

ARDENT
CONSULTING ENGINEERS

AN EMPLOYEE OWNED COMPANY

REF APP/D5120/W/22/3293225

**Proposed Carehome Development 2, 4, 6, 8 Danson
Road, Bexleyheath on behalf of Carebase Ltd**

PROOF OF EVIDENCE: TRANSPORT (Appendices)

Of Ian Wharton

BA (Hons) MCIHT

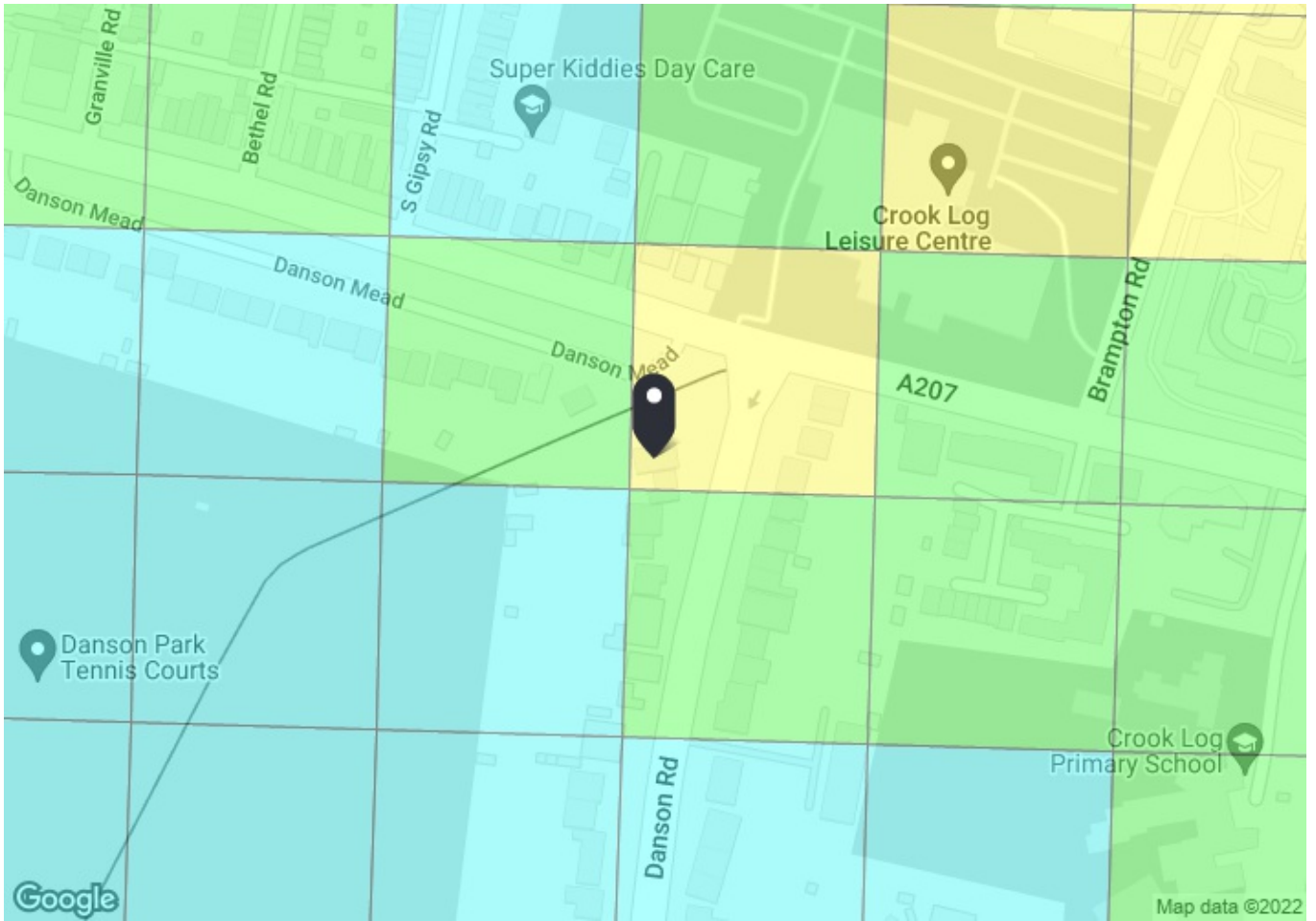
**REPORT REF.
190320-10**

NOVEMBER 2022

Appendices

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App IWA - PTAL



PTAL output for 2021 (Forecast)
4

2 Danson Rd
2 Danson Rd, Bexleyheath DA6 8HB, UK
Easting: 547607, Northing: 175507


Grid Cell: 56354

Report generated: 08/11/2022

Map key - PTAL

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

Map layers

 PTAL (cell size: 100m)

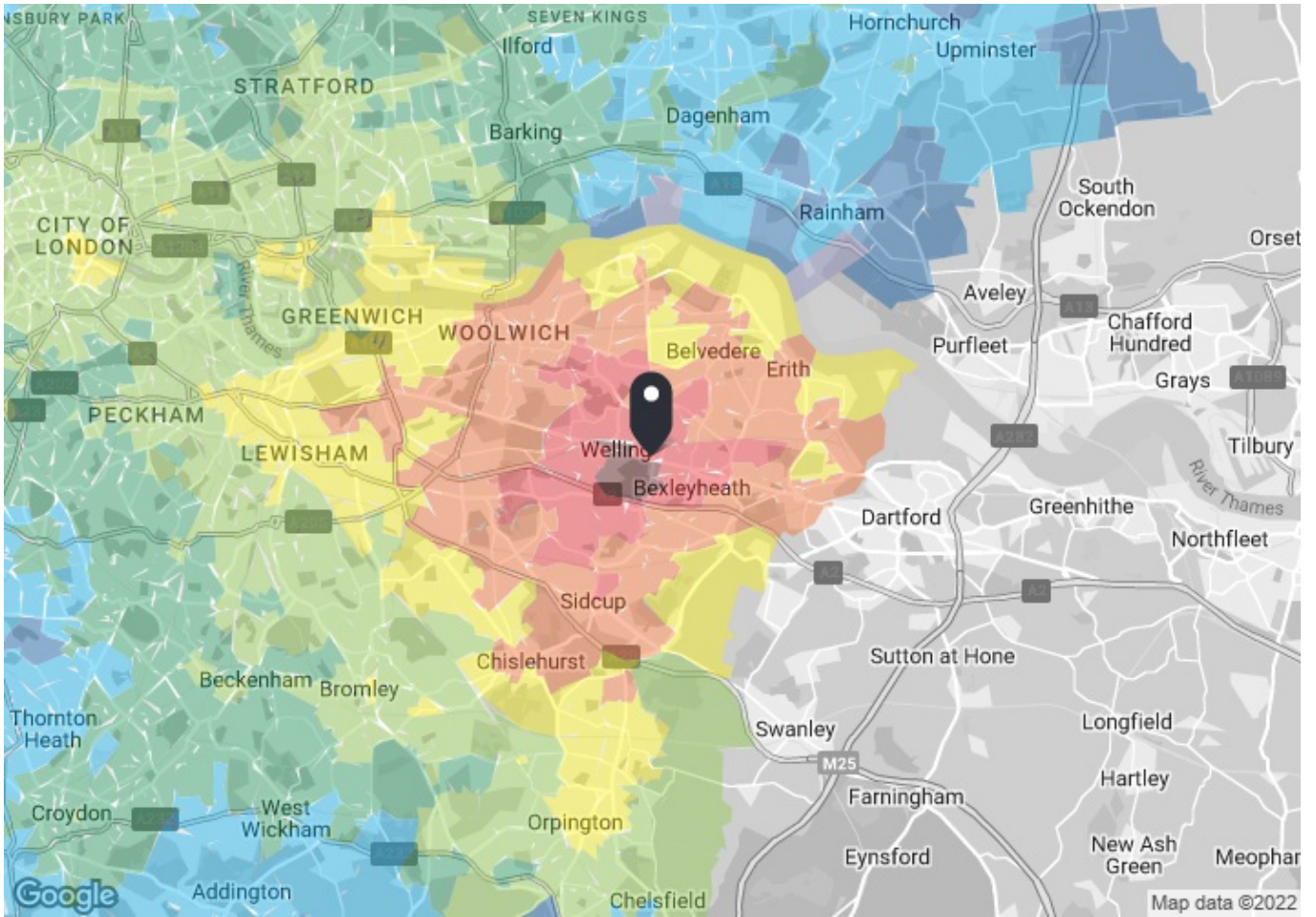
Calculation Parameters

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

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	BEXLEYHEATH BDY UPTON RD	B15	612.27	3.1	7.65	11.66	19.32	1.55	0.5	0.78
Bus	BEXLEYHEATH BDY UPTON RD	B11	612.27	4.14	7.65	9.25	16.9	1.78	0.5	0.89
Bus	BEXLEYHEATH BDY UPTON RD	422	612.27	6.21	7.65	6.83	14.48	2.07	0.5	1.04
Bus	BEXLEYHEATH BDY UPTON RD	B12	612.27	3.1	7.65	11.66	19.32	1.55	0.5	0.78
Bus	CROOK LOG SPORTS CENTRE	B16	14.02	4.14	0.18	9.25	9.42	3.18	0.5	1.59
Bus	CROOK LOG SPORTS CENTRE	89	14.02	5.95	0.18	7.04	7.22	4.16	0.5	2.08
Bus	CROOK LOG SPORTS CENTRE	96	14.02	8.28	0.18	5.62	5.8	5.17	1	5.17
Bus	CROOK LOG SPORTS CENTRE	486	14.02	7.76	0.18	5.86	6.04	4.97	0.5	2.48
Bus	CROOK LOG SPORTS CENTRE	B14	14.02	2.07	0.18	16.49	16.67	1.8	0.5	0.9
Total Grid Cell AI:										15.7

App IWB - WebCAT Catchment Data



TIM output for 2021 (Forecast)

Scenario: 2021 (Forecast) Mode: All public transport modes, Time of day: AM peak, Direction: To location









2 Danson Rd, Bexleyheath DA6 8HB, UK
Easting: 547626, Northing: 175522

Report generated: 08/11/2022


Population and employment: GLA forecasts 2016
Town Centres: GLA 2016
Education: EduBase 2016
Health: NHS Direct, CQC 2016

Code: WE086A05C

Map key- Travel Time

 < 15 mins	 15 - 30 mins
 30 - 45 mins	 45 - 60 mins
 60 - 75 mins	 75 - 90 mins
 90 - 105 mins	 105 - 120 mins
 120 - 135 mins	 135 - 150 mins

Map layers

 Travel Times

Catchment data for your current selection

Population - Working Age: London 2021

Working Age: London (2021) 6,328,438

Travel Time (mins)	Total: London (2011) 8,217,475	Total: London (2021) 9,203,328
< 15	6399	6453
< 30	100738	102490
< 45	375465	405156
< 60	666723	770619
< 75	1793021	2153738
< 90	3909191	4516247
< 105	6553365	7416695
< 120	8079970	9055514
< 135	8216233	9202022
< 150	8216233	9202022

Travel Time (mins)	Total: London & SE (2011) 21,126,595	Total: London & SE (2021) 23,138,477
< 15	6399	6453
< 30	100738	102490
< 45	382592	413829
< 60	704987	817182
< 75	1965584	2349876
< 90	4256513	4904700
< 105	7552933	8495120
< 120	11845412	13102295
< 135	15044136	16551326
< 150	16895080	18558995

Travel Time (mins)	Households: London (2011) 3,278,323	Households: London (2021) 3,745,744
< 15	2561	2649
< 30	39252	40896
< 45	148022	163158
< 60	269663	319873
< 75	731872	903799
< 90	1619906	1908030
< 105	2654847	3062906
< 120	3226270	3689128
< 135	3277836	3745228
< 150	3277836	3745228

Travel Time (mins)	Households: London & SE (2011) 8,578,772	Households: London & SE (2021) 9,584,028
< 15	2561	2649
< 30	39252	40896
< 45	150934	166884
< 60	285262	339830
< 75	801732	986672
< 90	1761112	2071665
< 105	3059552	3509504
< 120	4743213	5351469
< 135	6039909	6776175
< 150	6801985	7621912

Travel Time (mins)	Working Age: London (2011) 5,487,531	Working Age: London (2021) 6,328,438
< 15	3937	4157
< 30	61972	65774
< 45	234761	262168
< 60	428673	514963

< 75	1225291	1530582
< 90	2695314	3212980
< 105	4431820	5165910
< 120	5400385	6232829
< 135	5486809	6327656
< 150	5486809	6327656

Travel Time (mins)	Economically active: London (2011) 3,706,868	Economically active: London (2021) 4,261,577
< 15	2953	3119
< 30	45071	47829
< 45	160957	179144
< 60	292720	351347
< 75	793867	990230
< 90	1781844	2118921
< 105	2979111	3461204
< 120	3646443	4195473
< 135	3706294	4260956
< 150	3706294	4260956

Travel Time (mins)	Pensioners: London (2011) 1,087,045	Pensioners: London (2021) 1,014,232
< 15	1242	1090
< 30	19418	17563
< 45	61887	57061
< 60	99770	92460
< 75	216727	201725
< 90	459853	426265
< 105	826972	769189
< 120	1065836	994289
< 135	1086765	1013994
< 150	1086765	1013994

Employment - Jobs: London 2021

Travel Time (mins)	Jobs: London (2011) 4,895,753	Jobs: London (2021) 5,223,462
< 15	2602	2643
< 30	29100	29512
< 45	111004	117738
< 60	395557	449821
< 75	2247184	2456388
< 90	3247154	3511781
< 105	4227683	4534247
< 120	4822822	5147724
< 135	4894833	5222508
< 150	4894833	5222508

Travel Time (mins)	Jobs: London & SE (2011) 10,763,962	Jobs: London & SE (2021) 11,552,108
< 15	2602	2643
< 30	29100	29512
< 45	120450	128656
< 60	420075	478159
< 75	2319045	2535591
< 90	3395511	3672356
< 105	4688913	5025594
< 120	6569680	7020935
< 135	8015883	8579605
< 150	8880405	9514059

Town centres - Metropolitan, major and district: London

Travel Time (mins)	Metropolitan, major and district: London - 191
< 15	1
< 30	2
< 45	8
< 60	21
< 75	45
< 90	103
< 105	168
< 120	191
< 135	191
< 150	191

Travel Time (mins)	Metropolitan and major: London - 47
< 15	0
< 30	1
< 45	3
< 60	7
< 75	14
< 90	31
< 105	44
< 120	47
< 135	47
< 150	47

Travel Time (mins)	Metropolitan only: London - 12
< 15	0
< 30	0
< 45	0
< 60	1
< 75	1
< 90	6
< 105	10
< 120	12
< 135	12
< 150	12

Health services - GP Surgeries: London

Travel Time (mins)	Pharmacies: London - 2,607
< 15	2
< 30	27
< 45	116
< 60	209
< 75	644

< 90	1376	
< 105	2206	
< 120	2581	
< 135	2607	
< 150	2607	

Travel Time (mins)	GP Surgeries: London - 1,454	
< 15	2	
< 30	17	
< 45	56	
< 60	105	
< 75	297	
< 90	684	
< 105	1195	
< 120	1442	
< 135	1453	
< 150	1453	

Travel Time (mins)	A&E departments: London - 31	
< 15	0	
< 30	0	
< 45	2	
< 60	4	
< 75	10	
< 90	17	
< 105	24	
< 120	31	
< 135	31	
< 150	31	

Education establishments - Primary schools: London

Travel Time (mins)	Primaryschools: London - 2,663	
< 15	2	
< 30	39	
< 45	159	
< 60	262	
< 75	616	
< 90	1253	
< 105	2095	
< 120	2612	
< 135	2663	
< 150	2663	

Travel Time (mins)	Secondarieschools: London - 756	
< 15	2	
< 30	15	
< 45	47	
< 60	71	
< 75	166	
< 90	302	
< 105	548	
< 120	741	
< 135	756	
< 150	756	

Travel Time (mins)	Further education colleges: London - 50
< 15	0
< 30	0
< 45	1
< 60	4
< 75	15
< 90	27
< 105	40
< 120	48
< 135	50
< 150	50

App IWC - CIHT journeys on foot

GUIDELINES FOR

PROVIDING FOR JOURNEYS ON FOOT

PUBLISHED BY
THE INSTITUTION OF
HIGHWAYS & TRANSPORTATION

2000



Table 3.2: Suggested Acceptable Walking Distance.

	Town centres (m)	Commuting/School Sight-seeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred maximum	800	2000	1200

3.33. Planning Policy Guidance Note 6 states that the acceptable distance from a supermarket car park to the town centre is about 200–300m (DOE, 1996). Further sources of information on acceptable walking distances are provide by IHT (1997 and 1999) and DETR (1998).

3.34. For shopping, Carley and Donaldsons (1996) advise that that “acceptable” walking distances depend on the quality of the shops, the size of the shopping centre and the length of stay of the shopper. Specifically, they state that parking time governs the distance walked from parking. See Table 3.3) Higher quality and larger centres generate longer acceptable walking distances with up to 1250m of walking journey to 100,000m² of floor space.

Table 3.3: Acceptable walking distances for car-borne shoppers.

Parking time (hours)	Acceptable walking distance (metres)
30 mins	100
1	200
2	400
4	800
8	1000

Source: Carley and Donaldsons (1997)

Individual Sites/Redevelopment

3.35. For smaller areas and individual new developments or redevelopment, usually within an existing urban area, origin /destination surveys and network planning may not be appropriate. It will be important to identify the anticipated desire lines, crossing locations, volume and type of pedestrian activity. The practicality and attractiveness of walking depend not only on the general location but also on the access details. The most important considerations are likely to be:

- the ease of pedestrian access to the site
- the orientation and location of buildings within the site
- the access arrangements within the site
- the architectural style of the development (car or pedestrian oriented).

3.36. Additional walking distances or gradients, can be crucial in determining whether a development is pedestrian friendly. Layouts that require pedestrians to walk through car parks or to follow indirect footpaths should be avoided as far as possible. These are issues that should be addressed jointly by planners and engineers involved in development control.

3.37. If the development is sufficiently large to warrant a Transport Impact Assessment, the local authority should ensure that this thoroughly addresses the issues of pedestrian access, both to the site and within it. Some guidance is provided in IHT *Guidelines for Providing for Public Transport in Developments* (IHT, 1999). Further Guidelines on Transport Assessments are expected from DETR.

App IWD - National Travel Survey 2021

[Home](#) > [National Travel Survey: 2021](#)

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for
Transport
\(\[https://www.gov.uk/government/organisations/department-
for-
transport\]\(https://www.gov.uk/government/organisations/department-for-transport\)\)](#)

National statistics

National Travel Survey 2021: Mode share, journey lengths and public transport use

Published 31 August 2022

Applies to England

Contents

[Mode share of trips](#)

[Journey lengths](#)

[Trends in public transport use](#)

[Background information](#)

[National Statistics](#)

[Further information about these statistics is available, including](#)

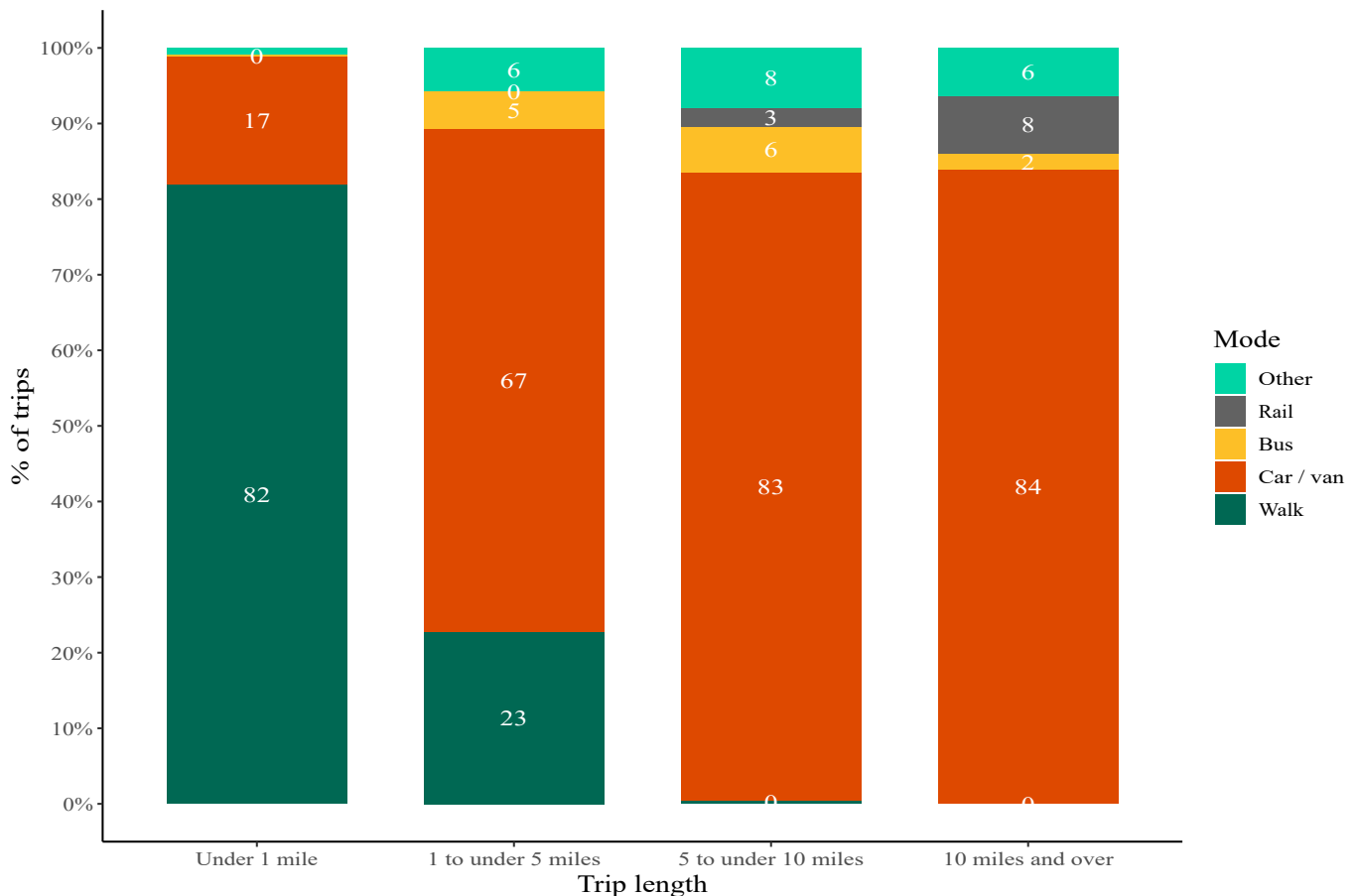
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transport modes with 36%. The highest proportion of trips using private transport modes were made by residents of the West Midlands with 71%.

Journey lengths

Chart 4: Mode share of trips by main mode for different trip lengths: England, 2021 (NTS0308) (<https://www.gov.uk/government/statistical-data-sets/nts03-modal-comparisons#trips-stages-distance-and-time-spent-travelling>)



Most trips are relatively short. In 2021, 25% of trips were under 1 mile, and 72% under 5 miles. These proportions of short trips are broadly consistent to how they were in 2020 and in 2019, with 25% of trips being under 1 mile and 71% of trips being under 5 miles in 2020 and 24% of trips being under 1 mile, and 68% under 5 miles in 2019.

Walking was the most frequent mode used for short trips: 82% of trips under one mile were walks in 2021, the same proportion as in 2020 and slightly higher than in 2019 where 80% of trips under one mile were walks. For all other distance bands, the car was the most frequent mode of travel. Nearly all walks recorded in the NTS were under 5 miles in 2021 (99.8%), compared with 61% of car trips, 68% of bus trips and 3% of trips by surface rail. This was similar to proportions in 2020 and 2019 where 99.6% of walks were under 5 miles, compared with 59% car trips, 62% bus trips and 14% rail trips in 2020; and 99.8% of walks were under 5 miles, compared with 58% car trips, 69% bus trips and 8% rail trips in 2019.

App IWE - LTN 1-20 extract



Department
for Transport

Cycle Infrastructure Design

Local Transport Note 1/20
July 2020



2.1 Introduction

2.1.1 This document is about infrastructure design, but it is important to understand the context in which design is taking place. This chapter describes the role of cycling as a means of transport, physical activity, leisure and tourism activity. It looks at some of the benefits that accrue from more people cycling more safely and more often. Careful design, construction and maintenance is required to ensure that cycling is accessible to all potential cyclists.

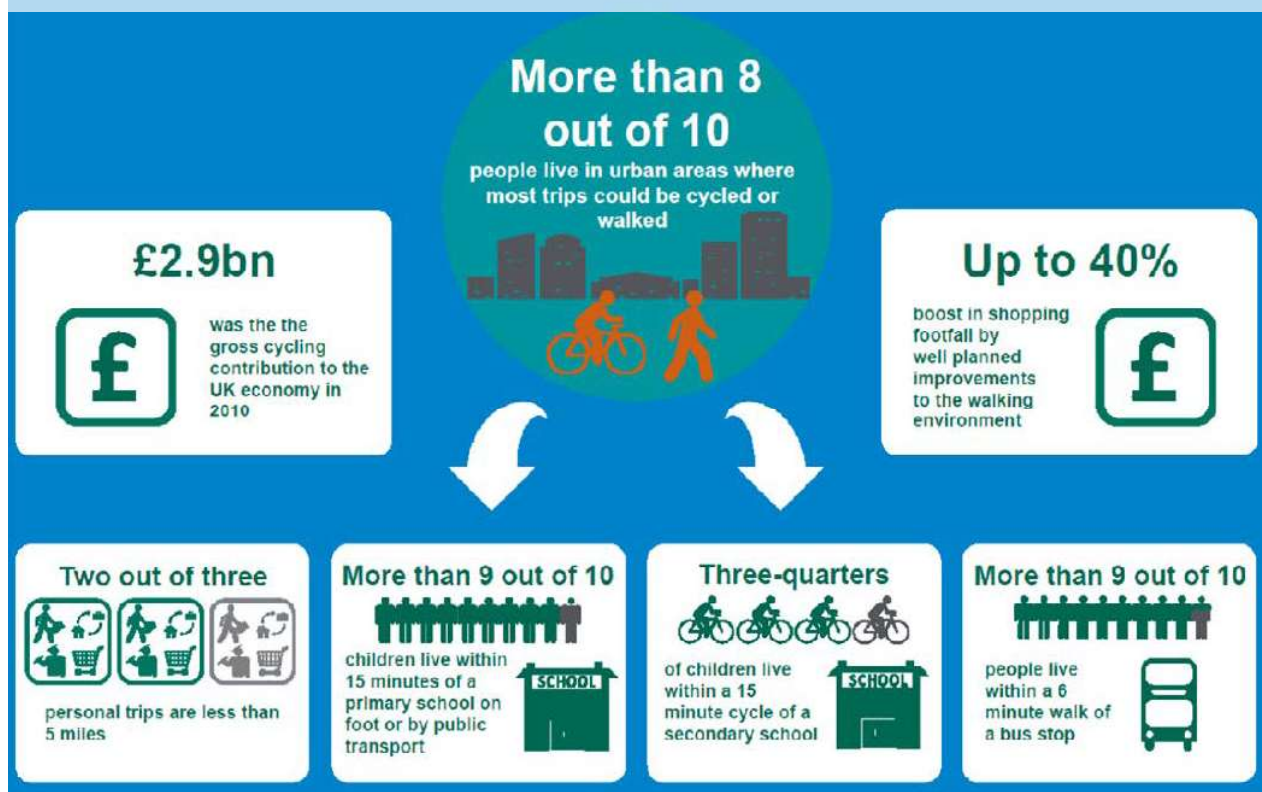
2.1.2 Increasing levels of traffic congestion, air pollution and poor health associated with inactivity require new approaches to transport planning. Towns and cities around the world are embracing cycling as a vital component of their sustainable transport policies.

2.2 The potential for cycling

2.2.1 Utility and leisure cycling facilities and services in the UK are at an early stage of development compared to many other countries, with a huge opportunity for growth (see Figure 2.1).

2.2.2 Recent growth of cycling recorded in central London and other towns and cities following programmes of investment have illustrated that there is significant potential for change in travel behaviour and that more people cycle for everyday journeys¹ where acceptable conditions are provided. Two out of every three personal trips are less than five miles in length² – an achievable distance to cycle for most people, with many shorter journeys also suitable for walking. For schoolchildren the opportunities are even greater: three quarters of children live within a 15-minute cycle ride of a secondary school, while more than 90% live within a 15-minute walk of a primary school.

Figure 2.1: Cycling potential baseline statistics, 2016



Source: Cycling and Walking Investment Strategy, DfT, 2016

- 1 Aldred R, Goodman A, Gulliver J and Woodcock J, Cycling injury risk in London: A case-control study exploring the impact of cycle volumes, motor vehicle volumes, and road characteristics including speed limits. Accident Analysis and Prevention, Vol 117, August 2018
- 2 Transport Statistics Great Britain, DfT, 2016

App IWF - LBB Local Plan main mods

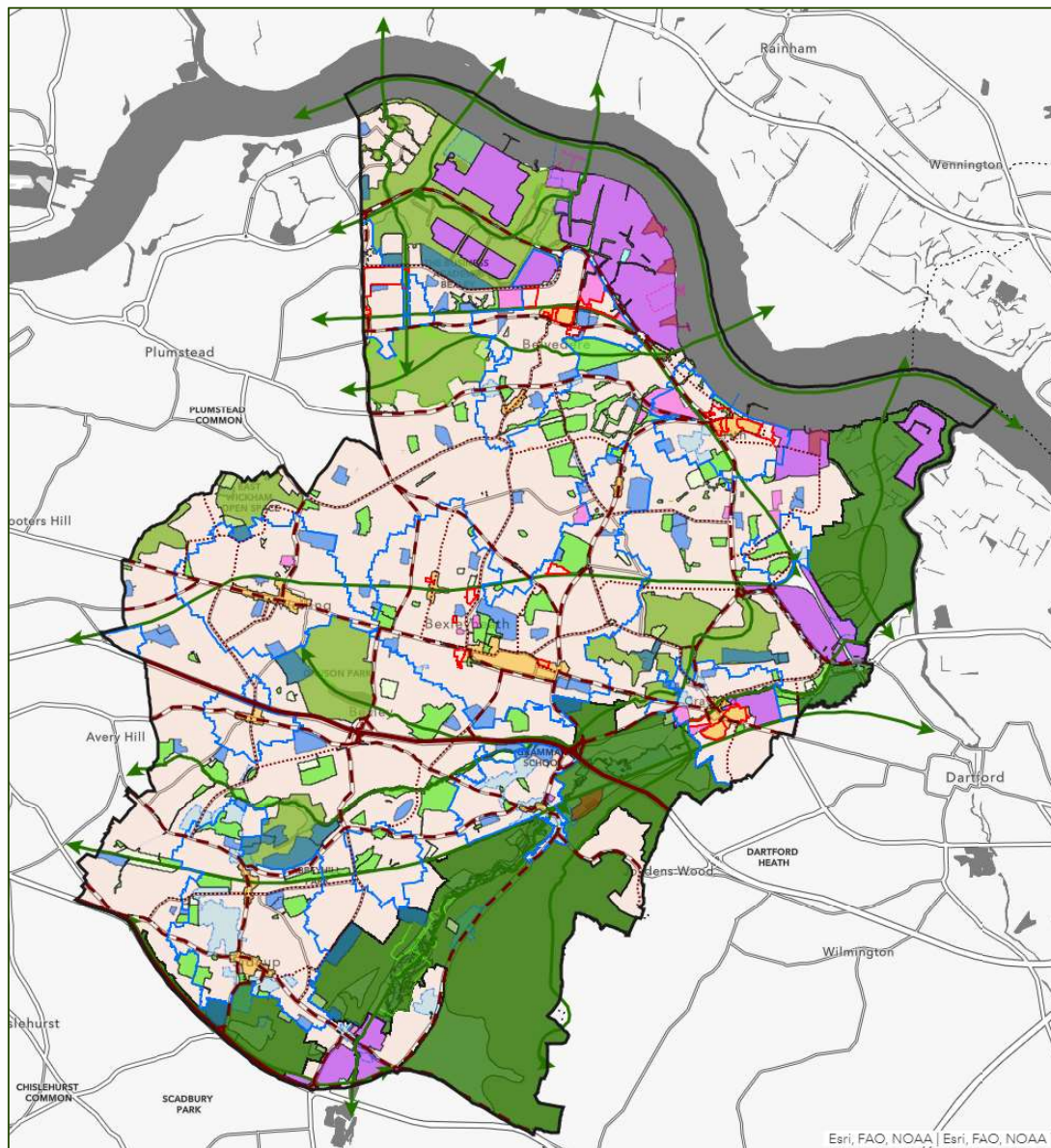
Draft Local Plan

Proposed Submission Document

TRACKED CHANGE VERSION FOR SCHEDULE OF CHANGES

Regulation 19 Stage

May 2021



more sustainable modes. The result should be better connectivity with facilities, goods and services in a way that helps the borough to achieve the benefits of achieving its travel mode objectives. A statement to show how these points have been addressed should be supplied at pre-application stage for discussion with the Council. Where a transport assessment or transport statement is required in support of a planning application, that statement should be included.

- 6.38 Both active and passive provision for electric vehicle parking will be required in line with the standards in the London Plan and details agreed in accordance with Council guidance. In larger schemes these should be evenly distributed throughout the development. Mixed use town centre development will provide secure off-street space where possible as part of the development and on-street spaces as part of public realm improvements.
- 6.39 The Council will support the bringing forward of car clubs and car sharing schemes in connection with new developments. Car clubs have the potential to reduce congestion and parking pressure, particularly where parking provision in new developments has been set materially lower than the maximum standard.

DP23: Parking management

Related plans, strategies and key evidence – why we need this policy

London Plan Table 10.3 Maximum residential parking standards

Local Implementation Plan (LIP)

Local Plan Transport Assessment (LPTA)

Bexley Strategic Housing Market Assessment (SHMA)

Local Plan Parking Standards and the Delivery of Family Housing Technical Paper

- 6.40 The London Plan sets out maximum parking standards to encourage the uptake of sustainable modes of transport and manage impacts of development on the road network. However, the London Plan also allows for higher provision in outer London boroughs and in areas that have lower public transport access levels (PTALs) where there is clear evidence that it supports additional family housing to meet identified local need.
- 6.41 This is consistent with the Government's position, which acknowledges the need to meet housing need whilst avoiding the adverse impacts of increasing on street parking stress. The Bexley SHMA identifies family housing as being the type most needed to be delivered in the borough, across all tenures (market, low-cost/affordable rent and intermediate housing products).
- 6.42 A flexible approach is supported by the NPPF, which states that local authorities should take into account a number of considerations when setting local parking standards. This should include local car ownership levels and the availability of public transport.
- 6.43 In line with both NPPF and London Plan guidance, the Council has taken into consideration characteristics of developments and the actual level of access to public transport and services and facilities when deciding whether to apply a more flexible approach to parking.
- 6.44 The Council has considered higher levels of residential parking for family housing in areas that have a lower level of public transport access to address specific on-street parking issues such as overspill and inappropriate parking, which may affect safety, amenity, accessibility, and congestion as well as the effective roll out of charging infrastructure for electric vehicles. The Council also wishes to prevent the creation of any traffic flow, safety and amenity issues through the impacts of new development.

- 6.45 Some areas within the borough are less connected by public transport. Even where public transport access levels (PTALs) are higher, there are still some challenges to sufficiently cater for people's travel needs. The dispersed pattern of travel can mean that dependence on the car remains high. This suggests that there is still a role for the car in Bexley, even as the Council looks to increase walking, cycling and public transport use in the borough and reduce dependence on the car.
- 6.46 The London Plan has set specific and highly ambitious maximum parking standards for outer London Opportunity Areas. However, the spatial approach to sustainable development set out in policy SP1 does not apply a blanket approach to growth in these areas. Parts of the Bexley Riverside OA in particular have poor connectivity, including access to shops, services and facilities. These areas are unlikely to change during the Plan period without significant interventions and there are no fixed London Plan commitments for these. However, if new public transport commitments were secured for Bexley, for example through the development of a planning framework for the OA, then the local policy position will need to be reviewed.

DP23 Parking management

1. In applying the principles of sustainable development in line with Policy SP1, the Council will seek to balance the need for parking and the environmental, economic and social impacts of traffic movement and parked vehicles. Therefore, proposals for residential development will be expected to provide parking within the lowest applicable maximum London Plan standards except:
 - a) areas with a PTAL of 2 that are outside of sustainable development locations more than 5 minutes' walking distance from a railway station and town centre (see Figure 11) where, in exceptional circumstances, consideration will be given on a case by case basis for 3 or more bedroom dwellings will to have a maximum standard of up to 1.25 spaces; and
 - b) within the Bexley Riverside Opportunity Area where, except for developments covered by 1a) above, maximum residential parking standards will be the London Plan outer London standards rather than the Opportunity Area standards for outer London.
2. Parking provision materially below London Plan maximum standards may be acceptable in areas that have a PTAL of 3 – 4, for residential development sites that are:
 - a) outside of a Controlled Parking Zone (CPZ) or Restricted Parking Zone (RPZ), where it can be demonstrated through a parking survey that there is sufficient on-street, off-site parking capacity within 200 metres of the development boundary; or
 - b) inside an existing or planned CPZ or RPZ, in which case the applicant will normally be required to enter into a legal agreement to restrict future occupiers from obtaining on-street parking permits.
3. For residential developments of fewer than 10 units, where the spaces per dwelling calculation results in a fraction of a space, provision will be rounded up to the nearest whole space.
4. For specialist housing for older people a case by case approach will be taken with; the London Plan residential parking standards used as a starting point and particular regard being had to the need for appropriate visitor and staff parking in the context of~~should be:~~
 - a) levels of public transport accessibility in the relevant area; and a maximum of 1 car space for every 6 residents (for visitors);
 - b) the characteristics of the residential care to be provided including the nature of shift patterns, a minimum of 1 car space for every 2 staff full time equivalents (FTE) for non-resident staff and visiting health care workers. Further spaces may be required to support additional demand, to be determined through;

Such matters should be informed by a transport statement or assessment and other appropriate information.

App IWG - Travel Plan

CAREBASE LTD

**PROPOSED CARE HOME DEVELOPMENT:
DANSON ROAD, BEXLEYHEATH**

TRAVEL PLAN

REPORT REF. 190320-08

PROJECT NO. 190320

MAY 2022

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DOCUMENT CONTROL SHEET

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
-	1 st Draft Client Issue	TP <i>TP</i>	FM <i>FM</i>	IW 	19.05.22

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1.0 INTRODUCTION

- 1.1 Ardent Consulting Engineers (ACE) has been appointed by Carebase Ltd to prepare a Travel Plan (TP) in relation to the proposed redevelopment of the existing site at Danson Road, Bexleyheath (hereafter known as 'the site').
- 1.2 This TP has been prepared to support a full planning application for the redevelopment of the four semi-detached houses and its associated land. The redevelopment schedule seeks to provide a 70 no. bedroom care home, associated car parking and landscaping.
- 1.3 A Transport Statement (TS, report ref 190320-02) has also been prepared by ACE and was submitted with the original planning application.
- 1.4 This TP has been prepared in accordance with the latest government advice and current best practices, with the aim of promoting the use of sustainable and active modes of travel for journeys to / from the site. This TP outlines a package of measures tailored to the needs of the site to promote more sustainable and active travel choices, thereby reducing reliance on the private car.

Purpose of a Travel Plan

- 1.5 Travel Plans are defined in the National Planning Policy Guidance as:
"...long-term management strategies for integrating proposals for sustainable travel into the planning process. They are based on evidence of the anticipated transport impacts of development and set measures to promote and encourage sustainable travel..."
- 1.6 The benefits from a TP can be loosely categorised under three main headings:
- Health Benefits;

- Environmental Benefits; and
- Financial Benefits.

Health Benefits

- 1.7 A reduction in the potential number of polluting vehicles on the roads surrounding the site will contribute to better air quality throughout the area. There are also well documented health benefits associated with active travel, such as walking and cycling, which are increasingly being recognised as ways to reduce sedentary lifestyles.
- 1.8 Regular moderate physical activity (including walking and cycling), can help prevent and reduce the risk of cardiovascular disease, cancer, obesity, diabetes, stroke, mental health problems, high blood pressure, and musculoskeletal problems.

Environmental Benefits

- 1.9 Climate change is a global issue, and the Government has pledged to play its part in reducing harmful carbon and related emissions by setting carbon reduction targets. The Government has committed to reduce its greenhouse-gas emissions to net zero by 2050. As part of this commitment there is a target to cut emissions by 78% by 2035, compared to 1990 levels.
- 1.10 Encouraging staff and visitors to make smarter, low carbon travel choices in the way they travel can reduce the impact that the redevelopment has on the local environment and air quality.
- 1.11 An increase in car trips can also contribute to negative local environmental issues such as severance. By encouraging sites to reduce car dependency, the local highway networks will benefit from a reduction in vehicular movements and local communities will benefit from less traffic.

Financial Benefits

- 1.12 There are financial benefits to be gained from increasing active travel rates and reducing harmful emissions produced by vehicles, both for individuals and for wider society.
- 1.13 Individuals (specifically staff and visitors) can benefit financially from travelling to and from a site with a TP in place due to the improved range of transport options available, some of which may be more cost-effective than car travel.
- 1.14 An effective TP can help encourage staff and visitors to lessen their environmental impact by reducing emissions from transport, lead a healthier and more active lifestyle, and reduce financial wastage.

Policy Background

- 1.15 TPs have become an important tool for the delivery of national, regional and local transport policy and commonly play an integral aspect within the planning process, fulfilling a role in encouraging more sustainable development.
- 1.16 In preparing this TP, ACE has reviewed relevant national guidance including the National Planning Policy Framework (NPPF), the London Plan and the Mayor's Transport Strategy.
- 1.17 The NPPF states that a Travel Plan will be a key tool to: -
- *Facilitate the efficient delivery of goods and supplies;*
 - *Give priority to pedestrian and cycle movement;*
 - *minimise conflicts between traffic and cyclists or pedestrians;*
and
 - *Consider the needs of people with disabilities by all modes of transport.*

1.18 Para 113 also identifies that: *All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.*

1.19 Both the London Plan and Mayor's Transport Strategy recognises that transport plays a fundamental role in addressing the whole range of spatial planning, environmental, economic and social policy priorities. They require the use of Travel Plans to help deliver sustainable development in London.

Structure

1.20 Following this introduction, the remainder of this report is structured as follows:

- **Section 2.0** describes existing conditions in terms of the site's accessibility on foot, by cycle and public transport;
- **Section 3.0** provides a description of the proposed redevelopment scheme;
- **Section 4.0** provides details of the proposed TP aims and objectives;
- **Section 5.0** outlines proposed measures and initiatives to encourage use of alternative modes of travel to the private car; and
- **Section 6.0** sets out an Action Plan.

- 2.4 The site boundary is formed by: Danson Park to the north and west; Danson Road to the east; and additional residential properties on Danson Road to the south.

Local Highway Network

Pedestrian Accessibility

- 2.5 The site's location in Bexleyheath means a variety of local amenities and services are available to cater for the day-to-day needs of members of staff and visitors.
- 2.6 All local residential roads have two wide footways with street lighting, providing a good environment for pedestrians.
- 2.7 All existing crossing points in close proximity of the site have dropped kerbs allowing pedestrians a direct, step-free crossing point.
- 2.8 Dropped kerbs and tactile paving are available at both ends of Danson Road and at junctions in the vicinity to assist pedestrian movements along key desire lines. Furthermore, a number of nearby junctions include signal-controlled pedestrian crossing facilities.
- 2.9 These facilities provide an excellent environment for pedestrians and connect the site very well to surrounding public transport infrastructure and local facilities.
- 2.10 It is considered that the existing pedestrian routes/facilities in the area encourage walking as a main mode of travel for those who work and live in the area.
- 2.11 The Chartered Institution of Highways and Transportation (CIHT) document '*Providing for Journeys on Foot*' recommends suggested acceptable walking distances of between 500m (6 minutes, "Desirable") and 2km (25 minutes, "Preferred Maximum") for commuting and journeys to school.

- 2.12 The 'Manual for Streets' (MfS) identifies walkable neighbourhoods as being those typically characterised by having a range of facilities within an 800m (10 minute) walk distance, however not an upper limit, with walking offering the greatest potential to replace short car trips, particularly those under 2km.

Table 2.2: Suggested Acceptable Walking Distance

	Town Centre (m)	Commuting/ School Sigh- seeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred maximum	800	2000	1200

- 2.13 Based on the walking distances detailed above, it is evident that the site is within easy walking distance to local facilities, services and public transport (discussed further in this section).
- 2.14 Whilst care home residents are unlikely to venture off-site, the ability to reach local facilities may assist staff of the care home.

Cycle Accessibility

- 2.15 Local Transport Note 1/20 'Cycle Infrastructure Design' (DfT, July 2020) states that "...Two out of every three personal trips are less than five miles in length." [Paragraph 2.2.2, page 16]. The site is well placed for staff to reach the site within 5 miles (8km), a realistic cycling distance time. The site is therefore well placed to encourage journeys by bike based on its location.
- 2.16 A 5km isochrone catchment area centred on the site demonstrates that surrounding areas including Belvedere, Erith, Sidcup, Welling and Woolwich are within a comfortable cycling distance. A typical cycle speed of 20km/h would result in this distance equating to a journey time of approximately 15 minutes.

- 2.17 The existing local area is conducive for cycling and provides links to local facilities and the wider transport network. The general topography and relatively lightly trafficked roads assist with the potential for travel by bicycle.
- 2.18 On-road cycle routes in close proximity to the site are located to the north and west which provide a connection to / from the centre of Bexleyheath (see **Plate 2**).



Plate 2: Cycle Route Map (Source: Open Street Map)

Public Transport Accessibility

PTAL

- 2.19 An important aspect of reviewing transport links to the proposed development and the characteristics for modal split is to assess its accessibility to public transport. The public transport accessibility of the site has been assessed using the PTAL (Public Transport Accessibility Level) method.
- 2.20 Site specific PTAL maps are available from Transport for London's Web-based Connectivity Assessment Toolkit (WebCAT) for use by local planning authorities and Developers to aid strategic planning decisions. The PTAL rating ranges between 1a to 6b, with 1a denoting 'Very Poor' access to public transport and 6b being an 'Excellent' level of access.
- 2.21 The application site has a PTAL of 4, which represents accessibility to public transport on the higher end of the scale.
- 2.22 A plan showing the location of the site in relation to the nearest public transport nodes is provided in **Plate 3**. Local bus stops are shown in blue, and the nearest railway station (Bexleyheath Railway Station) is shown in green.



Plate 3: Site Context (Source: Google Earth)

Buses

- 2.23 Typically, the maximum recommended distance for people to walk to bus stops is 800m, although TfL's PTAL calculation uses 640m.
- 2.24 The closest bus stops are located on Danson Road to the south of the site within a 100m (1-minute) walk.
- 2.25 This stop is served by one service (B14) that is operated by London Buses and provides access to Orpington.
- 2.26 Additional bus stops are provided along the A207 Park View Road that provide services within a 140m (2-minute) walk.
- 2.27 This stop is served by 5 additional services that provide access to Bluewater (service 96), Erith (service N89), Kidbrooke (service B16), Lewisham (service 89), North Greenwich (service 486), Slade Green

(service 89), Trafalgar Square (service N89) and Woolwich (service 96).

2.28 Services 89/486/B16 and N89 are operated by London Buses and service 96 is operated by Stagecoach London.

2.29 The route and frequencies of the above bus service is summarised in **Table 2.3**.

Table 2.3: Local Bus services

Service and Route	Bus Stop	Daytime Frequency		
		Weekday	Saturday	Sunday
89 Slade Green - Bexleyheath - Welling - Shooters Hill - Blackheath - Lewisham	Park View Road	9 - 20 mins	10 - 20 mins	18 - 20 mins
96 Bluewater - Dartford - Bexleyheath -Woolwich	Park View Road	6 - 15 mins	6 - 20 mins	10 - 20 mins
486 Bexleyheath - Welling - North Greenwich	Park View Road	6 - 15 mins	10 - 15 mins	15 mins
B14 Bexleyheath - Sidcup - Orpington	Danson Road	30 mins	30 mins	30 mins
B16 Kidbrooke - Eltham - Bexleyheath	Park View Road	8 - 14 mins	8 - 13 mins	10 -15 mins
N89 Erith - Lewisham - Trafalgar Square (Between Midnight and 5am)	Park View Road	30 mins (Between Midnight and 04:45am)		

Rail

2.30 Bexleyheath Railway Station is the nearest train station, located around 1.1km to the north-east of the site, around a 14-minute walk away.

2.31 The station is managed by Southeastern and is located in Travelcard Zone 5. The Bexleyheath Line separates from the North Kent Line east of Blackheath Station and re-joins south of Slade Green.

- 2.32 Bexleyheath Railway Station has 32 secure cycle parking spaces located at platforms 1 and 2.
- 2.33 In the morning peak period between 06:30 and 08:30 there are a total of 27 direct trains that connect to Dartford, London Charing Cross, London Cannon Street, London Victoria and Slade Green.
- 2.34 In the evening peak period between 16:30 and 18:30 there are a total of 27 direct trains that return to Bexleyheath station from Dartford, Gravesend, London Charing Cross, London Cannon Street and London Victoria.
- 2.35 These services also call at stations including Barnehurst, Blackheath, Dartford, Denmark Hill, Eltham, Falconwood, Greenhithe, Kidbrooke, Lewisham, London Bridge, London Waterloo East, New Cross, Nunhead, Peckham Rye, St Johns and Welling.
- 2.36 These stations also provide further connections for the London Underground (Bakerloo, Circle, District, Northern and Victoria lines).
- 2.37 A route map of the Southeastern network is provided at **Plate 4**.

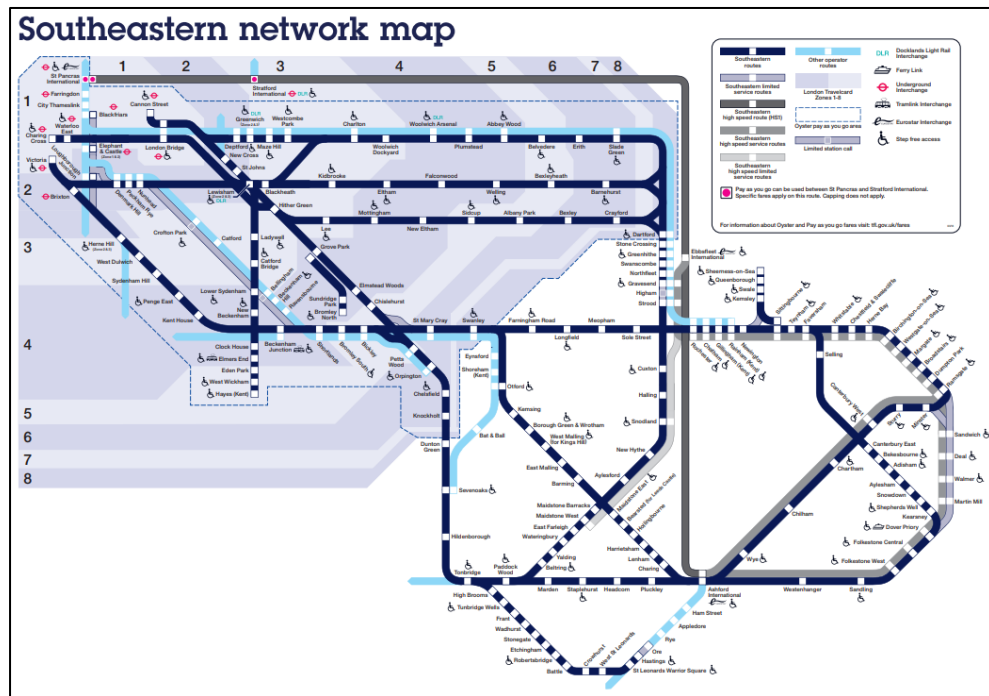


Plate 4: Southeastern network map (Source: Southeastern)

Conclusions

- 2.38 The site is located within walking distance of many local facilities and amenities catering of the day-to-day needs of members of staff and visitors.
- 2.39 The above has confirmed that the existing pedestrian and cycle infrastructure is sufficient, along with adequate opportunity to travel by public transport.

3.0 THE PROPOSED DEVELOPMENT

3.1 The proposed development is for 70 no. bedroom carehome (Use Class C2), associated car parking and landscaping.

3.2 As well as the residential aspect, the carehome development is proposed to provide various facilities for residents including a salon, cinema, lounges/dining areas, offices, reading areas and staff areas.

Parking

3.3 Parking is to be provided based upon an evidential approach as set out in the Transport Statement to the site.

3.4 Due to the nature of the development being a carehome and the required level of care that residents require, then residents will not own a car. The proposed car parking of 17 car parking spaces will be for visitors only and some staff.

3.5 Parking spaces are to be provided measuring 2.4m x 4.8m in size.

3.6 1 no. space is provided for disabled users, as is set out in the London Plan requirements.

3.7 In total, 17 no. parking spaces are proposed on the site. There are no specific London Plan standards for carehome developments.

3.8 The applicant, Carebase, operate a number of carehome facilities around the country and have an excellent understanding of the level of parking required on an operational basis. They are content with the provision of 17 no. parking spaces for this development, given its size and location.

3.9 From Carebase's extensive experience, the majority of staff are based locally to the development, and typically walk, cycle or use public transport to travel to and from work.

3.10 For additional context, Carebase has provided the following breakdown of expected staffing level for a 70-bedroom carehome based upon their current sites:

Table 3.1: Expected Staff Level and Working Patterns

2 x Registered Nurses - Day time	7am to 7pm	7 days per week
12 x Healthcare Assistants - Day time	7am to 7pm	7 days per week
1 x Registered Nurse - Night time	7pm to 7am	7 nights per week
6 x Healthcare Assistants - Night	7pm to 7am	7 nights per week
3 x Housekeeping & Laundry Assistants	8am to 4pm	7 days per week
Chef	8am to 4pm	7 days per week
Kitchen Assistant	8am to 8pm	7 days per week
Lifestyle Coordinators	9am to 5pm	7 days per week
Minibus Driver	9am to 5pm	2/3 days per week (alternating)
Hairdresser	9am to 1pm	3 days per week
Maintenance Officer	9am to 5pm	5 days per week
Administrator/Receptionist - weekdays	9am to 6pm	5 days per week
Administrator/Receptionist - weekends	10am to 4pm	2 days per week
Director of Nursing	9am to 5pm	5 days per week
Manager	9am to 5pm	5 days per week

3.11 In total, there are around 24 staff employed on the site on a typical weekday although Carebase have found that staff are mostly resident within a mile or two of the carehome facility. The site has produced this Travel Plan in order to emphasise to staff that they are to use public transport and active travel to travel to and from the site.

- 3.12 Given the site's high PTAL level, and the nature of employment for carehomes, it is expected that the provision of 17 parking spaces is sufficient, particularly given that the residents will not be permitted to own a car.
- 3.13 Car parking will be provided with 20% of spaces as electric charging from the outset, with the remaining spaces provided with passive provision (i.e. cabling in place for future conversion).
- 3.14 Cycle parking will be provided in accordance with the draft London Plan level of 1 space per 5 staff (long-stay) and 1 space per 20 bedrooms (short-stay). To this end, 16 no. cycle spaces are to be provided. This is therefore compliant.

Predicted Travel Patterns

- 3.15 As part of the TS (report ref 190320-02) prepared by ACE, the peak hour trip generation of the proposed redevelopment scheme was estimated using data from the TRICS database.
- 3.16 The TRICS output is provided in **Table 3.2**.

Table 3.2: Weekday peak hour trip rates (source: TRICS)

Period and mode	Trip Rates			Trips		
	<i>In</i>	<i>Out</i>	<i>2-way</i>	<i>In</i>	<i>Out</i>	<i>2-way</i>
Weekday AM peak hour (08:00-09:00)						
Proposed Development (70 Residents)						
<i>Vehicles (per resident)</i>	0.098	0.073	0.171	7	5	12
Weekday PM peak hour (17:00-18:00)						
Proposed Development (70 Residents)						
<i>Vehicles (per resident)</i>	0.048	0.095	0.143	3	7	10

*Figures subject to rounding

- 3.17 It is predicted that there will be 12 two-way vehicle movements in the weekday AM peak and 10 two-way PM peak hour movements resulting from the 70 bed scheme.

4.0 AIMS AND OBJECTIVES

4.1 The primary aim of this TP is to: *'minimise single occupancy car trips associated with the development site, by promoting and encouraging the use of more sustainable alternatives.*

4.2 The plan is to take into consideration the existing transport conditions relevant to the development and the surrounding environment, and secondly, to propose a number of measures designed to increase travel awareness and to effectively manage and reduce the level of single-occupancy car use.

4.3 The main objectives of this TP are to: -

- Encourage safe and viable alternatives to the private car for access to the proposed development;
- Inform users of the health, social and environmental benefits of sustainable active travel;
- Achieve fewer private vehicle trips to / from the development than would otherwise have been the case;
- Achieve a reduction in overall private vehicle mileage resulting in an associated reduction in environmental pollution; and
- Encourage good design principles that increase the opportunity for walking and cycling.

4.4 In order to achieve the main objectives identified above, this TPS seeks to increase awareness of the advantages and potential for travel by more sustainable modes and introduce a package of physical and management measures that will assist this.

5.0 MEASURES AND INITIATIVES

5.1 TfL guidance states that a TPS should include a set of positive measures promoting sustainable transport, together with an action plan for their implementation.

5.2 Initial measures are detailed below, however following occupation of the site, some of these may be subject to change, and additional measures also provided that will be of benefit of the scheme at a later date.

Travel Plan Co-ordinator

5.3 To ensure the delivery and management of this TP, a Travel Plan Co-ordinator (TPC) will be appointed prior to first occupation of the development, to implement and promote the measures included in this TP.

5.4 It is anticipated that the TPC will be a permanent member of staff with the appropriate skills and resources to fulfil the role.

5.5 The TPC duties should include:

- Provide travel advice and guidance to residents, staff and visitors in the early stages of occupation and throughout the development process;
- Liaise with LBB on the production and management of the Travel Information Pack (TIP);
- Assess the potential journeys that staff may make and identify what modes of transport are available from the site, promoting sustainable options;
- Design and implement effective marketing and awareness-raising campaigns to promote the initiatives and sustainable transport infrastructure within in TP; and

- To provide a point of contact with transport operators and officers of the Council.

5.6 The contact details for the TPC will be submitted to LBB upon appointment to the role and prior to first occupation of the site.

Travel Information Packs

5.7 Easy to understand information about sustainable ways to travel is an essential ingredient for a TP, since the first step towards behavioural change is for an individual to understand and consider the options that are realistically available and the benefits / disadvantages of each. One barrier to behavioural change is not knowing the options available. Equally, it is unrealistic to expect behavioural change where there are no viable alternatives.

5.8 Upon commencement of employment, each employee will be provided with a Travel Information Pack (TIP) to promote the existence of, and use of, alternative modes of transport to the private car and increase the use of sustainable modes of travel.

5.9 The TIP will contain details of public transport routes and services, the location of bus stops and timetable information, as well as details of safe pedestrian and cycle routes. In addition, information on car sharing and how this is encouraged through designation of car sharing spaces on site will be included (where appropriate).

5.10 The TIP will also provide promotional material highlighting the health benefits of walking and cycling.

5.11 Details included within the TIP will be replicated and posted on staff notice boards within communal areas of the building.

Travel Information for Visitors

- 5.12 The TPC will ensure that travel information is made available to visitors in advance of them travelling to the site through the care home website, by promotional flyer or e-mail. Details will also be made available in the main reception area of the care home.

Guaranteed Lift Home

- 5.13 The TPC will seek agreement from senior management for the use of the mini-bus or funded journeys home by taxi for staff that, for reasons outside their control, are unable to travel home by normal (non-car) means and would otherwise be without safe transport home.

Travel Partner

- 5.14 The TPC will liaise with senior management to maximise the potential for co-ordinated working hours of employees living close to each other in order to maximise the potential for staff to travel together by walk, cycle or public transport or car share for essential journeys.

Car Park Management

- 5.15 The TPC will monitor the use of on-site car parking, with the aim to enforce any restrictions that may be put in place, maximise efficiency and ensure that parking associated with the care home does not affect the safe operation of the internal site access roads.

Cycle Parking

- 5.16 Cycle parking is to be provided on site, in-line with local standards, for both staff and visitors.
- 5.17 The use of these spaces will be monitored by the TPC, and if demand for cycle parking regularly exceeds the supply, the provision of additional spaces will be investigated.

5.18 In addition, the bicycle stores are to be provided with electricity points in order to future-proof the likely uptake of e-bikes.

Recruitment

5.19 The TPC will liaise with senior management to encourage the promotion of recruitment policies aimed at employing appropriately qualified individuals that live in the local area, wherever possible, thereby maximising opportunities for future employees to travel to work by sustainable modes of travel.

5.20 Data from Carebase's existing facilities indicates that the vast majority of existing carehome staff live within 3 to 5 miles of the carehome that they work at.

6.0 ACTION PLAN

- 6.1 The TPC will prepare a detailed Action Plan (AP) to set out the proposed delivery and implementation of the TP.
- 6.2 The AP will summarise all measures / initiatives to be introduced to ensure the implementation and management of the TP and achieve its targets.
- 6.3 Anticipated actions, timescales and responsibilities are set out in **Table 6.1** below.

Table 6.1: Initial Action Plan

Action	Responsibility	Timescale
Production of a TP (this report)	Developer / ACE	To accompany planning submission
Agree timeline and details with LBB	Developer / LBB	Prior to occupation
Preparation of Brochure of Travel Modes / Notice Board	Developer	Prior to occupation
Appoint a TPC	Developer	Prior to occupation
Implementation of physical measures (cycle parking, car parking, pedestrian links)	Developer	During construction
TP launch	Developer / TPC	On first occupation
Implementation of TP measures	TPC	On first occupation

App IWH - Lambeth Methodology

Lambeth Council Parking Survey

Guidance Note

1. Introduction and Policy Background

Most forms of development have the potential to increase the amount of on-street parking, more commonly known as parking stress. High parking stress can affect highway safety, the free flow of traffic, amenity, access by emergency services, refuse collection and delivery of goods. Investigation of this impact forms an important part of the Council's analysis of proposed developments and therefore it is essential that enough information is submitted by a developer to allow a full analysis of the issue. An unacceptable increase in parking stress, or the submission of an insufficient level of information, can lead to a recommendation for refusal of a planning application.

Lambeth's policies on parking are based on The London Plan 2021. Developers are particularly advised to read Chapter 10 (London's Transport) of The London Plan 2021, and the policies and standards, particularly Policy T6 – Car Parking, contained therein.

Lambeth Council will seek to maximise trips made by sustainable modes in the borough and reduce the use of the private car in accordance with the Lambeth's Transport Strategy and policies within the Lambeth Local Plan 2021. This includes car-free and permit free developments in most areas, ongoing expansion of Controlled Parking Zones, as well as promotion of cycling in the borough and high-quality cycle parking within developments.

The Transport Strategy sets out the Council's strategic vision for Transport in Lambeth.

Developers are advised to read Section 8: Transport and Communications of the Lambeth Local Plan 2021.

The Planning Department will not validate a residential planning application that is located outside of the Controlled Parking Zone (CPZ) without a parking survey unless prior advice to the contrary has been obtained in writing from the Council's Transport Planning Team. Locations of the Controlled Parking Zones can be found on the Council's website.

In some cases, parking surveys are required for commercial developments as well, depending on the scale and nature of the development. Submitting a survey enables the Council to make an informed decision, within statutory planning timescales, and benefits applicants in obtaining a quick decision.

Even for developments where on-site parking is proposed this may not accommodate all vehicles generated by a development, so a parking survey may still be required. An assessment of potential vehicle ownership of future occupants is expected to be undertaken to understand the scale of any overspill parking. This is to be based on local census information for car and van ownership. The cumulative effect of other consented development in the immediate area is also to be taken into account when assessing the effect of parking on street.

2. Undertaking a Survey

The following guidelines should be followed when undertaking a survey. If these guidelines are not followed the Council may not be able to make a full and proper assessment of the proposal.

Type of Development

Residential Developments

The Council requires a parking survey to cover the area where residents of a proposed development may want to park. This generally covers an area of 200m (or a 2 minute walk) around a site. For further detail see 'Extent of survey' below.

The survey should be undertaken when the highest number of residents are at home, generally late at night during the week. A snapshot survey between the hours of 0030-0530 should be undertaken on two separate weekday nights (i.e. Monday, Tuesday, Wednesday or Thursday).

Commercial Developments

Surveys for commercial developments should cover an area within 500m walking distance (or a 5 minute walk) of a site. For further detail, see 'Extent of survey' below. Surveys should generally be done during proposed opening hours on an hourly beat basis.

Excluding the extent and time of the surveys the same principles apply as a survey for a residential development as set out below, but developers should contact the Case Officer for further advice.

Additional survey times for all developments

Additional survey times may be necessary where the development site:

- Is a town centre location
- Has regular specific uses close to the site (eg. place of worship, education etc)
- Has commercial uses close to the site
- Is close to railway stations/areas of commuter parking

In the above circumstances, developers should contact the Case Officer for further advice regarding the scope of the parking survey.

Surveys **should not** be undertaken:

- in weeks that include Public Holidays and school holidays, and it is advised that weeks preceding and following holidays should also be avoided;
- on or close to a date when a local event is taking place locally since this may impact the results of the survey.

In some cases, the hours of the survey may need to be extended or amended. Applicants should contact the Council prior to undertaking a survey if there is any doubt.

Extent of survey

All roads within 200m (or 500m for commercial uses) walking distance of the site. Note this area is **NOT** a circle with a 200/500m radius but a 200/500m walking distance as measured along all roads up to a point 200/500m from the site.

People searching for a parking space are unlikely to stop halfway along a road at an imaginary 200/500m line so the survey should be extended to the next junction or shortened to the previous one, or taken to a suitable location along a road. Surveys will be assessed based on practical driving routes so advanced confirmation that the extent of a survey is acceptable should be sought.

The following areas should be *excluded* from surveys:

- If the site is in a CPZ, any parking bays in an adjoining CPZ
- Any CPZ bays within the survey area where the site itself does not fall into a CPZ
- Private roads and housing estate roads
- Places where drivers are unlikely to park, for example:
 - Locations where parking is restricted due to the width of the road or waiting restrictions are in place.
 - Areas that may present highway or personal safety issues, or difficulty in accessing the parking, such as on a major road, in areas with poor surveillance, etc.

Common sense should be applied in all cases and the extent of the survey area and justification for any amendments should be included in the survey. If inadequate justification is provided for a survey area, then amendments may be required or a recommendation for refusal made accordingly.

Required Information

The following information should be included with the survey results, to be submitted to the Council:

- The date and time of the surveys.
- A description of the area noting any significant land uses in the vicinity of the site that may affect parking within the survey area (eg. places of worship, restaurants, bars and clubs, train stations, hospitals, large offices, town centres etc.).
- All areas excluded from the survey with an explanation why they have been excluded.
- Any unusual observations, e.g. suspended parking bays, spaces out of use because of road works or presence of skips, etc.
- A drawing (preferably scaled at 1:1250) showing the site location and extent of the survey area. All other parking and waiting restrictions such as Double Yellow Lines and Double Red Lines, bus lay-bys, kerb build-outs, and crossovers (vehicular accesses) etc. should also be shown on the plan.
- The number of cars parked on each road within the survey area on each night should be counted and recorded in a table as shown below. It would be helpful to note the approximate location of each car on the plan (marked with an X).
- Photographs of the parking conditions in the survey area can be provided to back-up the results. If submitted, the location of each photograph should be clearly marked.

Parking Restrictions

Areas Within A Controlled Parking Zone (CPZ)

Only Resident Permit Holder (RPH) Bays and Shared Bays which allow residents parking (these may be shared with Pay-and-Display parking and/or Business Permit Holders) should be counted.

To calculate parking capacity each individual length of parking bay must be measured and then converted into parking spaces by dividing the length by 5 (each vehicle is assumed to measure 5m) and rounding down to the nearest whole number. For example a parking bay measuring 47m in length would provide 9 parking bays ($47/5=9.4=9$). The capacity of each parking bay on a road must be calculated separately and then added together to give a total number of parking spaces for each road. This is to be done for all roads in the survey area.

The results should generally be presented in the following format (figures given as an example):

Street Name	Total Length (m) of parking spaces	No. of RPH parking spaces	No. of cars parked in RPH bays	RPH Parking Stress (%)
A Street	350	70	70	100
B Street	250	50	40	80
C Street	150	30	10	33
Total	750	150	120	80

Areas Not in A Controlled Parking Zone (CPZ)

All areas of unrestricted parking should be counted. To calculate parking capacity each length of road between obstructions (such as crossovers, kerb build-outs, yellow lines, bike hangars etc) must be measured and then converted into parking spaces by dividing the length by 5 and rounding down to the nearest whole number.

Example 1: a road has a lot of driveways that restrict the amount of kerb space available for on-street parking. The length of kerb between the first two driveways may measure 8m. This would only provide 1 parking bay ($8/5=1.6=1$). The distance to the next driveway may be 12m which would provide 2 spaces ($12/5=2.4=2$) This calculation would have to be done for every length of road between every driveway. To provide the total amount of kerb space available for on-street parking.

Example 2: a road has a series of kerb build-outs. The distance between the first two measures 47m in length which would provide 9 parking bays ($47/5=9.4=9$). The capacity of each separate section of road between build-outs must be calculated separately and then added together to give a total number of parking spaces for each road in the survey area.

For reasons of highway safety, the first 5m from a junction should also be omitted from the calculation.

A map or plan showing the measurements used in calculating parking capacity should be supplied so that this can be verified by the Council. The parking survey may not be accepted if this is not supplied.

The results should generally be presented in the following format (figures given as an example):

Street Name	Total Length (m) of kerb space	Length of unrestricted parking (m)	No. of parking spaces	No. of cars parked on unrestricted length of road	Unrestricted Parking Stress (%)
A Street	400	350	70	70	100
B Street	300	250	50	40	80
C Street	200	150	30	10	33
Total	900	750	150	120	80

3. Understanding the Results

The results of the parking survey will be analysed by the Council in accordance with The London Plan 2021 and policies in the Lambeth Local Plan 2021, any Supplementary Planning Documents produced by the Council in relation to parking, and any other Transport policy guidance produced by the Council, Transport for London, or nationally.

The Council will also take into consideration the impact of any recently permitted schemes in determining the acceptability or not of each proposed development.

Note that stress levels of over 100% stress (or 100% occupancy level) are possible. For example small cars may need less space than 5 metres to park, meaning that additional cars can be accommodated.

App IWI - Parking Surveys

NUMBER OF VEHICLES PARKED (AT)															
STREET NAME	06:30 - 09:30			09:30 - 12:30			12:30 - 15:30			15:30 - 18:30			18:30 - 24:00		
	CAP	TOT	%OCC	CAP	TOT	%OCC	CAP	TOT	%OCC	CAP	TOT	%OCC	CAP	TOT	%OCC
Balcombe Close	3	0	0.0%	3	0	0.0%	3	0	0.0%	3	0	0.0%	3	0	0.0%
Bean Road	45	10	22.2%	45	20	44.4%	45	24	53.3%	45	13	28.9%	45	12	26.7%
Bethel Road	85	73	85.9%	85	61	71.8%	85	64	75.3%	85	62	72.9%	85	76	89.4%
Brampton Road	74	0	0.0%	0	0	N/A	0	0	N/A	0	0	N/A	74	0	0.0%
Chestnut Drive	73	11	15.1%	11	11	100.0%	11	12	109.1%	11	11	100.0%	73	10	13.7%
Clarence Road	32	7	21.9%	10	8	80.0%	10	8	80.0%	10	8	80.0%	32	4	12.5%
Crook Log	34	0	0.0%	0	0	N/A	0	1	N/A	0	0	N/A	34	0	0.0%
Dallin Road	20	17	85.0%	20	21	105.0%	20	26	130.0%	20	24	120.0%	20	20	100.0%
Danson Park	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A
Danson Road	12	4	33.3%	12	5	41.7%	12	10	83.3%	12	5	41.7%	12	3	25.0%
Denham Close	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A
Glynde Road	45	9	20.0%	13	9	69.2%	13	10	76.9%	13	8	61.5%	45	14	31.1%
Granville Road	75	69	92.0%	75	65	86.7%	75	59	78.7%	75	62	82.7%	75	67	89.3%
Lewis Road	61	52	85.2%	61	48	78.7%	61	44	72.1%	61	49	80.3%	61	51	83.6%
North Close	8	4	50.0%	8	3	37.5%	8	6	75.0%	8	5	62.5%	8	4	50.0%
Palmeira Road	89	70	78.7%	89	64	71.9%	89	64	71.9%	89	63	70.8%	89	80	89.9%
Park View Road	95	41	43.2%	85	54	63.5%	85	53	62.4%	85	49	57.6%	95	41	43.2%
Sharnbrooke Close	20	11	55.0%	20	14	70.0%	20	14	70.0%	20	17	85.0%	20	13	65.0%
South Close	8	3	37.5%	8	2	25.0%	8	4	50.0%	8	2	25.0%	8	2	25.0%
South Gipsy Road	89	70	78.7%	85	69	81.2%	85	69	81.2%	85	63	74.1%	89	75	84.3%
Glynde Road	14	7	50.0%	14	6	42.9%	14	6	42.9%	14	5	35.7%	14	5	35.7%
Granville Road	3	2	66.7%	3	1	33.3%	3	2	66.7%	3	1	33.3%	3	3	100.0%
Westbrooke Road	19	6	31.6%	19	8	42.1%	19	10	52.6%	19	8	42.1%	19	9	47.4%
TOTAL	904	466	51.5%	666	469	70.4%	666	486	73.0%	666	455	68.3%	904	489	54.1%

NUMBER OF VEHICLES PARKED (AT)															
STREET NAME	06:30 - 09:30			09:30 - 12:30			12:30 - 15:30			15:30 - 18:30			18:30 - 24:00		
	CAP	TOT	%OCC	CAP	TOT	%OCC	CAP	TOT	%OCC	CAP	TOT	%OCC	CAP	TOT	%OCC
Balcombe Close	3	0	0.0%	3	0	0.0%	3	0	0.0%	3	0	0.0%	3	0	0.0%
Bean Road	45	9	20.0%	45	18	40.0%	45	36	80.0%	45	16	35.6%	45	14	31.1%
Bethel Road	85	76	89.4%	85	57	67.1%	85	65	76.5%	85	68	80.0%	85	80	94.1%
Brampton Road	74	0	0.0%	0	0	N/A	0	0	N/A	0	0	N/A	74	0	0.0%
Chestnut Drive	73	12	16.4%	11	11	100.0%	11	11	100.0%	11	10	90.9%	73	9	12.3%
Clarence Road	32	6	18.8%	10	8	80.0%	10	8	80.0%	10	7	70.0%	32	5	15.6%
Crook Log	34	0	0.0%	0	0	N/A	0	0	N/A	0	0	N/A	34	0	0.0%
Dallin Road	20	20	100.0%	20	22	110.0%	20	23	115.0%	20	25	125.0%	20	22	110.0%
Danson Park	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A
Danson Road	12	2	16.7%	12	5	41.7%	12	5	41.7%	12	5	41.7%	12	1	8.3%
Denham Close	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A
Glynde Road	45	7	15.6%	13	9	69.2%	13	10	76.9%	13	10	76.9%	45	13	28.9%
Granville Road	75	67	89.3%	75	67	89.3%	75	55	73.3%	75	62	82.7%	75	69	92.0%
Lewis Road	61	51	83.6%	61	44	72.1%	61	47	77.0%	61	47	77.0%	61	53	86.9%
North Close	8	4	50.0%	8	4	50.0%	8	9	112.5%	8	5	62.5%	8	4	50.0%
Palmeira Road	89	74	83.1%	89	69	77.5%	89	69	77.5%	89	65	73.0%	89	66	74.2%
Park View Road	95	36	37.9%	85	50	58.8%	85	49	57.6%	85	45	52.9%	95	37	38.9%
Sharnbrooke Close	20	9	45.0%	20	11	55.0%	20	11	55.0%	20	12	60.0%	20	11	55.0%
South Close	8	2	25.0%	8	2	25.0%	8	2	25.0%	8	3	37.5%	8	2	25.0%
South Gipsy Road	89	78	87.6%	85	70	82.4%	85	74	87.1%	85	78	91.8%	89	74	83.1%
Glynde Road	14	4	28.6%	14	4	28.6%	14	6	42.9%	14	6	42.9%	14	6	42.9%
Granville Road	3	2	66.7%	3	1	33.3%	3	1	33.3%	3	1	33.3%	3	1	33.3%
Westbrooke Road	19	8	42.1%	19	13	68.4%	19	8	42.1%	19	12	63.2%	19	9	47.4%
TOTAL	904	467	51.7%	666	465	69.8%	666	489	73.4%	666	477	71.6%	904	476	52.7%

Bexleyheath - Wednesday 30th March 2022 (06:30 - 18:30)

Occupancy & Capacity

Parking Location

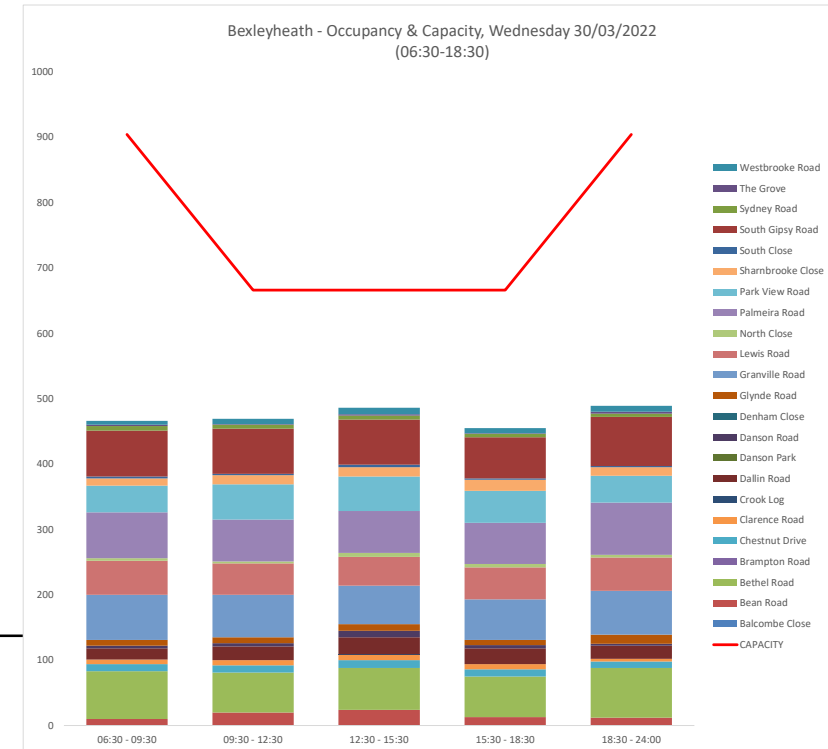
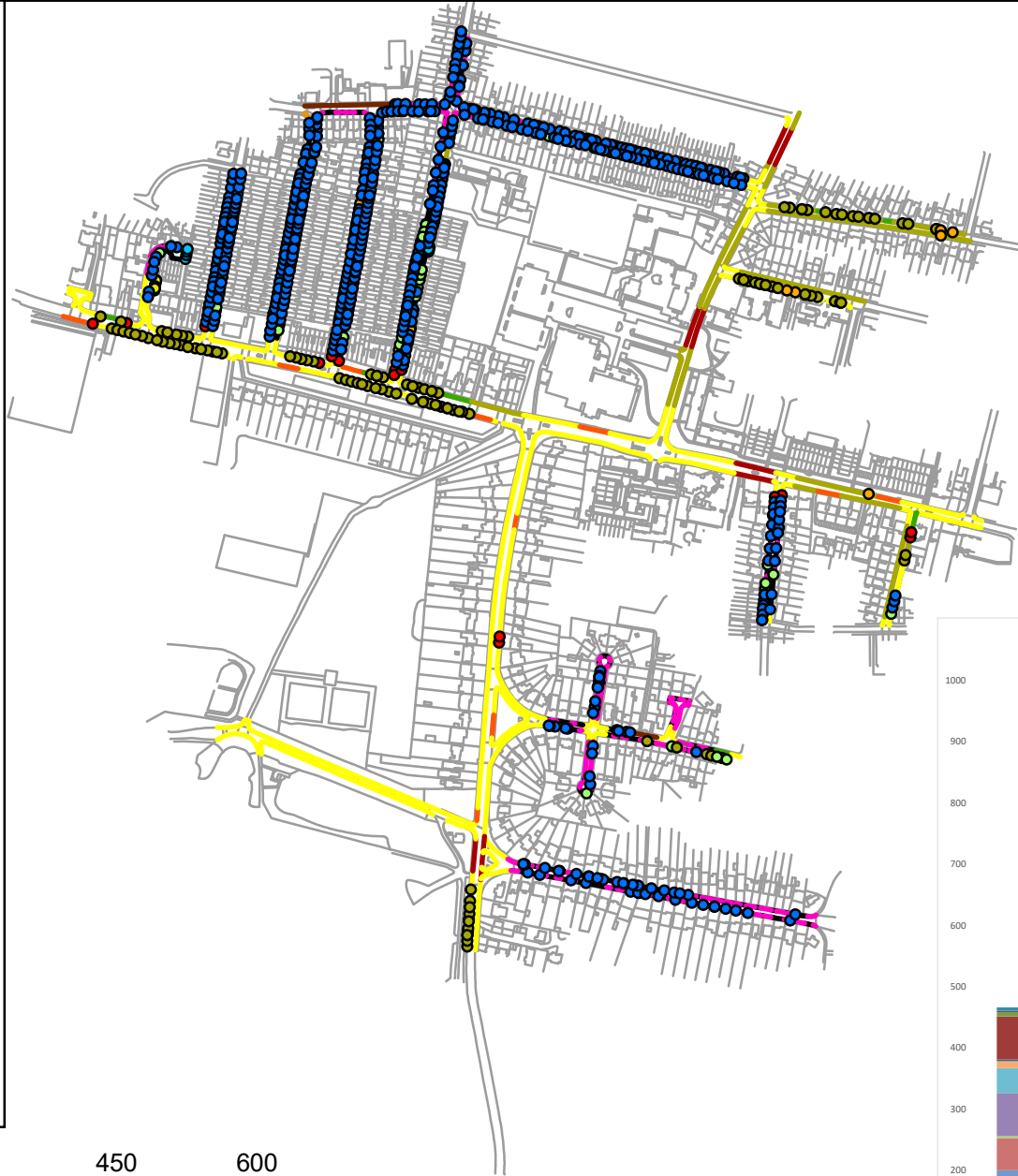
CLASS

- Disabled
- Double yellow lines
- Dropped Kerb
- Nose-in Bay
- Parallel Bay
- School Keep Clear
- Single yellow line
- Unclassified
- Unclassified Nose-In

Classified links

CLASS

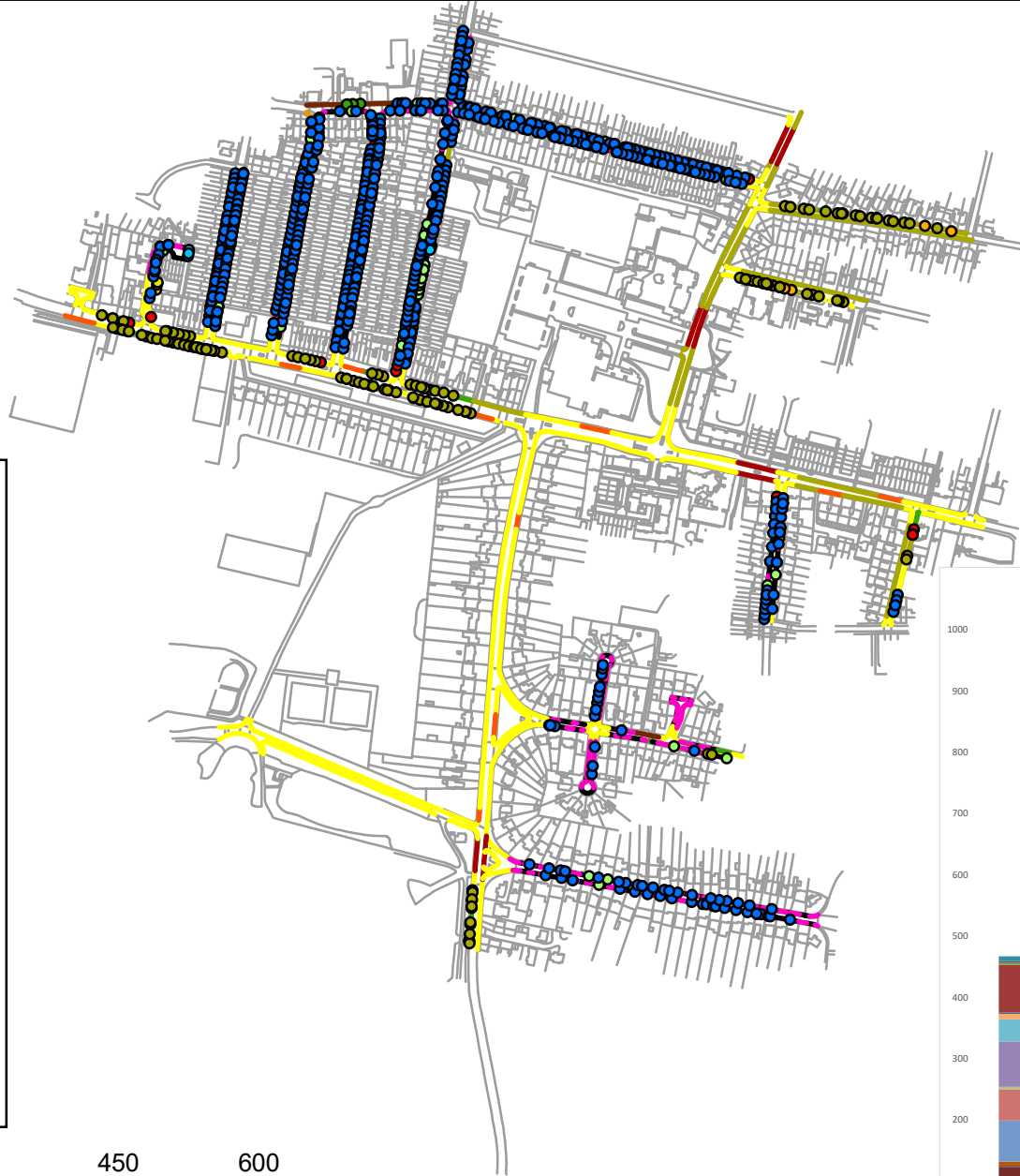
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- Cycle Lane
- Disabled
- Double yellow lines
- Dropped Kerb
- I-Bar
- Nose-in Bay
- Parallel Bay
- School Keep Clear
- Single yellow line
- Unclassified
- Unclassified Nose-In
- Zig zag



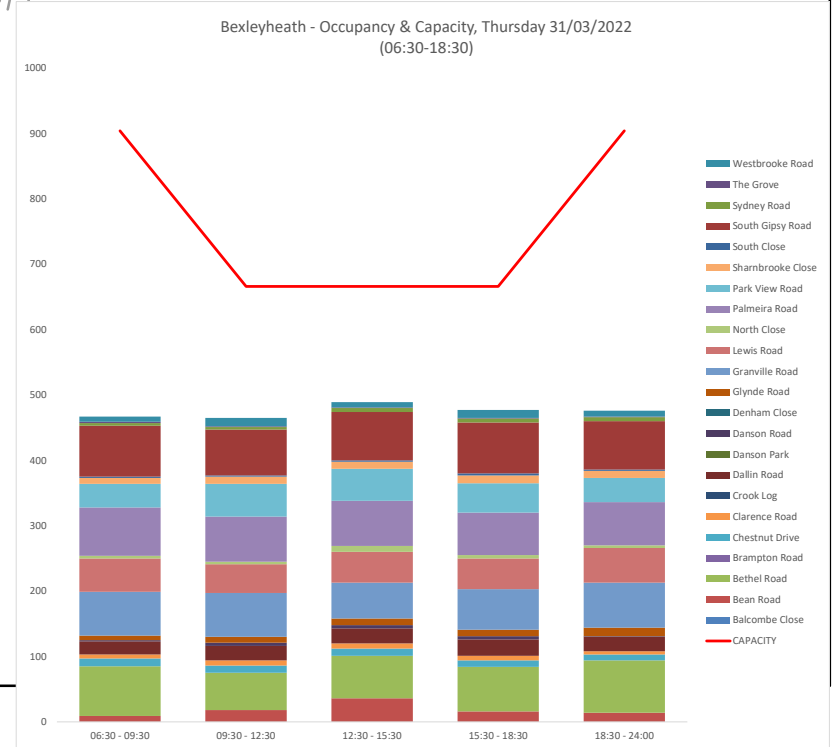
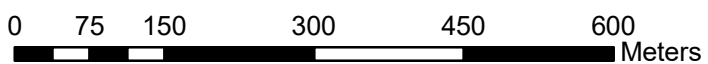
Streetwise Services Ltd
www.streetwiseservices.com
 Tel: 01133 222 602
 Email: england@streetwiseservices.com

Bexleyheath - Thursday 31st March 2022 (06:30 - 18:30)

Occupancy & Capacity

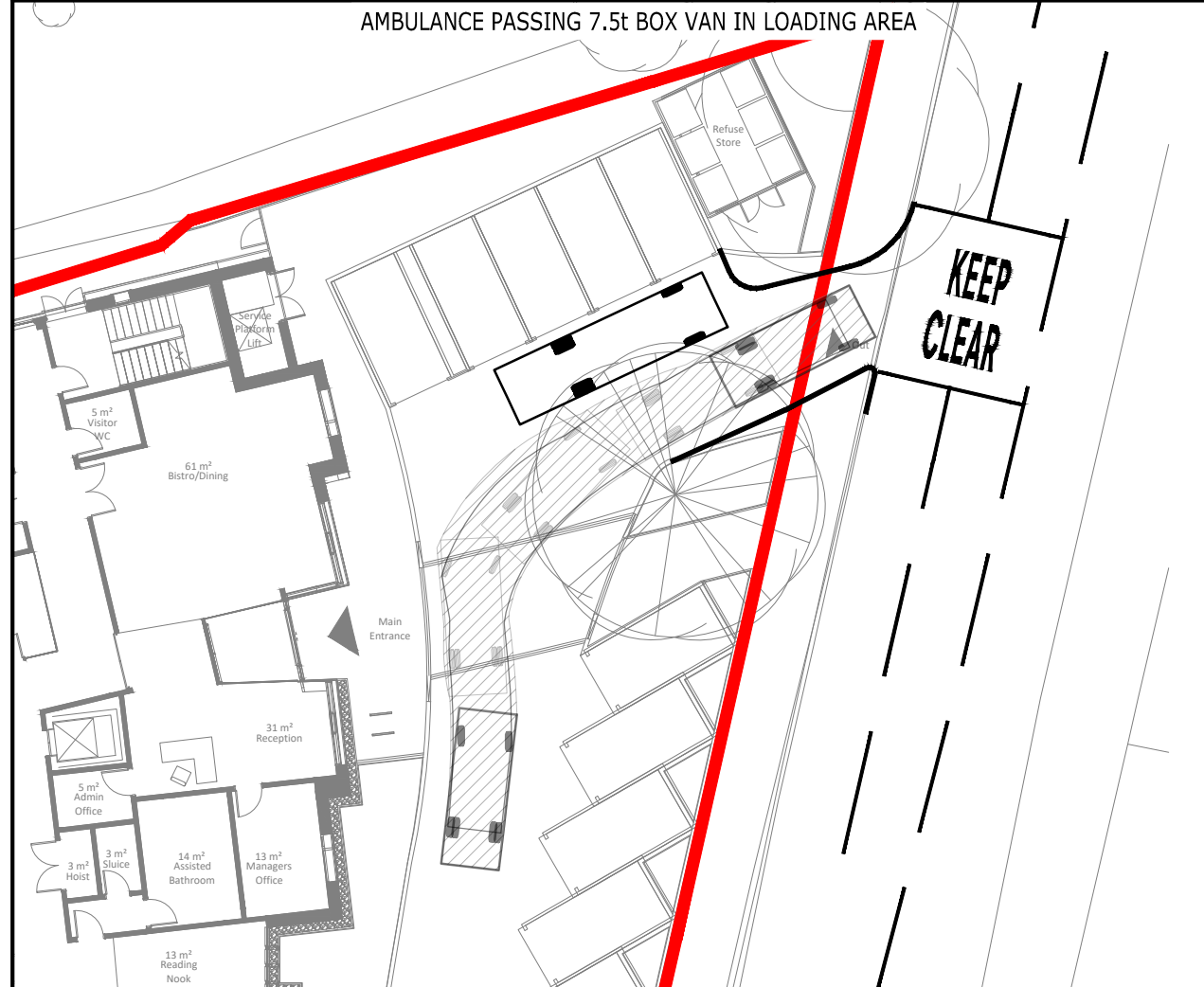
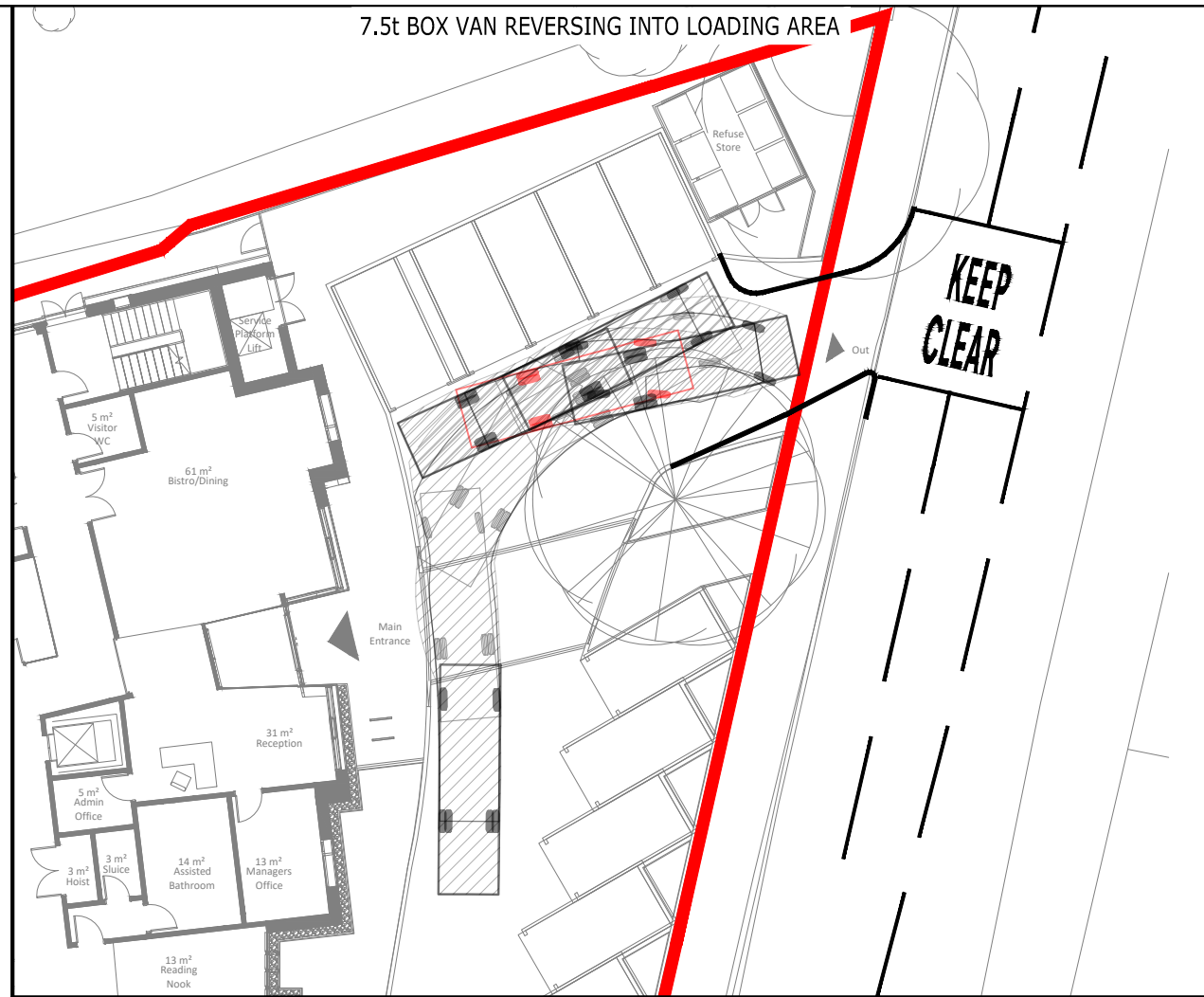
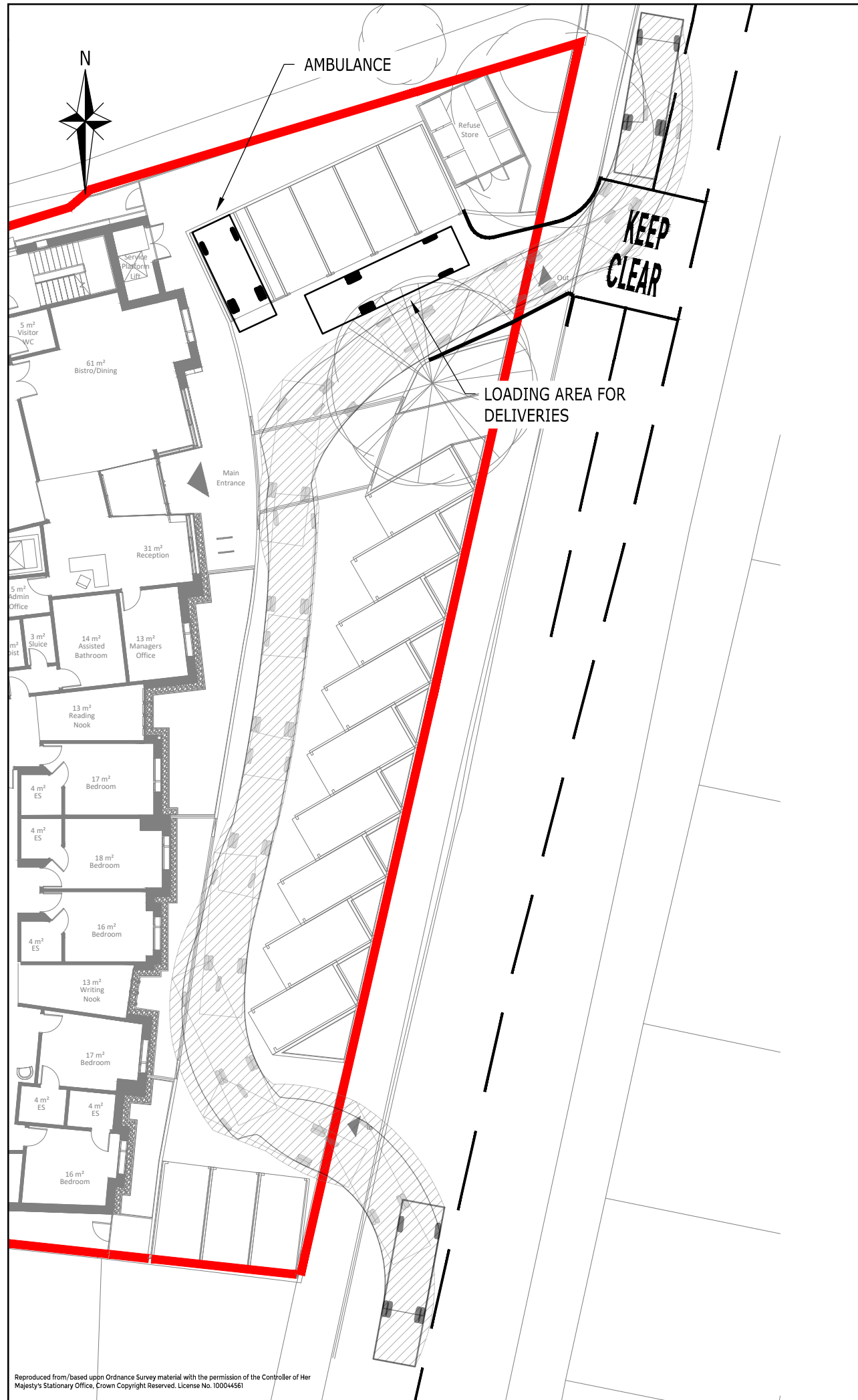


- Classified links**
- CLASS**
- Bus Stop
 - Cycle Lane
 - Disabled
 - Double yellow lines
 - Dropped Kerb
 - I-Bar
 - Nose-in Bay
 - Parallel Bay
 - School Keep Clear
 - Single yellow line
 - Unclassified
 - Unclassified Nose-In
 - Zig zag

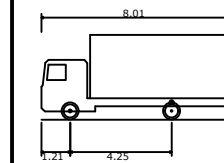


Streetwise Services Ltd
www.streetwiseservices.com
 Tel: 01133 222 602
 Email: england@streetwiseservices.com

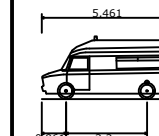
App IWJ - Tracking Study



VEHICLE USED:



7.5t Box Van
 Overall Length 8.010m
 Overall Width 2.100m
 Overall Body Height 3.556m
 Min Body Ground Clearance 0.351m
 Track Width 2.064m
 Lock to lock time 4.00s
 Kerb to Kerb Turning Radius 7.400m



Ambulance
 Overall Length 5.461m
 Overall Width 2.020m
 Overall Body Height 2.498m
 Min Body Ground Clearance 0.225m
 Track Width 1.860m
 Lock to lock time 4.00s
 Kerb to Kerb Turning Radius 6.500m

KEY:

SITE BOUNDARY

DRAFT

Rev	Description	Drn	Chk	App	Date
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ARDENT CONSULTING ENGINEERS

Third Floor
 The Hallmark Building
 52-56 Leadenhall Street
 London
 EC3M 5JE

Tel: 020 7680 4088
 Web: www.ardent-ce.co.uk
 E-mail: enquiries@ardent-ce.co.uk

Client
CAREBASE

Project Title:
DANSON ROAD, BEXLEYHEATH

Drawing Title:
SERVICE VEHICLE SWEEP PATHS

A3 Scale	Date	Designed by
1:250	09.11.22	DV
Drawn by	Checked by	Approved by
DV	DV	IW
Drawing Number	190320-009	
Rev	-	

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App IWK - TfL Accident Data

Danson Road Personal Injury Collisions 60 months to end of November 2021 (Provisional)



SUMMARY OF COLLISIONS SELECTED

SITE REFERENCE AND DESCRIPTION

GIS AREA B18 DANSON ROAD(P)

DATE PERIOD

60MTS TO NOV/2021

COLLISION COUNT

20

THE DESCRIPTION OF HOW THE COLLISION OCCURRED AND THE CONTRIBUTORY FACTORS ARE THE REPORTING OFFICER'S OPINION AT THE TIME OF REPORTING AND MAY NOT BE THE RESULT OF EXTENSIVE INVESTIGATION. NOTE THAT SELF-REPORTED COLLISIONS (INTRODUCED IN SEPTEMBER 2016) MAY HAVE LIMITED INFORMATION. DESCRIPTIONS HAVE BEEN AUTOMATICALLY REDACTED TO REMOVE ALL PERSONALLY IDENTIFIABLE INFORMATION, BUT SHOULD YOU RECEIVE ANY IN ERROR PLEASE INFORM THE COLLISIONS DATA TEAM AS SOON AS PRACTICAL. SELF-REPORTED COLLISIONS INTRODUCED IN SEPTEMBER 2016 MAY HAVE LIMITED INFORMATION AND TEND TO BE LOWER IN QUALITY THAN POLICE REPORTS. THE INTRODUCTION OF ONLINE SELF-REPORTING HAS MADE IT EASIER FOR MEMBERS OF THE PUBLIC TO REPORT COLLISIONS TO THE POLICE. THERE HAVE BEEN YEAR ON YEAR INCREASES IN SELF-REPORTS SINCE THIS WAS INTRODUCED. THIS HAS CONTRIBUTED TO AN OVERALL INCREASE IN THE NUMBER OF CASUALTIES REPORTED ON LONDON'S ROADS.

1

01170009782	WED 04/01/2017 13:37	LIGHT	DANSON RD 60M S OF J/W PARK VIEW RD	18 LINK 94-230	547640/175460		
POLICE - AT SCENE	ROAD-WET	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(69 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
CASUALTY	002 (002)	(29 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
CASUALTY	003 (002)	(23 YRS - M - REDA)	SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	VAN/GOODS => 3.5T	(69 YRS - M - REDACT)		MOVING OFF	(P TO P) BACK HIT FIRST	JOURNEY P/O WORK
VEHICLE	002 (000)	CAR	(29 YRS - M - REDACT)		G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	J/P - UNKN

2

01170018657	WED 15/02/2017 14:15	LIGHT	DANSON RD 25M W OF J/W GROVE	18 LINK 94-230	547600/175340		
POLICE - AT SCENE	ROAD-WET	RAINING	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (003)	(29 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	VAN/GOODS >3.5 - 7.5T	(42 YRS - M - REDACT)		SLOWING/STOPPING	(S TO N) FRONT HIT FIRST	JOURNEY P/O WORK
VEHICLE	002 (000)	CAR	(31 YRS - F - REDACT)		SLOWING/STOPPING	(S TO N) BACK HIT FIRST	J/P - UNKN
VEHICLE	003 (000)	VAN/GOODS => 3.5T	(29 YRS - M - REDACT)		SLOWING/STOPPING	(S TO N) BACK HIT FIRST	JOURNEY P/O WORK

3

01170029535	SAT 01/04/2017 22:40	DARK	CROOK LOG J/W DANSON RD	18 NODE 94	547643/175559
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY T/STAG JUN AUTO SIG	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (001)	(24 YRS - M - REDA)	SLIGHT DRIVER/RIDER		
VEHICLE	001 (000)	WC 51-125CC	(24 YRS - M - REDACT)	G/AHEAD - OTHER	(S TO N) FRONT HIT FIRST J/P - UNKN JCT APP
VEHICLE	002 (000)	CAR	(40 YRS - M - REDACT)	TURNING RIGHT	(N TO S) N/S HIT FIRST J/P - UNKN JCT APP

4

01180149946	TUE 04/12/2018 18:26	DARK	DANSON RD 20M S OF J/W CROOK LOG BRDWAY	18 NODE 94	547639/175530
POLICE - AT SCENE	ROAD-WET	RAINING	SINGLE CWY T/STAG JUN AUTO SIG	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (001)	(13 YRS - M - REDA)	SLIGHT PEDESTRIAN	N BOUND	FROM DRIVERS O/SIDE
VEHICLE	001 (000)	CAR	(57 YRS - M - REDACT)	G/AHEAD - OTHER	(S TO N) O/S HIT FIRST J/P - UNKN JCT APP

5	01190169650	SUN 17/03/2019 15:04	LIGHT	PARK VIEW RD, NR JUNCT WTH DANSON RD.			18 NODE 94	547631/175562
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	DUAL CWY	T/STAG JUN	AUTO SIG	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (001)	(13 YRS - M - REDA)	SLIGHT	PEDESTRIAN		N BOUND	FROM DRIVERS O/SIDE - MASKED	
VEHICLE	001 (000)	CAR	(51 YRS - F - REDACT)			G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT MID

6	01190171983	FRI 29/03/2019 09:29	LIGHT	PARK VIEW RD, NR JUNCT WTH DANSON RD.			18 NODE 94	547653/175551
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	MULTI JUN	AUTO SIG	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (001)	(56 YRS - F - REDA)	SLIGHT	VEH/PILLION PAX		SEATED PASSENGER		
CASUALTY	002 (001)	(79 YRS - F - REDA)	SLIGHT	VEH/PILLION PAX		SEATED PASSENGER		
VEHICLE	001 (000)	LONDON BUS	(60 YRS - M - REDACT)			MOVING OFF	(E TO W) DID NOT IMPACT	JOURNEY P/O WORK JCT APP

7

01190177108	FRI 26/04/2019 17:45	LIGHT	DANSON RD, 126 METRES SOUTH OF JUNCT WTH CROOK LOG.			18 LINK 94-230	547620/175420
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M		NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (002)	(23 YRS - M - REDA)	SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	CAR	(46 YRS - F - REDACT)		TURNING RIGHT	(W TO S) FRONT HIT FIRST	J/P - UNKN
VEHICLE	002 (000)	WC >500CC	(23 YRS - M - REDACT)		G/AHEAD - OTHER	(S TO N) N/S HIT FIRST	J/P - UNKN

8

01190184384	FRI 31/05/2019 15:00	LIGHT	DANSON RD, NR JUNCT WTH CROOK LOG.			18 NODE 94	547630/175522
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (001)	(14 YRS - M - REDA)	SLIGHT	PEDESTRIAN	UNKNOWN	FROM DRIVERS O/SIDE	
VEHICLE	001 (000)	CAR	(? YRS - UNKNOWN - REDACT)		G/AHEAD - OTHER	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN L/MAIN RD

9

01190204140	WED 04/09/2019 08:45	LIGHT	DANSON RD, NR JUNCT WTH PARK VIEW RD .			18 NODE 94	547656/175550
SELF-REPORTED	ROAD-WET	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (001)	(35 YRS - F - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR	(35 YRS - F - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R
VEHICLE	002 (000)	GOODS ? T	(? YRS - UNKNOWN - REDACT)	MULTIPLE TRAILER	UNKNOWN S/R	(MOVE UNKN) BACK HIT FIRST	J/P - UNKN UNKNOWN S/R

10

01190214434	SUN 27/10/2019 22:20	DARK	CROOK LOG, NR JUNCT WTH DANSON RD.			18 NODE 94	547636/175557
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (001)	(18 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR	(18 YRS - M - REDACT)		TURNING RIGHT	(W TO S) FRONT HIT FIRST	JCT MID
VEHICLE	002 (000)	CAR	(56 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) N/S HIT FIRST	JCT MID

11

01190220734	MON 25/11/2019 16:28	DARK	DANSON RD, NR JUNCT WTH WELLING HIGH ST.			18 NODE 94	547654/175561
POLICE - AT SCENE	ROAD-WET	RAINING - H WIND	SINGLE CWY	MULTI JUN	AUTO SIG	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (002)	(30 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR	(32 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	JCT CLEARED
VEHICLE	002 (000)	VAN/GOODS => 3.5T	(30 YRS - M - REDACT)		TURNING RIGHT	(W TO SE) O/S HIT FIRST	JOURNEY P/O WORK JCT CLEARED

12

01200242061	SAT 14/03/2020 15:40	LIGHT	PARK VIEW RD, NR JUNCT WTH DANSON RD.			18 NODE 94	547633/175562
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	AUTO SIG	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (001)	(11 YRS - F - REDA)	SERIOUS	PEDESTRIAN	N BOUND	FROM DRIVERS O/SIDE	
VEHICLE	001 (000)	CAR	(53 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) O/S HIT FIRST	JCT APP

13

01200248717	FRI 22/05/2020 19:34	LIGHT	DANSON RD, NR JUNCT WTH PARK VIEW RD.			18 NODE 94	547647/175547
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	DUAL CWY	T/STAG JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (002)	(41 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR	(17 YRS - F - REDACT)		TURNING RIGHT	(W TO S) O/S HIT FIRST	L/MAIN RD
VEHICLE	002 (000)	CAR	(41 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	JCT MID

14

01200261265	MON 10/08/2020 11:57	LIGHT	PARK VIEW RD, NR JUNCT WTH DANSON RD DA6.			18 NODE 94	547635/175559
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (002)	(70 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR	(47 YRS - M - REDACT)		TURNING RIGHT	(W TO S) FRONT HIT FIRST	JCT CLEARED
VEHICLE	002 (000)	PED CYCLE	(70 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) O/S HIT FIRST	JCT MID

15	01200268661	FRI 18/09/2020 21:00	DARK	CROOK LOG, NR JUNCT WTH DANSON RD.			18 NODE 94	547650/175557
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (002)	(24 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR		(33 YRS - M - REDACT)		TURNING RIGHT	(W TO S) N/S HIT FIRST	JCT MID
VEHICLE	002 (000)	WC 51-125CC		(24 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	J/P - UNKN JCT MID

16	01200278254	FRI 16/10/2020 18:30	DARK	DANSON RD CROOK LOG , 95 METRES NORTH OF JUNCT WTH PARK VIEW RD .. NREST CLASSIFIED RD WAS A207			18 LINK 94-230	547626/175454
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M		ZEBRA XING	NONE IN 50M
CASUALTY	001 (001)	(39 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR		(39 YRS - F - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	COMMUTING
VEHICLE	002 (000)	CAR		(30 YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN

17

01210314112	WED 16/06/2021 21:15		DARK	PARK VIEW RD, NR JUNCT WTH DANSON RD.			18 NODE 94	547601/175562
POLICE - AT SCENE		ROAD-WET	RAINING	SINGLE CWY	OTHER JUN	AUTO SIG	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (003)	(58 YRS - M - REDA)		SLIGHT	VEH/PILLION PAX	REAR SEAT PASSENGER		
VEHICLE	001 (000)	CAR		(34 YRS - M - REDACT)		MOVING OFF	(E TO W) DID NOT IMPACT	JCT CLEARED
VEHICLE	002 (000)	CAR		(27 YRS - M - REDACT)		SLOWING/STOPPING	(S TO N) BACK HIT FIRST	JCT CLEARED
VEHICLE	003 (000)	CAR		(27 YRS - M - REDACT)		SLOWING/STOPPING	(S TO N) FRONT HIT FIRST	JCT CLEARED

18

01210317413	SUN 04/07/2021 21:30		DARK	CROOK LOG, NR JUNCT WTH DANSON RD.			18 NODE 94	547662/175550
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	UNKNOWN	CROSSROADS	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (001)	(20 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	MC 51-125CC		(20 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	UNKNOWN S/R
VEHICLE	002 (000)	CAR		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

19

01210325391	THU 19/08/2021 23:30	DARK	CROOK LOG, NR JUNCT WTH DANSON RD.			18 NODE 94	547646/175548
POLICE - AT SCENE	ROAD-WET	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (003)	(15 YRS - F - REDA)	SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	CAR	(20 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	JCT MID
VEHICLE	002 (000)	CAR	(19 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) N/S HIT FIRST	J/P - UNKN JCT MID
VEHICLE	003 (000)	CAR	(20 YRS - M - REDACT)		TURNING RIGHT	(W TO S) N/S HIT FIRST	JCT MID

20

01210335733	TUE 05/10/2021 20:55	DARK	PARKVIEW RD, NR JUNCT WTH DANSON RD, BEXLEYHEATH, KENT.			18 NODE 94	547647/175550
SELF-REPORTED	ROAD-DRY	WEATHER-OTHER	SINGLE CWY	T/STAG JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (001)	(24 YRS - F - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR	(24 YRS - F - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	COMMUTING UNKNOWN S/R
VEHICLE	002 (000)	CAR	(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

App IWL - DfT Count Point Data

count_poir	direction	year	count_date	hour	local_auth	road_name	road_type	start_juncti	road_name	end_juncti	all_hgvs	all_motor_vehicles
26805	N	2017	28/03/2017	7	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	17	797
26805	N	2017	28/03/2017	8	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	23	1008
26805	N	2017	28/03/2017	9	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	28	877
26805	N	2017	28/03/2017	10	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	15	694
26805	N	2017	28/03/2017	11	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	22	724
26805	N	2017	28/03/2017	12	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	24	845
26805	N	2017	28/03/2017	13	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	22	795
26805	N	2017	28/03/2017	14	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	13	901
26805	N	2017	28/03/2017	15	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	12	1048
26805	N	2017	28/03/2017	16	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	7	911
26805	N	2017	28/03/2017	17	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	4	1173
26805	N	2017	28/03/2017	18	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	7	1031
26805	S	2017	28/03/2017	7	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	15	917
26805	S	2017	28/03/2017	8	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	10	852
26805	S	2017	28/03/2017	9	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	24	804
26805	S	2017	28/03/2017	10	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	27	789
26805	S	2017	28/03/2017	11	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	28	800
26805	S	2017	28/03/2017	12	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	16	842
26805	S	2017	28/03/2017	13	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	16	856
26805	S	2017	28/03/2017	14	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	39	864
26805	S	2017	28/03/2017	15	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	7	950
26805	S	2017	28/03/2017	16	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	7	950
26805	S	2017	28/03/2017	17	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	2	879
26805	S	2017	28/03/2017	18	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	4	885
26805	N	2021	12/05/2021	7	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	23	871
26805	N	2021	12/05/2021	8	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	22	923
26805	N	2021	12/05/2021	9	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	28	823
26805	N	2021	12/05/2021	10	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	28	723
26805	N	2021	12/05/2021	11	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	39	790
26805	N	2021	12/05/2021	12	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	26	869
26805	N	2021	12/05/2021	13	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	16	804
26805	N	2021	12/05/2021	14	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	19	885
26805	N	2021	12/05/2021	15	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	13	951
26805	N	2021	12/05/2021	16	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	20	989
26805	N	2021	12/05/2021	17	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	8	971
26805	N	2021	12/05/2021	18	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	5	960
26805	S	2021	12/05/2021	7	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	21	879
26805	S	2021	12/05/2021	8	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	17	773
26805	S	2021	12/05/2021	9	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	28	867
26805	S	2021	12/05/2021	10	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	33	766
26805	S	2021	12/05/2021	11	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	37	821
26805	S	2021	12/05/2021	12	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	39	916
26805	S	2021	12/05/2021	13	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	21	840
26805	S	2021	12/05/2021	14	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	27	925
26805	S	2021	12/05/2021	15	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	22	933
26805	S	2021	12/05/2021	16	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	18	965
26805	S	2021	12/05/2021	17	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	11	948
26805	S	2021	12/05/2021	18	Bexley	A221	Major	A221	Danson Underpass roundabout	A207	8	874

App IWM - TfL Tech Note 10

Roads Task Force - Technical Note 10

What is the capacity of the road network for private motorised traffic and how has this changed over time?

Introduction

This paper forms one of a series of thematic analyses, produced to contribute to the Roads Task Force Evidence Base. It looks at the topic of “Road capacity in London” and changes in capacity over time.

Summary

- Road capacity, defined as the maximum design capacity of a given roadway in London at link and junction level for motorised traffic, is well understood for different lanes and carriageway widths.
- “Effective” capacity is the capacity available after many random influences such as the driver behaviour of individuals, changing road conditions and weather have interacted to remove an element of available capacity. The “effective” capacity at the link, junction and network level available for utilisation by traffic is not currently monitored or fully understood.
- The TLRN is characterised by east - west high volume roads with limited changes in capacity across their length, e.g. the A13. London’s north – south corridors are characterised by high variations in capacity along their length e.g. A24.
- The north - south corridors have a higher share of movement by buses and coaches, and effective movement on roads is also determined by capacity utilisation by public transport.
- TfL has calculated the proportion of network capacity for private motorised trips lost relative to 1996. This is estimated to be 30 per cent in central London, 15 per cent in inner London and 5 per cent in outer London.
- Between 2008/09 and 2011/12 the total number of capacity constrained junctions across London has decreased from 380 to 354, a decrease of 7 per cent.
- In considering the capacity of the road network, it is important to consider the capacity in terms of ‘total people movement’, including travel by public transport, cycle and on foot. Where capacity for general traffic has been moved, this often (but not always) reflects reallocation of available capacity to other forms of ‘on road’ movement.

What is road capacity and how does it differ for different road types?

Road capacity is the maximum potential capacity of a given roadway. It is usually expressed in terms of vehicles per hour or day. The UK Highways Agency in advice note TA 79/99 has analysed the traffic flows on urban trunk roads in Greater and Outer London to assess the capacities that can be achieved for different road types and widths. In TA 79/99 capacity is defined as the maximum sustainable flow of traffic passing in one hour, under favourable road and traffic conditions.

Figure 1 Types of urban roads and the features that distinguish them based on national guidelines issued by the Highways Agency

Feature	ROAD TYPE				
	Urban Motorway	Urban All-purpose			
	UM	UAP1	UAP2	UAP3	UAP4
General Description	Through route with grade separated junctions, hardshoulders or hardstrips, and motorway restrictions.	High standard single/dual carriageway road carrying predominantly through traffic with limited access.	Good standard single/dual carriageway road with frontage access and more than two side roads per km.	Variable standard road carrying mixed traffic with frontage access, side roads, bus stops and at-grade pedestrian crossings.	Busy high street carrying predominantly local traffic with frontage activity including loading and unloading.
Speed Limit	60mph or less	40 to 60 mph for dual, & generally 40mph for single carriageway	Generally 40 mph	30 mph to 40 mph	30mph
Side Roads	None	0 to 2 per km	more than 2 per km	more than 2 per km	more than 2 per km
Access to roadside development	None. Grade separated for major only.	limited access	access to residential properties	frontage access	unlimited access to houses, shops & businesses
Parking and loading	none	restricted	restricted	unrestricted	unrestricted
Pedestrian crossings	grade separated	mostly grade separated	some at-grade	some at-grade	frequent at-grade
Bus stops	none	in lay-bys	at kerbside	at kerbside	at kerbside

The flows (design link capacities) given in the tables are the maximum that typical inter-urban roads based on national guidelines can carry consistently in an hour. The principal factors including lanes and carriageway widths that may affect flow levels on urban roads are given in Figures 1, 2 and 3.

The capacity of the lower width roads will be significantly reduced by parking and temporary width restrictions caused by such activities as maintenance and road works. The lowest widths are unlikely to be suitable for bus routes or for significant volumes of heavy goods vehicles.

When a road is designed, traffic engineers assume there are no limits to how a road can be utilised. They assume all roads are open, for example, and limitations such as weather which could hamper driving conditions are not factored in.

Figure 2 Capacities of urban roads – one-way hourly flows in each direction

		Two-way Single Carriageway- Busiest direction flow (Assumes a 60/40 directional split)								Dual Carriageway				
		Total number of Lanes								Number of Lanes in each direction				
		2			2-3	3	3-4	4	4+	2		3	4	
Carriageway width		6.1m	6.75m	7.3m	9.0m	10.0m	12.3m	13.5m	14.6m	18.0m	6.75m	7.3m	11.0m	14.6m
Road type	UM	Not applicable									4000	5600	7200	
	UAP1	1020	1320	1590	1860	2010	2550	2800	3050	3300	3350	3600	5200	*
	UAP2	1020	1260	1470	1550	1650	1700	1900	2100	2700	2950	3200	4800	*
	UAP3	900	1110	1300	1530	1620	*	*	*	*	2300	2600	3300	*
	UAP4	750	900	1140	1320	1410	*	*	*	*	*	*	*	*

Figure 3 Capacities of urban one-way roads, hourly flows

Carriageway width		6.1m	6.75m	7.3m	9.0m	10.0m	11.0m
		2 lanes			2-3 lanes		3 lanes
Road type	UAP1		2950	3250	3950	4450	4800
	UAP2	1800	2000	2200	2850	3250	3550

There are numerous limitations on road capacity which make it highly unusual for roads to attain their stated design capacities. Furthermore, in many cases efforts are undertaken to restrain road capacity for the purposes of limiting traffic to reduce congestion, improve journey time reliability or address environmental problems.

One of the biggest constraints on road capacity is driver behaviour. Inattentive driving, speeding, reckless driving and other behaviour can slow overall traffic. Likewise, failure to merge in an orderly fashion, frequent exits and entrances, also cause traffic to slow.

Therefore any change in prevailing conditions results in a change in the capacity of a road or road network. In other words capacity is stochastic in nature (involving chance or probability), because of differences in individual driver behaviour and changing road and weather conditions.