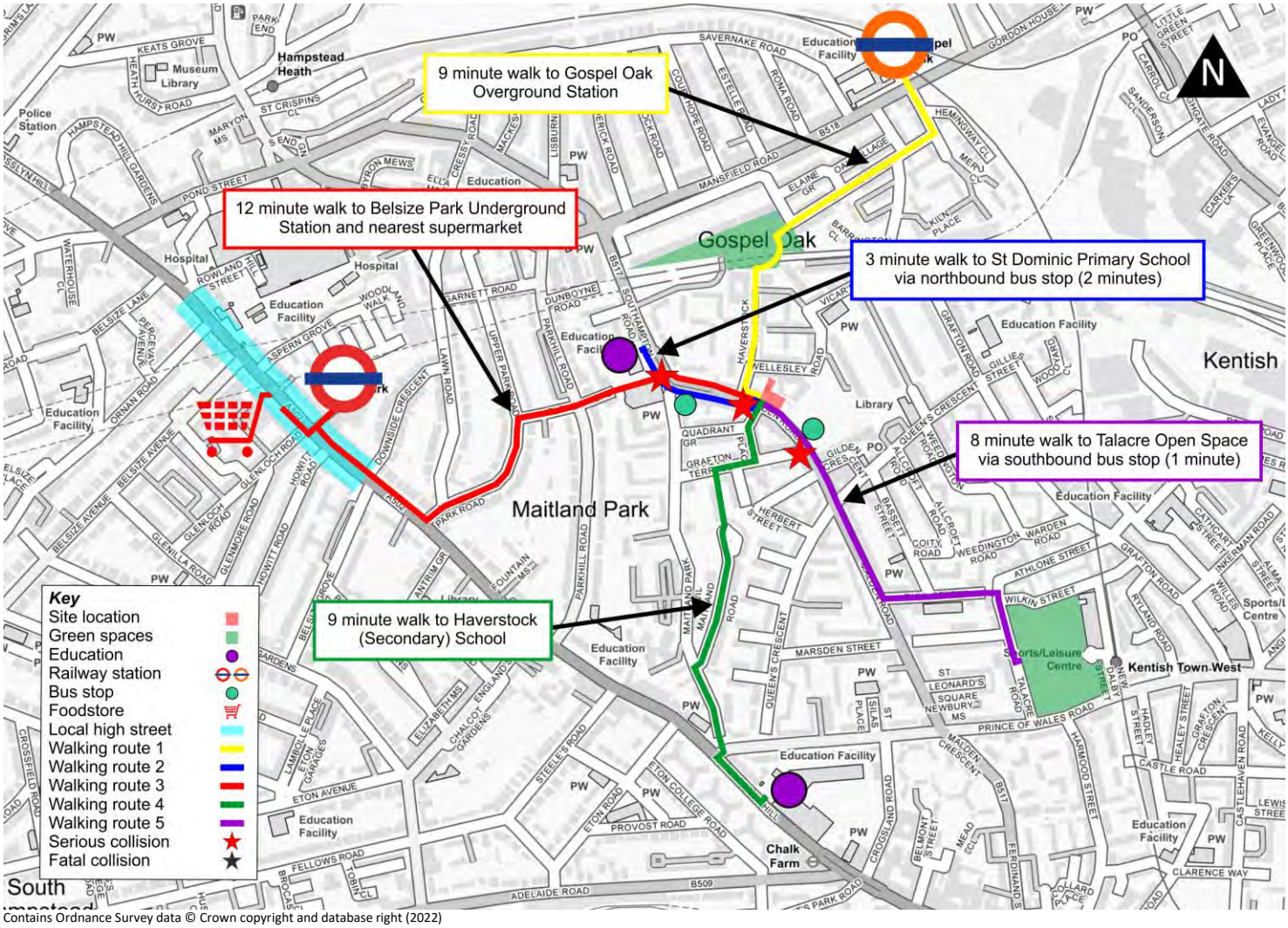

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Figure 3.3 Active Travel Zone neighbourhood scale and most important journeys

3.8.3 As part of the Active Travel Zone Assessment, the route to each key car-free destination has been considered. This includes five routes as set out below.

- **Route 1** – to Gospel Oak Overground Station, approximately a 9-minute walk from the site. This route travels north along Haverstock Road and through Lismore Circus playground, before heading further north along Elaine Grove and finally east along Mansfield Road where Gospel Oak station is situated. There is a dropped kerb tactile paving crossing at the junction of Haverstock Road and Wellesley Road, however

footway provision along Haverstock Road is intermittent, however, vehicle flow and speed is likely low and there is a lack of passive surveillance. Pedestrians are well provided for along the rest of the route, with footways provided on both sides of the carriageway and a pelican crossing along Mansfield Road which provides access to the station on the northern side of the carriageway.

- Route 2 – to St Dominic Primary School and the closest northbound bus stops, approximately a 3-minute walk from the site. There is good footway provision along Malden Road, with dropped kerb tactile paving crossings on the approach to junctions. There is also a conveniently located zebra crossing which provides access to the southern side of the carriageway where the bus stop is located. The route is well-lit and overlooked by a mix of residential and commercial frontages.
- Route 3 – to Belsize Park Underground Station and local high street including the nearest food store, approximately a 12-minute walk. This route begins by following a similar path to Route 2, although it carries on further west towards Haverstock Hill via Alan Cheales Way, Tasker Road and Upper Park Road. There are footways provided on both sides of the carriageway along the entirety of the route, with dropped kerbs on the approach to junctions and crossings with pedestrian refuge islands along Haverstock Hill. Haverstock Hill benefits from passive surveillance from commercial units, and the footways are wide enough to create a separation between pedestrians and vehicles.
- Route 4 – to Haverstock School, approximately a 9-minute walk from the site. There is good footway provision along the roads en-route, with likely low traffic flows and speeds along Malden Place, Grafton Terrace and Maitland Park Road/Villas. Pedestrians are required to cross Prince of Wales Road, where traffic flows are likely to be higher, although there is a pelican crossing provided which provides access to Haverstock Hill where the secondary school is located.
- Route 5 – to Talacre Gardens and the closest southbound bus stops, approximately an 8-minute walk from the site. The majority of this route is along Malden Road, where there is good footway provision and sufficient street lighting, as well as continuous passive surveillance from both residential and commercial properties. Traffic flows will be higher than some of the secondary residential streets, although Malden Road is subject to a 20mph speed limit. The only road that is required to cross to reach Talacre Gardens is Talacre Road, and there are multiple dropped kerb crossing with tactile paving and a pedestrian refuge island that can be used to access the park.

3.9 Vision zero

3.9.1 Personal injury collision data has been obtained for the period 2017 to 2021 (inclusive). It can be seen from Figure 3.3 above that there have been three collisions resulting in serious injuries being sustained (no fatal collisions) involving pedestrians or cycle roads users along the key car-free routes identified.

3.9.2 There were no clusters of collisions resulting in serious or fatal injury.

3.10 Neighbourhood healthy characteristics

3.10.1 The neighbourhood healthy characteristics including green spaces and land uses are described below:

- Land use – town centre land uses including food stores and various restaurants are provided along Haverstock Hill (to west and south) and Kentish Town Road (to the east). The nearest education facilities are St Dominic Primary School on Malden Road and Haverstock School on Haverstock Hill.
- Street density – there is very good footway provision in the vicinity of the site leading to key local destinations.
- Green space – the site is situated by a small area of green space to the east, as well as Lismore Circus playground to the north. The nearest significant area of green space is Talacre Gardens, situated approximately 650m to the south-east.
- Public transport density – the site is located in close proximity to a comprehensive level of bus and rail services, including both Overground and Underground stations within comfortable walking distance. These services provide access to a variety of destinations throughout London.
- Permeability – there are extensive routes around the site, with various pedestrian and cycle routes provided. There is a convenient through-path to the north of St Dominic's Priory Church which connects Malden Road to Tasker Road, as well as London Cycleway 6 which is provided slightly further afield along Kentish Town Road.

4 Development proposals

4.1 Introduction

4.1.1 As part of the development, it is proposed to demolish the existing building on site and construct a mixed-use residential and office building comprising 15 self-contained flats and 184m^2 of office space. The proposed development is illustrated in **Figure 4.1** below.

Figure 4.1 Development proposals

4.2 Pedestrian access

4.2.1 Pedestrian access for the residential element of the development will be gained via Malden Road to the south-west of the development site. All three of the ground floor residential units have individual accesses, with the remaining residential units accessed via a communal entrance into a lobby area.

4.2.2 The office will have one pedestrian access point, separate to the residential element of the development, and similarly this will be accessed via Malden Road.

4.3 Vehicle access

4.3.1 At present, there is vehicle crossover access at two points to the site. One of these will be closed as part of the proposals and the footway reinstated, and the other is required to be maintained as the access is shared with a business storage unit.

4.3.2 There will be no vehicle access to the site as the development is proposed to be car-free.

4.4 Cycle parking

4.4.1 It is proposed to provide cycle parking for both the residential and office uses in accordance with the London Plan.

4.4.2 For the residential element of the development, it is required to provide a total of 29 secure and covered long-stay bicycle spaces. These will be provided in a secure cycle storage room within the main building, located in close proximity to the pedestrian access.

4.4.3 As per the London Plan 2021, the development is required to provide additional spaces for two visitor bikes. It is proposed that one high quality Sheffield stand (with the capacity to store two bicycles) will be provided to the east of the main building, on land adjacent to Unit 3.

4.4.4 A summary of the cycle parking provision for the residential element of the development is included in Table 4.1 overleaf.

Table 4.1 Cycle parking standards and provision

Dwelling type	No. of dwellings	Parking standards	No. of spaces required	Proposed provision
Residents				
1-bed flats	2	1.5 per unit	3	29
2-bed flats	9	2 per unit	18	
3-bed flats	4	2 per unit	8	
Visitors				
1-bed flats	2	5 to 40 dwellings: 2 spaces	2	2
2-bed flats	9			
3-bed flats	4			

4.4.5 Cycle storage for the office space will be provided in a separate store to the residential cycle parking, with three long-stay spaces and one short-stay space provided. The provision will be accompanied with supporting facilities for office staff, including a shower and changing facilities.

4.5 Car parking

4.5.1 Car ownership data for the surrounding area is low, however, the new households are unlikely to own cars as no car parking will be provided within the development and it is proposed that future residents will be ineligible to apply for parking permits.

4.5.2 Although the development is car-free, the London Plan requires that disabled persons parking should be provided for new residential developments of ten or more units. It is required to provide one blue badge parking bay from the outset, and to be able to show that one could be provided in the future.

4.5.3 It is, therefore, considered that up to two blue badge spaces will need to be accommodated on street within the vicinity of the site, and parking surveys were undertaken to establish whether there is sufficient capacity to accommodate these.

4.5.4 Standards for non-residential disabled persons parking are based on a percentage of the total number of parking bays, and therefore no provision is required.

4.6 Deliveries, servicing, refuse and emergency vehicles

Deliveries

4.6.1 It is anticipated that the development could generate up to a maximum of two (delivery and servicing) vehicle trips per day.

4.6.2 It is anticipated that servicing and deliveries will be undertaken mainly from within the parking bays and laybys along Malden Road, with additional opportunities for vehicles to stop along Haverstock Road. The likely maximum size of vehicle that would be reasonably expected to delivery to residential developments and offices is a 10m rigid vehicle. In practice, it is more likely that the maximum size of vehicle will be an 8m rigid vehicle, with transit sized vehicles being much more commonly used.

Refuse

4.6.3 It is anticipated that all refuse generated by the development will be collected by the local authority as part of the existing refuse collection in the area, from Malden Road. Discussions with the Camden Refuse Team confirmed that refuse collection would form part of the existing collection route along Malden Road (refer Appendix A).

Emergency

4.6.4 It is anticipated that access for emergency vehicles (fire and ambulance) will be provided from Malden Road.

5 Transport characteristics

5.1 Introduction

5.1.1 In order to assess the impact of the development of a mixed-use residential and office building comprising 15 self-contained flats and 184m^2 of office space on the existing highway network, it is necessary to assess the number of trips likely to be generated by the proposed development. This section, therefore, outlines the methodology used to predict the person trip generation (by mode).

5.2 Trip generation – flats privately owned

5.2.1 The TRICS (v.7.9.1) trip generation database has been reviewed to predict the likely level of trips generated by the residential element of the development. The sites were selected based on the following parameters:

- Land use: residential; flats privately owned;
- Survey type: multi-modal;
- Survey days: Tuesday, Wednesday and Friday;
- Number of units: up to 493;
- Location of selected sites: suburban area and neighbourhood centre;
- Geographical area: Greater London only; and,
- PTAL rating: 3-5.

5.2.2 A total of three sites have been selected, and the AM, PM and daily trips generated by the proposed development are summarised in Table 5.1 below and are included in full in Appendix B. It should be noted that average trip rates have been calculated as there is insufficient data to use the 85th percentile.

Table 5.1 Trip generation – flats privately owned

Time period	Arrival trip rate	No. of arrivals	Depart trip rate	No. of departs	Total trip rate	Total movements
Total people						
8am–9am	0.039	1	0.239	4	0.278	4
5pm–6pm	0.238	4	0.132	2	0.370	6
7am–9pm	1.925	29	2.284	34	4.209	63
Pedestrians						
8am–9am	0.028	0	0.056	1	0.084	1
5pm–6pm	0.071	1	0.043	1	0.114	2
7am–9pm	0.716	11	0.714	11	1.430	21
Cyclists						
8am–9am	0.000	0	0.009	0	0.009	0
5pm–6pm	0.004	0	0.000	0	0.004	0
7am–9pm	0.032	0	0.039	1	0.071	1
Public transport users						
8am–9am	0.007	0	0.123	2	0.130	2
5pm–6pm	0.108	2	0.067	1	0.175	3
7am–9pm	0756	11	1.028	15	1.784	27
Vehicles						
8am–9am	0.004	0	0.039	1	0.043	1
5pm–6pm	0.044	1	0.019	0	0.063	1
7am–9pm	0.331	5	0.372	6	0.703	11

5.2.3 It can be seen from the table above that the residential element of the development could generate one vehicle movement (two-way) in both the AM and PM peak periods, with a total of up to 11 vehicle movements (two-way) throughout the day (including deliveries, drop-off and cars associated with the blue badge parking).

5.3 Trip generation – employment (office)

5.3.1 The TRICS (v.7.9.1) trip generation database has been reviewed to predict the likely level of trips generated by the 184m^2 of office space being provided as part of the development. The sites were selected based on the following parameters:

- Land use: employment; office;
- Survey type: multi-modal;
- Survey days: Monday and Thursday;
- Gross floor area: up to 120,000m^2 (actual range: 2,255m^2 to 10,625m^2);
- Location of selected sites: suburban area and neighbourhood centre;
- Geographical area: Greater London only; and,

- PTAL rating: 5.

5.3.2 A total of two sites have been selected, and the AM, PM and daily trips generated by the proposed development are summarised in Table 5.2 overleaf and are included in full in Appendix A.

5.3.3 Due to the limited number of sites within the TRICS database of similar size and with similar locational characteristics, average trip rates have been used.

Table 5.2 Trip generation – employment (office)

Time period	Arrival trip rate	No. of arrivals	Depart trip rate	No. of departs	Total trip rate	Total movements
Total people						
8am–9am	2.050	4	0.085	0	2.135	4
5pm–6pm	0.155	0	1.793	3	1.948	4
7am–9pm	8.782	16	8.445	16	17.227	32
Pedestrians						
8am–9am	0.334	1	0.031	0	0.365	1
5pm–6pm	0.062	0	0.311	1	0.373	1
7am–9pm	3.043	6	2.927	5	5.970	11
Cyclists						
8am–9am	0.047	0	0.000	0	0.047	0
5pm–6pm	0.000	0	0.062	0	0.062	0
7am–9pm	0.118	0	0.118	0	0.236	0
Public transport users						
8am–9am	1.071	2	0.023	0	1.094	2
5pm–6pm	0.054	0	0.908	2	0.962	2
7am–9pm	3.556	7	3.332	6	6.888	13
Vehicles						
8am–9am	0.575	1	0.047	0	0.622	1
5pm–6pm	0.062	0	0.443	1	0.505	1
7am–9pm	1.997	4	1.912	4	3.909	7

5.3.4 It can be seen from the table above that the proposed development of 184m^2 of office space could generate one vehicle movement (two-way) in both the AM and PM peak periods, with a total of up to seven vehicle movements (two-way) throughout the day.

5.4 Total trip generation

5.4.1 The total number of trips generated by the development of a mixed-use residential and office building comprising 15 self-contained flats and 184m^2 of office space is summarised in Table 5.3 below.

Table 5.3 Total trip generation

Time period	No. of arrivals	No. of departs	Total movements
Total people			
8am–9am	4	4	8
5pm-6pm	4	5	9
7am-7pm	45	50	95
Pedestrians			
8am–9am	1	1	2
5pm-6pm	1	1	2
7am-7pm	16	16	32
Cyclists			
8am–9am	0	0	0
5pm-6pm	0	0	0
7am-7pm	1	1	2
Public transport users			
8am–9am	2	2	4
5pm-6pm	2	3	4
7am-7pm	18	22	39
Vehicles			
8am–9am	1	1	2
5pm-6pm	1	1	2
7am-7pm	9	9	18

5.4.2 It can be seen from the table above that the proposed development could generate up to two vehicle movements (two-way) in both the AM and PM peak periods, with a total of up to 18 vehicle movements (two-way) throughout the day.

5.4.3 It is likely that 77% of all trips will be carried out by sustainable modes, with public transport likely to be the preferred mode of transport, contributing to 41% of all trips, and walking and cycling contributing to 37% of all daily trips.

5.4.4 It is considered that this volume of movements can be accommodated safely within the surrounding highway and public transport network.

5.5 Servicing trip generation

Residential use

5.5.1 There are a limited number of sites available within the TRICS database which detail the likely servicing associated with residential use. Given the increase in home deliveries in recent months, there is also a lack of up-to-date data. Therefore, the likely number of deliveries has been based on surveys undertaken at a residential development in Croydon of more than 300 dwellings (in July 2020) in a town centre location with access to good public transport links (planning ref. 19/05893/DISC).

5.5.2 The surveys were undertaken during a period when restrictions in relation to COVID-19 were still in place and when the number of deliveries was likely to be higher than usual. This corresponded with an increased proportion of people working from home or being furloughed, and when the shops and restaurants were not fully open, therefore, resulting in a higher number of food and other deliveries.

5.5.3 The number of delivery and servicing trips generated by the residential element of the development is shown in Table 5.4 below.

Table 5.4 Deliveries and servicing trip generation

Time period	Total trip rate	Total no. of trips	Total no. of trips (6 days/week)
LGVs			
8am–9am	0	0.0	0
5pm-6pm	0.003	0.0	0
7am-10pm	0.0737	1.1	7
OGVs			
8am–9am	0	0.0	0
5pm-6pm	0.003	0.0	0
7am-10pm	0.017	0.3	2
Motorbikes			
8am–9am	0	0.0	0
5pm-6pm	0	0.0	0
7am-10pm	0.007	0.1	1
Cars			
8am–9am	0	0.0	0
5pm-6pm	0	0.0	0
7am-10pm	0.01	0.2	1
Total			
8am–9am	0	0.0	0
5pm-6pm	0.006	0.1	1
7am-10pm	0.1077	1.6	10

5.5.4 Light goods vehicles (LGVs) are defined as cars and small vans under 3.5T and with 2-axles, and ordinary goods vehicles (OGVs) are defined as over 3.5T with 2-axles or more.

5.5.5 Based on the independent survey results, very few trips are observed during the AM or PM peak periods. Based on the above, it is likely that the residential element of the development will generate up to ten trips (20 movements) per week.

Office use

5.5.6 Office deliveries are typically for everyday office supplies including general office supplies and stationery, couriers and postal/parcel deliveries and cleaning materials/equipment supplies.

5.5.7 Data from the TRAVL/TRICS database show that two sites in Central London (Buckingham Palace Road and the Baltic Exchange) have an average vehicle movements rate of 0.277 vehicles per 100m^2. Based on the floor area of the proposed office, it is predicted that there will be approximately one delivery every two days.

5.5.8 This results in a total delivery and servicing trip generation for the proposed development of approximately two trips per day.

5.6 Potential impact

5.6.1 This section of the report summarises the potential effect of the development on the transport network.

Walking

5.6.2 The development is likely to generate 32 pedestrian movements per day. In addition, a further 39 daily public transport movements are likely to walk to reach public transport. The walking trips will be spread across a number of local streets and it is anticipated that there will be no adverse impact to the pedestrian network.

Cycling

5.6.3 There are likely to be a small number of cycle movements during the day. The cycling trips will be spread across a number of local routes and it is anticipated that there will be no adverse impact to the cycle network. Whilst this is low, there are proposals across London to encourage active travel as well as the provision of conveniently located bicycle stores as part of the development, and this has the potential to increase.

Public transport

5.6.4 The development is likely to generate 39 public transport movements per day. These are likely to be taken by a mixture of rail (19 movements) and bus (20 movements). It is considered that this level of additional passengers will not have a material impact on the public transport network, which is extensive in this area with numerous services.

Vehicles

5.6.5 It is predicted that the scheme is likely to generate up to 18 vehicle movements (including servicing trips) throughout the day and it is considered that the proposed development will have a minimal impact on the surrounding roads.

5.6.6 Based on the volume of trips identified above, it is considered that the proposed development will have a minimal impact on the surrounding transport network, and that the proposed development can be accommodated within the existing highway and public transport networks.

5.7 Design solutions and mitigation measures

5.7.1 This Transport Statement has demonstrated that the development will not have a significant impact on the surrounding streets and the following measures are proposed to reduce the impact further.

- High quality cycle parking provided in covered, secure locations;
- The removal of an existing vehicle crossover and the provision of a living green wall along Malden Road will create a more pleasant streetscape;
- The new apartments will provide additional passive surveillance onto Malden Road; and,
- Provision of a Travel Information Pack (with travel voucher) upon first occupation to encourage active travel.

6 Parking surveys

6.1 Introduction

6.1.1 In order to assess whether there is scope to accommodate blue badge parking on-street in the vicinity of the site, parking beat surveys were carried out on the nights of Wednesday 18th and Thursday 18th May 2022. These surveys followed the principles set out in the London Borough of Lambeth's 'Residential Parking Survey Methodology'.

6.1.2 The surveys were carried out on two consecutive weekday nights between 12.30am and 5.30am (excluding public and school holidays). This is to ensure that the maximum demand for residential parking was captured. The surveys covered a two-minute walk from the site and covered all streets within 200m. This is considered a reasonable distance that a resident is prepared to leave their vehicle and walk to their home. In accordance with Lambeth's methodology, surveys were continued to the end of the street (or suitable local along a road even where this is beyond the 200m walk distance).

6.2 On-street parking surveys

6.2.1 The results from the parking surveys were recorded per street, per night and by type of parking location. The following parking types were noted on the busiest night:

- Permit holders (resident);
- Permit holders or pay by phone;
- Pay by phone;
- Disabled badge holders only;
- Doctor parking only;
- Solo motorcycles only; and,
- Single yellow lines.

6.2.2 The extent of the survey area within 200m of the site is shown in **Appendix C**.

6.2.3 The highest demand for parking occurred on the first night (Wednesday 18th May 2022), with a total of 167 vehicles parked (157 parked on Thursday night) within the study area. The full results of the parking surveys are also included in Appendix B. **Table 6.1** below summarises the survey results for the busiest night of the survey.

Table 6.1 Summary of parking survey results

Street	Total no. of spaces available	Total spaces used	% of spaces used	No. of unoccupied spaces before practical capacity reached
Southampton Road	44	39	89	0
Southampton Road (B517)	2	0	-	-
Malden Road*	36	26	72	5
Wellesley Road*	17	13	76	1
Haverstock Road	34	10	29	19
Grafton Terrace*	68	38	56	20
Quadrant Grove	34	26	76	3
Malden Place	9	7	78	1
Gilden Crescent	12	8	67	2
	256	**167**	**65**	**51**

*Note: In addition, one vehicle parked on single yellow lines on each street

6.3 Analysis

6.3.1 On the busiest night of the survey, 167 vehicles were parked out of 256 available spaces. This represents 65% of the available capacity.

6.3.2 Typically, practical capacity is reached when 85% of the available spaces are occupied. Above this level of parking stress, finding a space may become difficult and vehicles may need to circulate within an area. Also, depending on the layout and width of the carriageway, streets fully parked on both sides may have fewer passing places, which can affect vehicle circulation in an area and possibly access by large vehicles. There is capacity for an additional 89 vehicles to be parked, with 51 spaces before practical capacity is reached at 85%.

6.4 Capacity for blue badge parking

6.4.1 Further analysis of the on-street parking capacity has been undertaken specifically considering the streets within 50m of the site in order to assess the capacity to provide blue badge parking on-street. Table 6.2 summarises the results from the busiest night of the survey.

Table 6.2 On-street parking capacity within 50m of the site

Street	Total no. of spaces available	Total spaces used	% of spaces used	No. of unoccupied spaces before practical capacity reached
Malden Road*	7	5	71	1
Wellesley Road*	5	5	100	-
Quadrant Grove	4	3	75	0
	16	**13**	**81**	**1**

*Note: In addition, one vehicle parked on single yellow lines on each street

6.4.2 It can be seen from the table above that there are 16 total on-street parking spaces within 50m of the site access, of which 13 were occupied on the busiest night of the survey. There is capacity for an additional three vehicles to be parked, with one space until practical capacity is reached.

6.4.3 There is sufficient capacity to accommodate one blue badge parking bay on-street immediately within practical capacity. The provision of a second bay in the future could also be accommodated, although this would result in an increase of parking stress slightly above practical capacity within 50m of the site. There is, however, ample capacity within 200m of the site for existing parking permit holders (who do not require a blue badge space) in the immediately adjacent streets within 200m.

6.5 Impact of the development

6.5.1 As the development is proposed to be car-free, with residents' ineligible to apply for parking permits, the only impact on parking on the surrounding streets will be associated with the provision of up to two blue badge spaces.

6.5.2 On-street parking for all other development users will be limited, as agreed as part of the pre-application discussion with Camden Borough Council:

'The council will not issue on-street parking permits in connection with the new development and will use a Section 106 Legal Agreement to ensure that future occupants are aware that they are not entitled to on-street parking permits.'

6.5.3 The only impact on the on-street parking stress in the area surrounding the site will initially be one blue badge space (3% of dwellings), with the view to providing another in the future (7% of dwellings). As a 'worst-case' scenario, this would increase parking stress within 200m from 65% to 66%, which is considerably below practical capacity.

7 Summary and conclusions

7.1 Summary

7.1.1 Lime Transport has been commissioned by Andreas Kypriandes to produce a Transport Statement in support of a planning application for the development of a mixed-use residential and office building comprising 15 self-contained flats and 184m^2 of office space on land to the north of Malden Road, Camden. The development is car-free with conveniently located, secure and covered cycle parking for the residential and office uses. Refuse and fire access will be from Malden Road.

7.1.2 The purpose of this report is to review existing conditions within the vicinity of the site, outline the development proposals and how they will integrate into the existing transport infrastructure, and identify the likely transport characteristics of the proposed development.

Site and surroundings

7.1.3 The site is located within a PTAL 3 area, although a bespoke PTAL calculation resulted in an increase to a level 4, which indicates a good level of connectivity to public transport. The nearest bus stops in each direction are located approximately 40m to the south-east (southbound) and 130m to the west (northbound) of the site. The closest railway station to the site is Gospel Oak Overground Station, which is situated approximately 750m north.

7.1.4 In addition to this level of connectivity to public transport, it is considered that the site is in a sustainable location, as it has excellent access to facilities on foot and by cycle with a high street, education facilities and open space within close proximity of the development.

Development proposals

7.1.5 As part of the development, it is proposed to demolish the existing building on site and construct a mixed-use residential and office building comprising 15 self-contained flats and 184m^2 of office space. There will be separate accesses for the residential and office uses, with pedestrian and cyclist access gained from Malden Road.

7.1.6 Cycle and car parking will be provided in accordance with the adopted standards.

7.1.7 Access for large vehicles, including deliveries, emergency and refuse will be from Malden Road, with no vehicular access into the site itself as it is proposed to be car-free.

Travel characteristics

7.1.8 The proposed development is likely to generate 32 pedestrian movements and 39 public transport movements throughout the day. It is predicted that the development will generate two vehicle movements in each peak hour (including deliveries and servicing). A larger proportion of the total trips will be associated with the residential element of the development (64%) compared with the office use (34%). It is considered that the surrounding highway network can accommodate these additional trips.

Parking surveys

7.1.9 In order to assess whether there is capacity on street to accommodate up to two blue badge parking spaces in the vicinity of the site, parking beat surveys were carried in the vicinity of the site.

7.1.10 On the busiest night of the survey, 167 vehicles were parked out of 256 available spaces. This represents 65% of the available capacity. There is capacity for an additional 89 vehicles to be parked, with 51 spaces before practical capacity is reached at 85%.

7.2 Conclusions

7.2.1 It is concluded that the development is compliant with national, regional and local policy and in particular with the Mayor of London's Transport Strategy, Healthy Streets and Vision Zero. It is considered that it will not have a significant impact on the transport network. Any impact is further limited as the development is proposed to be car-free with generous and well-located cycle parking provision.

7.2.2 National Planning Policy Framework (NPPF) states in Paragraph 111 that:

'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

7.2.3 It is considered that the proposed development of a mixed-use residential and office building comprising 15 self-contained flats and 184m^2 of office space does not have an unacceptable impact on highway safety, the residual cumulative impact can be accommodated on the road network and are not severe.

Appendices

Appendix A

Sam Lee

From: Daniel Wilks <Daniel.Wilks@camden.gov.uk>
Sent: 21 April 2022 16:20
To: Sam Lee
Cc: Camden Commercial Waste, UK Veolia Waste; Manning, John; Grzegorz Budzik
Subject: RE: Refuse arrangements - 160 Malden Road, Camden

Hi Sam,

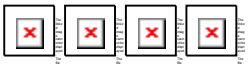
I don't see this being a problem. Veolia stop to collect wheelie bins and bags from the flats above shops along Malden road.

Large euro bins or similar would be required we can arrange this for you. I have copied in Veolia's commercial waste team and colleagues so this can be set up.

Kind regards

Daniel Wilks
Senior Area Monitoring Officer

Telephone: 020 7974 3979



The majority of Council staff are continuing to work at home through remote, secure access to our systems. Where possible please communicate with us by telephone or email.

From: Sam Lee <sam@limetransport.com>
Sent: 19 April 2022 17:12
To: Daniel Wilks <Daniel.Wilks@camden.gov.uk>
Subject: Refuse arrangements - 160 Malden Road, Camden

Dear Daniel,

I contacted one of your colleagues within Camden Borough Council regarding this issue and they came back saying that I should contact the ward senior area monitoring officer. I trust that this is your role for the Gospel Oak ward.

Lime Transport are currently working on a site for the development of 15 self-contained residential flats and a small amount of office space at an existing garage at 160 Malden Road, Camden (site location shown below).

I assume that Malden Road in an existing route for refuse collection, although there is a cycle route which runs directly to the south of our site which may impact on kerbside collection. I note that within Camden's Environment Service technical guidance for recycling and waste it states that "the highways or footway including cycle paths and areas of high public use should not have any potential obstruction". The guidance also specifies that waste collection crews should not have to cross a main, dual road or cycle pathway under waste transfer.

Bearing this in mind, would it be acceptable for refuse to be collected from Malden Road? The location of the waste storage has not been fixed yet, although it is likely to be situated within comfortable walk distance for collection from Malden Road.

The site falls within the Gospel Oak ward of Camden Borough, and I am happy to give you a call at some point to discuss this further if necessary.

Kind regards
Sam

Sam Lee BA
Graduate Transport Planner
t: 02920 700924
5A Andrews Buildings Stanwell Road Penarth CF64 2AA

www.limetransport.com

Appendix B

Calculation Reference: AUDIT-258601-220608-0659

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON		
	BT	BRENT	1 days
	HG	HARINGEY	1 days
	WF	WALTHAM FOREST	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 22 to 472 (units:)
Range Selected by User: 6 to 493 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 30/06/21

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

Selected survey days:

Tuesday	1 days
Wednesday	1 days
Friday	1 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:

Suburban Area (PPS6 Out of Centre)	1
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Development Zone	1
Residential Zone	1
No Sub Category	1

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

Secondary Filtering selection:

Use Class:
C3 3 days

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

Population within 500m Range:
All Surveys Included
Population within 1 mile:
25,001 to 50,000 3 days

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

Population within 5 miles:
500,001 or More 3 days

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

Car ownership within 5 miles:
0.6 to 1.0 3 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.

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

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1 BT-03-C-02 BLOCKS OF FLATS BRENT
ENGINEERS WAY
WEMBLEY

Suburban Area (PPS6 Out of Centre)
Development Zone
Total No of Dwellings: 472
Survey date: WEDNESDAY *30/11/16* *Survey Type: MANUAL*

2 HG-03-C-01 BLOCKS OF FLATS HARINGEY
BREAM CLOSE
TOTTENHAM HALE

Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 255
Survey date: TUESDAY *18/06/19* *Survey Type: MANUAL*

3 WF-03-C-03 FLATS & TERRACED HOUSES WALTHAM FOREST
FOREST ROAD
WALTHAMSTOW

Neighbourhood Centre (PPS6 Local Centre)
No Sub Category
Total No of Dwellings: 22
Survey date: FRIDAY *21/05/21* *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-03-C-01	Too much parking provided
HG-03-C-02	Too much parking provided

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 5.89

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	22	0.000	1	22	0.000	1	22	0.000
07:00 - 08:00	3	250	0.004	3	250	0.039	3	250	0.043
08:00 - 09:00	3	250	0.015	3	250	0.057	3	250	0.072
09:00 - 10:00	3	250	0.027	3	250	0.029	3	250	0.056
10:00 - 11:00	3	250	0.031	3	250	0.035	3	250	0.066
11:00 - 12:00	3	250	0.035	3	250	0.032	3	250	0.067
12:00 - 13:00	3	250	0.025	3	250	0.027	3	250	0.052
13:00 - 14:00	3	250	0.021	3	250	0.021	3	250	0.042
14:00 - 15:00	3	250	0.028	3	250	0.016	3	250	0.044
15:00 - 16:00	3	250	0.023	3	250	0.027	3	250	0.050
16:00 - 17:00	3	250	0.032	3	250	0.031	3	250	0.063
17:00 - 18:00	3	250	0.044	3	250	0.019	3	250	0.063
18:00 - 19:00	3	250	0.032	3	250	0.013	3	250	0.045
19:00 - 20:00	2	247	0.006	2	247	0.012	2	247	0.018
20:00 - 21:00	2	247	0.008	2	247	0.014	2	247	0.022
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.331			0.372			0.703

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:	22 - 472 (units:)
Survey date date range:	01/01/14 - 30/06/21
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:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	22	0.000	1	22	0.000	1	22	0.000
07:00 - 08:00	3	250	0.000	3	250	0.009	3	250	0.009
08:00 - 09:00	3	250	0.000	3	250	0.017	3	250	0.017
09:00 - 10:00	3	250	0.003	3	250	0.005	3	250	0.008
10:00 - 11:00	3	250	0.001	3	250	0.003	3	250	0.004
11:00 - 12:00	3	250	0.001	3	250	0.003	3	250	0.004
12:00 - 13:00	3	250	0.000	3	250	0.001	3	250	0.001
13:00 - 14:00	3	250	0.000	3	250	0.000	3	250	0.000
14:00 - 15:00	3	250	0.003	3	250	0.000	3	250	0.003
15:00 - 16:00	3	250	0.004	3	250	0.001	3	250	0.005
16:00 - 17:00	3	250	0.003	3	250	0.000	3	250	0.003
17:00 - 18:00	3	250	0.004	3	250	0.000	3	250	0.004
18:00 - 19:00	3	250	0.011	3	250	0.000	3	250	0.011
19:00 - 20:00	2	247	0.002	2	247	0.000	2	247	0.002
20:00 - 21:00	2	247	0.000	2	247	0.000	2	247	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.039			0.071

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	22	0.000	1	22	0.000	1	22	0.000
07:00 - 08:00	3	250	0.028	3	250	0.056	3	250	0.084
08:00 - 09:00	3	250	0.028	3	250	0.084	3	250	0.112
09:00 - 10:00	3	250	0.025	3	250	0.037	3	250	0.062
10:00 - 11:00	3	250	0.047	3	250	0.051	3	250	0.098
11:00 - 12:00	3	250	0.085	3	250	0.045	3	250	0.130
12:00 - 13:00	3	250	0.049	3	250	0.055	3	250	0.104
13:00 - 14:00	3	250	0.035	3	250	0.072	3	250	0.107
14:00 - 15:00	3	250	0.048	3	250	0.063	3	250	0.111
15:00 - 16:00	3	250	0.051	3	250	0.072	3	250	0.123
16:00 - 17:00	3	250	0.083	3	250	0.063	3	250	0.146
17:00 - 18:00	3	250	0.071	3	250	0.043	3	250	0.114
18:00 - 19:00	3	250	0.040	3	250	0.029	3	250	0.069
19:00 - 20:00	2	247	0.079	2	247	0.030	2	247	0.109
20:00 - 21:00	2	247	0.047	2	247	0.014	2	247	0.061
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.716			0.714			1.430

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	22	0.000	1	22	0.000	1	22	0.000
07:00 - 08:00	3	250	0.007	3	250	0.123	3	250	0.130
08:00 - 09:00	3	250	0.011	3	250	0.238	3	250	0.249
09:00 - 10:00	3	250	0.028	3	250	0.101	3	250	0.129
10:00 - 11:00	3	250	0.028	3	250	0.075	3	250	0.103
11:00 - 12:00	3	250	0.033	3	250	0.048	3	250	0.081
12:00 - 13:00	3	250	0.032	3	250	0.055	3	250	0.087
13:00 - 14:00	3	250	0.049	3	250	0.043	3	250	0.092
14:00 - 15:00	3	250	0.051	3	250	0.039	3	250	0.090
15:00 - 16:00	3	250	0.051	3	250	0.051	3	250	0.102
16:00 - 17:00	3	250	0.080	3	250	0.056	3	250	0.136
17:00 - 18:00	3	250	0.108	3	250	0.067	3	250	0.175
18:00 - 19:00	3	250	0.144	3	250	0.056	3	250	0.200
19:00 - 20:00	2	247	0.075	2	247	0.040	2	247	0.115
20:00 - 21:00	2	247	0.059	2	247	0.036	2	247	0.095
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.756			1.028			1.784

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 5.89

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	22	0.000	1	22	0.000	1	22	0.000
07:00 - 08:00	3	250	0.039	3	250	0.239	3	250	0.278
08:00 - 09:00	3	250	0.059	3	250	0.419	3	250	0.478
09:00 - 10:00	3	250	0.081	3	250	0.182	3	250	0.263
10:00 - 11:00	3	250	0.117	3	250	0.172	3	250	0.289
11:00 - 12:00	3	250	0.164	3	250	0.140	3	250	0.304
12:00 - 13:00	3	250	0.116	3	250	0.148	3	250	0.264
13:00 - 14:00	3	250	0.113	3	250	0.140	3	250	0.253
14:00 - 15:00	3	250	0.136	3	250	0.121	3	250	0.257
15:00 - 16:00	3	250	0.139	3	250	0.160	3	250	0.299
16:00 - 17:00	3	250	0.206	3	250	0.158	3	250	0.364
17:00 - 18:00	3	250	0.238	3	250	0.132	3	250	0.370
18:00 - 19:00	3	250	0.238	3	250	0.101	3	250	0.339
19:00 - 20:00	2	247	0.162	2	247	0.091	2	247	0.253
20:00 - 21:00	2	247	0.117	2	247	0.081	2	247	0.198
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.925			2.284			4.209

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

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

Calculation Reference: AUDIT-258601-220609-0637

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON		
	BT	BRENT	1 days
	KN	KENSINGTON AND CHELSEA	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	2255 to 10625 (units: sqm)
Range Selected by User:	408 to 120000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 11/11/21

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

Selected survey days:

Monday	1 days
Thursday	1 days

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

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Development Zone	1
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.

Secondary Filtering selection:

Use Class:

Not Known	2 days

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

Filter by Site Operations Breakdown:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 500m Range:
All Surveys Included

Population within 1 mile:

50,001 to 100,000	1 days
100,001 or More	1 days

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

Population within 5 miles:

500,001 or More	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days

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

Travel Plan:

Yes	1 days
No	1 days

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

PTAL Rating:

5 Very Good	2 days

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

LIST OF SITES relevant to selection parameters

1 BT-02-A-04 OFFICES BRENT
EMPIRE WAY
WEMBLEY

Suburban Area (PPS6 Out of Centre)
Development Zone
Total Gross floor area: 10625 sqm
Survey date: THURSDAY *14/05/15* *Survey Type: MANUAL*

2 KN-02-A-01 FRUIT DRINKS COMPANY KENSINGTON AND CHELSEA
LADBROKE GROVE
KENSAL GREEN

Neighbourhood Centre (PPS6 Local Centre)
Built-Up Zone
Total Gross floor area: 2255 sqm
Survey date: MONDAY *17/06/19* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 5.25

	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	2	6440	0.171	2	6440	0.039	2	6440	0.210
08:00 - 09:00	2	6440	0.575	2	6440	0.047	2	6440	0.622
09:00 - 10:00	2	6440	0.303	2	6440	0.070	2	6440	0.373
10:00 - 11:00	2	6440	0.225	2	6440	0.140	2	6440	0.365
11:00 - 12:00	2	6440	0.148	2	6440	0.132	2	6440	0.280
12:00 - 13:00	2	6440	0.101	2	6440	0.179	2	6440	0.280
13:00 - 14:00	2	6440	0.070	2	6440	0.070	2	6440	0.140
14:00 - 15:00	2	6440	0.078	2	6440	0.078	2	6440	0.156
15:00 - 16:00	2	6440	0.070	2	6440	0.155	2	6440	0.225
16:00 - 17:00	2	6440	0.101	2	6440	0.217	2	6440	0.318
17:00 - 18:00	2	6440	0.062	2	6440	0.443	2	6440	0.505
18:00 - 19:00	2	6440	0.093	2	6440	0.342	2	6440	0.435
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.997			1.912			3.909

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:	2255 - 10625 (units: sqm)
Survey date date range:	01/01/14 - 11/11/21
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 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	2	6440	0.008	2	6440	0.000	2	6440	0.008
08:00 - 09:00	2	6440	0.047	2	6440	0.000	2	6440	0.047
09:00 - 10:00	2	6440	0.031	2	6440	0.000	2	6440	0.031
10:00 - 11:00	2	6440	0.016	2	6440	0.000	2	6440	0.016
11:00 - 12:00	2	6440	0.000	2	6440	0.016	2	6440	0.016
12:00 - 13:00	2	6440	0.008	2	6440	0.000	2	6440	0.008
13:00 - 14:00	2	6440	0.000	2	6440	0.000	2	6440	0.000
14:00 - 15:00	2	6440	0.000	2	6440	0.008	2	6440	0.008
15:00 - 16:00	2	6440	0.000	2	6440	0.000	2	6440	0.000
16:00 - 17:00	2	6440	0.000	2	6440	0.016	2	6440	0.016
17:00 - 18:00	2	6440	0.000	2	6440	0.062	2	6440	0.062
18:00 - 19:00	2	6440	0.008	2	6440	0.016	2	6440	0.024
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.118			0.118			0.236

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PEDESTRIANS
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	2	6440	0.085	2	6440	0.016	2	6440	0.101
08:00 - 09:00	2	6440	0.334	2	6440	0.031	2	6440	0.365
09:00 - 10:00	2	6440	0.357	2	6440	0.054	2	6440	0.411
10:00 - 11:00	2	6440	0.124	2	6440	0.031	2	6440	0.155
11:00 - 12:00	2	6440	0.078	2	6440	0.116	2	6440	0.194
12:00 - 13:00	2	6440	0.357	2	6440	0.800	2	6440	1.157
13:00 - 14:00	2	6440	1.087	2	6440	0.986	2	6440	2.073
14:00 - 15:00	2	6440	0.334	2	6440	0.295	2	6440	0.629
15:00 - 16:00	2	6440	0.124	2	6440	0.109	2	6440	0.233
16:00 - 17:00	2	6440	0.070	2	6440	0.062	2	6440	0.132
17:00 - 18:00	2	6440	0.062	2	6440	0.311	2	6440	0.373
18:00 - 19:00	2	6440	0.031	2	6440	0.116	2	6440	0.147
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.043			2.927			5.970

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

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

TRIP RATE for Land Use 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	2	6440	0.186	2	6440	0.008	2	6440	0.194
08:00 - 09:00	2	6440	1.071	2	6440	0.023	2	6440	1.094
09:00 - 10:00	2	6440	1.180	2	6440	0.008	2	6440	1.188
10:00 - 11:00	2	6440	0.334	2	6440	0.054	2	6440	0.388
11:00 - 12:00	2	6440	0.155	2	6440	0.171	2	6440	0.326
12:00 - 13:00	2	6440	0.109	2	6440	0.210	2	6440	0.319
13:00 - 14:00	2	6440	0.179	2	6440	0.342	2	6440	0.521
14:00 - 15:00	2	6440	0.171	2	6440	0.093	2	6440	0.264
15:00 - 16:00	2	6440	0.070	2	6440	0.148	2	6440	0.218
16:00 - 17:00	2	6440	0.031	2	6440	0.210	2	6440	0.241
17:00 - 18:00	2	6440	0.054	2	6440	0.908	2	6440	0.962
18:00 - 19:00	2	6440	0.016	2	6440	1.157	2	6440	1.173
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.556			3.332			6.888

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 3.43

	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	2	6440	0.474	2	6440	0.062	2	6440	0.536
08:00 - 09:00	2	6440	2.050	2	6440	0.085	2	6440	2.135
09:00 - 10:00	2	6440	1.910	2	6440	0.116	2	6440	2.026
10:00 - 11:00	2	6440	0.722	2	6440	0.225	2	6440	0.947
11:00 - 12:00	2	6440	0.388	2	6440	0.458	2	6440	0.846
12:00 - 13:00	2	6440	0.575	2	6440	1.196	2	6440	1.771
13:00 - 14:00	2	6440	1.328	2	6440	1.398	2	6440	2.726
14:00 - 15:00	2	6440	0.590	2	6440	0.481	2	6440	1.071
15:00 - 16:00	2	6440	0.264	2	6440	0.419	2	6440	0.683
16:00 - 17:00	2	6440	0.202	2	6440	0.512	2	6440	0.714
17:00 - 18:00	2	6440	0.155	2	6440	1.793	2	6440	1.948
18:00 - 19:00	2	6440	0.124	2	6440	1.700	2	6440	1.824
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.782			8.445			17.227

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.*

Appendix C

PHOENIX
TRAFFIC SURVEYS LIMITED

CLIENT: LIME **PROJECT NUMBER:** 220510

PROJECT MANAGER: JOSH DALY **DATE:** 18/05/22 - 19/05/22

PROJECT DESCRIPTION: MALDEN ROAD - PARKING BEAT DATA - SITE PLAN

PHOENIX TRAFFIC SURVEYS LIMITED

CLIENT: LIME

PROJECT NUMBER: 220510

PROJECT MANAGER: JOSH DALY

DATE: 18/05/2022

PROJECT DESCRIPTION: MALDEN ROAD - PARKING BEAT DATA - NIGHT BEAT 1

TIME: 00:30 - 05:30

Road Name	Roadside	Total Spaces	Permit Holders Only		Permit Holders or Pay by Phone		Pay by Phone		Disabled Badge Holders Only		Doctor		Solo Motorcycles Only		Outside Garage Parking		Single Yellow	Double Yellow	Bus Stop	Keep Clear	White Zig-Zag	Total Parked	% of Spaces Used
			Spaces	Used	Spaces	Used	Spaces	Used	Spaces	Used	Spaces	Used	Spaces	Used	Spaces	Used	Used	Used	Used	Used	Used		
SOUTHAMPTON RD B517	East	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0						0	0%
	West	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						0	N/A
MALDEN RD B517 1	North	8	7	5	0	0	0	0	1	1	0	0	0	0	0	0						6	75%
	South	11	0	0	11	7	0	0	0	0	0	0	0	0	0	0						7	64%
MALDEN RD B517 2	North	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					1	N/A
	South	7	7	5	0	0	0	0	0	0	0	0	0	0	0	0						5	71%
MALDEN RD B517 3	East	7	2	2	0	0	4	3	0	0	1	0	0	0	0	0						5	71%
	West	4	4	3	0	0	0	0	0	0	0	0	0	0	0	0						3	75%
WESLEY RD EW	East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						0	N/A
	West	5	5	4	0	0	0	0	0	0	0	0	0	0	0	0	1					5	80%
HAVERSTOCK RD	East	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						0	N/A
	West	34	0	0	0	0	0	0	0	0	0	0	0	0	34	10						10	29%
WESLEY RD NS	North	9	9	7	0	0	0	0	0	0	0	0	0	0	0	0						7	78%
	South	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0						2	67%
SOUTHAMPTON RD	East	27	27	25	0	0	0	0	0	0	0	0	0	0	0	0						25	93%
	West	23	14	12	3	2	0	0	0	0	0	0	6	4	0	0						18	78%
GRAFTON TERRACE	North	45	45	27	0	0	0	0	0	0	0	0	0	0	0	0	1					28	60%
	South	23	23	11	0	0	0	0	0	0	0	0	0	0	0	0						11	48%
QUADRANT GROVE 1	North	14	12	9	0	0	0	0	2	1	0	0	0	0	0	0						10	71%
	South	16	16	13	0	0	0	0	0	0	0	0	0	0	0	0						13	81%
QUADRANT GROVE 2	East	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0						1	100%
	West	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0						2	67%
MALDEN PL	East	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0						2	100%
	West	7	7	5	0	0	0	0	0	0	0	0	0	0	0	0						5	71%
GILDEN CRES	North	10	9	6	0	0	0	0	1	1	0	0	0	0	0	0						7	70%
	South	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0						1	50%

PHOENIX TRAFFIC SURVEYS LIMITED

CLIENT: LIME **PROJECT NUMBER:** 220510

PROJECT MANAGER: JOSH DALY **DATE:** 18/05/2022

PROJECT DESCRIPTION: MALDEN ROAD - PARKING BEAT DATA - NIGHT BEAT 1 **TIME:** 00:30 - 05:30

Road Name	Roadside	Total Spaces	Permit Holders Only		Permit Holders or Pay by Phone		Pay by Phone		Disabled Badge Holders Only		Doctor		Solo Motorcycles Only		Outside Garage Parking		Single Yellow	Double Yellow	Bus Stop	Keep Clear	White Zig-Zag	Total Parked	% of Spaces Used
			Spaces	Used	Spaces	Used	Spaces	Used	Spaces	Used	Spaces	Used	Spaces	Used	Spaces	Used	Used	Used	Used	Used	Used		
SOUTHAMPTON RD B517	East	**2**	2	1	0	0	0	0	0	0	0	0	0	0	0	0						**1**	**50%**
	West	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0						**0**	**N/A**
MALDEN RD B517 1	North	**8**	7	4	0	0	0	0	1	0	0	0	0	0	0	0						**4**	**50%**
	South	**11**	0	0	11	8	0	0	0	0	0	0	0	0	0	0						**8**	**73%**
MALDEN RD B517 2	North	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					**1**	**N/A**
	South	**7**	7	6	0	0	0	0	0	0	0	0	0	0	0	0						**6**	**86%**
MALDEN RD B517 3	East	**7**	2	2	0	0	4	2	0	0	1	0	0	0	0	0						**4**	**57%**
	West	**4**	4	2	0	0	0	0	0	0	0	0	0	0	0	0	1					**3**	**50%**
WESLEY RD EW	East	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0						**0**	**N/A**
	West	**5**	5	5	0	0	0	0	0	0	0	0	0	0	0	0	1					**6**	**100%**
HAVERSTOCK RD	East	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0						**0**	**N/A**
	West	**34**	0	0	0	0	0	0	0	0	0	0	0	0	34	9						**9**	**26%**
WESLEY RD NS	North	**9**	9	8	0	0	0	0	0	0	0	0	0	0	0	0						**8**	**89%**
	South	**3**	3	2	0	0	0	0	0	0	0	0	0	0	0	0						**2**	**67%**
SOUTHAMPTON RD	East	**27**	27	23	0	0	0	0	0	0	0	0	0	0	0	0						**23**	**85%**
	West	**23**	14	11	3	1	0	0	0	0	0	0	6	3	0	0						**15**	**65%**
GRAFTON TERRACE	North	**45**	45	24	0	0	0	0	0	0	0	0	0	0	0	0	2					**26**	**53%**
	South	**23**	23	10	0	0	0	0	0	0	0	0	0	0	0	0						**10**	**43%**
QUADRANT GROVE 1	North	**14**	12	8	0	0	0	0	2	1	0	0	0	0	0	0						**9**	**64%**
	South	**16**	16	9	0	0	0	0	0	0	0	0	0	0	0	0						**9**	**56%**
QUADRANT GROVE 2	East	**1**	1	1	0	0	0	0	0	0	0	0	0	0	0	0						**1**	**100%**
	West	**3**	3	2	0	0	0	0	0	0	0	0	0	0	0	0						**2**	**67%**
MALDEN PL	East	**2**	2	2	0	0	0	0	0	0	0	0	0	0	0	0						**2**	**100%**
	West	**7**	7	4	0	0	0	0	0	0	0	0	0	0	0	0						**4**	**57%**
GILDEN CRES	North	**10**	9	7	0	0	0	0	1	1	0	0	0	0	0	0						**8**	**80%**
	South	**2**	2	2	0	0	0	0	0	0	0	0	0	0	0	0		1				**3**	**100%**