OPDC
OLD OAK AND
PARK ROYAL
DEVELOPMENT
CORPORATION

Old Oak and Park Royal
Development Corporation

Quantitative Baseline Study

February 2024

MAYOR OF LONDON

Contents

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1. Executive Summary

1.1 Introduction

This report provides a broad and high-level understanding of the demographic, socio-economic and environmental characteristics of the Old Oak and Park Royal Development Corporation (OPDC) area and surrounding areas at the time of publication. It has been developed by ARUP for OPDC. Its key purpose is to provide a baseline against which to measure the impacts of regeneration over time. Future updates will be undertaken and utilised to measure and monitor change over the long term regeneration of the area.

OPDC will use this document to inform a variety of forthcoming strategies, programmes and projects. In addition, the report will be used by OPDC where there is an intention to exercise its statutory planning powers. It will also be used to help identify where further analysis may be required.

OPDC is a Mayoral Development Corporation (MDC) whose purpose is to bring about the regeneration of the Old Oak Opportunity Area. OPDC's vision is as follows:

> "Drawing on its rich heritage at the heart of west London's manufacturing industry, Old Oak and Park Royal will become a renewed urban community, where a thriving local economy supports a great place to work, visit and live. It will be an inclusive, accessible, and diverse district, displaying the best practice in social and environmental design, and making a major contribution to London's success as a global city."[1]

[1]https://www.london.gov.uk/who-we-are/city-halls-partners/old-oak-and-park-royal-development-corporation-opdc

Wormwood Scrubs football pitches

1.2 Study Areas

The study areas have been chosen to provide a comprehensive understanding of OPDC and its surroundings. The chosen study areas are:

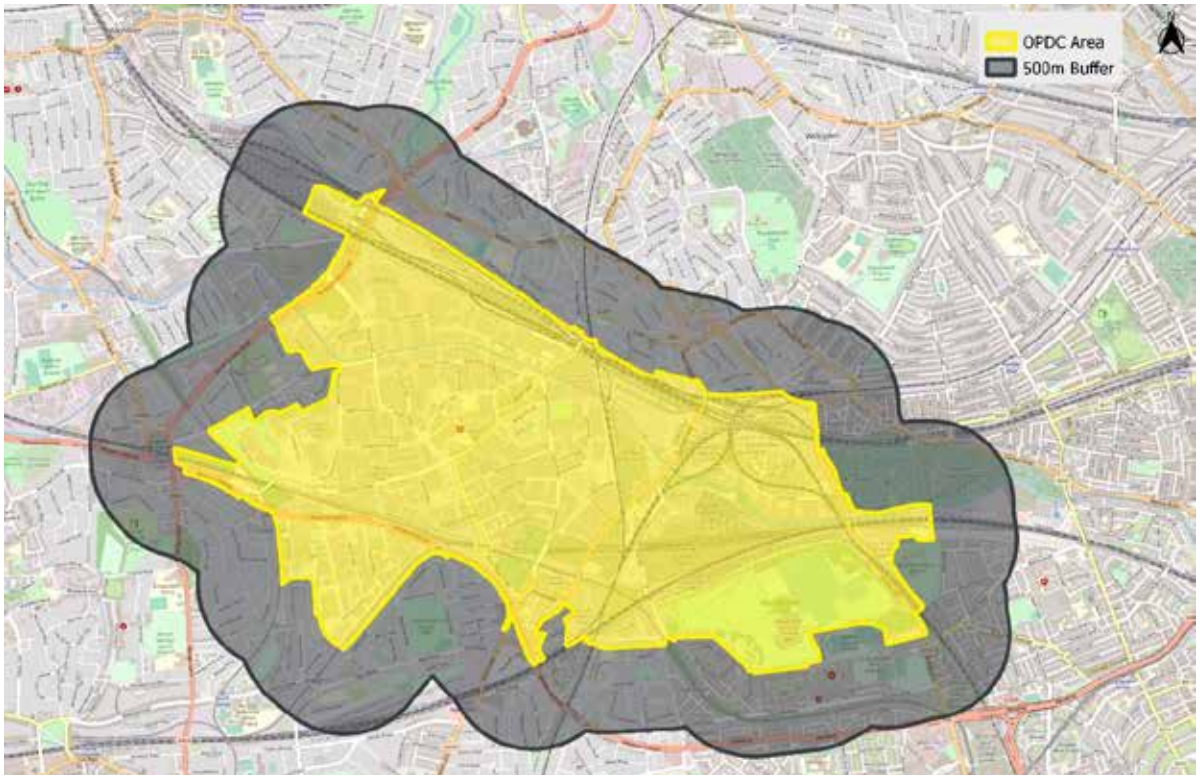
- The OPDC area (using best fit Lower Layer Super Output Areas).
- The OPDC area plus a 500m buffer (OPDC + 500m buffer) – This area has been chosen as a study area in order to consider 'spillover' impacts from activities within the OPDC area.
- The OPDC Region - a wider area that surrounds the OPDC area and comprises 35 Middle Layer Super Output Areas (MSOAs) or 25 Wards (including the three in the OPDC Area). This was a study area in the previous OPDC Quantitative Baseline (2016) and has been included here for comparison.

The following have been chosen as comparator areas which provide benchmarks against which to compare the study areas:

- The host Boroughs: Brent, Ealing and Hammersmith and Fulham
- London
- England

The defined OPDC area and OPDC + 500m can be seen in **Map 1-1** below.

Map 1-1 - OPDC Area + 500m Buffer



1.3 Baseline Assessment Summary

1.3.1 A Diverse and Young Working Age Population

This section demonstrates that the OPDC area is very diverse in comparison to the rest of England even London. It has a young and growing population. This is demonstrated by the following:

- Most of the area's population are of working age, 11% more than national average. Only 9% are older dependents which is half of the national average. A fifth of all residents are in the 20-29 age band.
- Population growth is volatile but averages 2.02% a year. The population of the area grew from 10,699 in 2011 to 12,784 in 2020
- The area is very ethnically diverse with around 41% identifying as white; 20% Black, Black British, Black Welsh, Caribbean or African; 19% Asian, Asian British or Asian Welsh; 13% Other Ethnic Group; and 7% Mixed or Multiple Ethnic Groups.
- A higher proportion of people within the OPDC area (1.64%) do not identify as the same gender identity assigned at birth than the rest of London and England.
- There is also a lower proportion of straight of heterosexual people in the OPDC area when compared to the rest of London and England.

1.3.2 Some deprivation, low crime rates and poor mental health

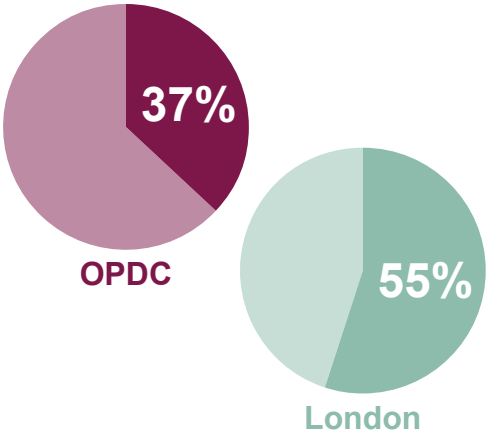
This section reveals a complex and multifaceted community profile with varying levels of deprivation, health challenges, mental health concerns, and low crime rates. Some of the headline statistics are outlined below.

- The OPDC area is relatively deprived - on average, the OPDC LSOAs are in the top 30% of the most deprived LSOAs in the country. Levels of childhood deprivation in the OPDC area are not as high but are still worse than the average (median) for England.
- Disability levels are comparable to the London average. 13.5% of the study area residents classify themselves as disabled compared to 13.2% for London and lower than 17.3% for London.
- Greater numbers of children in the OPDC area tend to be overweight or obese when compared to the host boroughs.
- Levels of mental health in the OPDC area are poor - 50% of geographic units in the OPDC area fall within the bottom 10% of the SAMHI rankings for the UK.
- The OPDC area has a much higher total number of crimes per 1000 people (386.7) compared to the host boroughs and rest of London. This is because the OPDC area is primarily a commercial area with a low population density compared to London as a whole.

1.3.3 Higher Housing Costs and Unemployment

This section suggests that the OPDC area has a number of issues associated with lower incomes and unemployment. The statistics below evidence this:

- The OPDC area has a lower household income compared to the London average and host borough average both before housing costs and after housing costs.
- Housing costs are high in the OPDC area. The average household income for the OPDC area falls by £8,600 (24%) compared to London housing costs only reducing household income by £5,700 (15%).
- The unemployment rate in the OPDC area is 6.3%, which is higher than London (4.8%) and England (3.5%). This is increased level may be due to the impacts of the Covid-19 pandemic reflecting the lower levels of residents working in professional occupations that restricts the potential for remote working.
- The OPDC area lags behind London in higher-skilled occupations - only 37% of residents in the OPDC area in the top 3 occupational groups, compared to London with 55%.



An Old Oak resident

1.3.4 Employment sectors reflect Park Royal's success

This section highlights that local employment reflects the industrial and transport business sectors in Park Royal and Old Oak North:

- In the OPDC area, the largest industry by employment is wholesale retail and trade, employing 23.6% of the workforce, exceeding proportions in the host boroughs (19.3%), London (11.4%), and England (14.4%). Of the wholesale employment, 67% is in the wholesale of food, beverages and tobacco reflecting the OPDC's area strong food and beverage sector.
- Manufacturing (16.5%) and transportation and storage (11.1%) are other significant sectors, with much higher proportions of the workforce than London and England. A significant proportion of manufacturing employment (71%) is within food production complementing the high proportion of wholesale employment relating to food.
- As expected for a historically commercial area, the OPDC area has a very high business density (192 business per thousand people) compared to the host boroughs and London as a whole.
- The OPDC area is a centre for food related manufacturing (33% of manufacturing businesses) and food related wholesale (26% of wholesale businesses).

1.3.5 Sufficient School Places but a Lack of Open Space and need for a new health facility

This section highlights school undersubscription patterns and a lack of accessible public open spaces in some parts of the area and the need for a new healthcare facility on the area. The headline findings are as follows:

- Of the 14 schools in the OPDC and buffer area, the majority of schools are slightly to significantly undersubscribed, with an overall capacity ratio of 74%.
- There are no secondary schools in the OPDC area, but four within the buffer area. Three of these are undersubscribed (71% to 91% capacity), with an overall capacity ratio for secondary schools in the area at 85%.
- Despite the availability of various open spaces there is a deficiency in access to public open space.
- There are 9 GP surgeries within the OPDC + Buffer area where 47.1 Full-time Equivalent (FTE) GPs serve 156,191 registered patients equating to 3,316 patients per FTE GP. This is higher than the national average of 2,294 patients per FTE GP.

1.3.6 High levels of rented housing with some overcrowding

To understand the housing situation in the OPDC area, we have considered housing tenure, household characteristics, house prices, broadband and fuel poverty. Headline statistics are outline below:

- Private rented housing is the dominant tenure in the OPDC area, constituting 39.3% of housing, 9% higher than for London as a whole.
- Socially rented homes are also prevalent and make up 30.6% of housing compared to 23.1% across London as a whole.
- Overall, 35.3% of housing in the OPDC area is affordable housing compared to 24.6% across London. Recently affordable housing has been a significant focus for OPDC with 40% of new homes built in 2022/23 being in the affordable category.
- There is an average household size of 2.36 people, aligning with the national average. Overcrowding is prevalent, with 54% of households having an ideal number of bedrooms.
- The mean house price in the OPDC area is £640,000 which is lower when compared to £734,400 for the host boroughs and £666,000 for London. However, reflecting local income levels the mean house price to mean household income ratio is higher.


Harlesden Canalside Canoe Club

1.3.7 Low Levels of Car Ownership and Opportunities to support Cycling

This section sets of levels of access to and safety of transport in the OPDC area. Headline statistics regarding the findings are outlined below:

- Public transport accessibility scores in the OPDC area vary from 1b to 6 with higher scores near tube stations, such as North Acton in the south and Willesden Junction in the north.
- 57% of OPDC households don't own a car or van, compared to 44% across London, whilst 35.3% have access to one vehicle, compared to 40% for London. There is significantly less access to cars in OPDC than the average for the host boroughs.
- The OPDC area has higher cycling concentrations along the Grand Union Canal and in the east, which are higher than the London averages for cycle flows. Outside of these areas, locations are lower than the London average.

1.3.8 Higher air and noise pollution along main roads with localised flood risk

This summary highlights key statistics on air quality, noise, green infrastructure, transportation, road accidents, vehicle access, cycling, broadband, and energy performance in the OPDC area. Headline statistics for this section are summarised below:

- NOx concentrations are highest near major roads, exceeding government targets on major roads like North Circular Road and Western Avenue.
- Similar patterns observed for NO2, with higher concentrations, although there has been a 22% reduction in population exposure to NO2 across host boroughs since 2016.
- Noise levels on main roads in OPDC can exceed 75dB, reducing further away from major roads. Deprived areas in the north of OPDC experience less road noise than the less deprived southwest. Railway noise patterns are similar to road noise, with higher levels near busy rail lines.
- Surface water flooding risk is present in localised areas with specific stretches along railways and roads.

2. Introduction

This report provides a broad and high-level understanding of the demographic, socio-economic and environmental characteristics of the Old Oak and Park Royal Development Corporation (OPDC) area and surrounding areas at the time of publication. Its key purpose is to provide a baseline against which to measure the impacts of regeneration over time. Future updates will be undertaken and utilised to measure and monitor change over the long-term regeneration of Old Oak and Park Royal.

OPDC will be using this document to inform a variety of forthcoming strategies, programmes and projects. In addition, the report will be used by OPDC where there is an intention for them to exercise their statutory powers. It will also be used to help identify where further analysis may be required.

2.1 Background and Context

The is a Mayoral Development Corporation (MDC) whose purpose is to bring about the regeneration of the Old Oak Opportunity Area. OPDC's Local Plan has recently been adopted and plans for Old Oak West to create an urban district are now being developed. OPDCs vision is as follows:

> "Drawing on its rich heritage at the heart of west London's manufacturing industry, Old Oak and Park Royal will become a renewed urban community, where a thriving local economy supports a great place to work, visit and live. It will be an inclusive, accessible and diverse district, displaying the best practice in social and environmental design, and making a major contribution to London's success as a global city."[2]

[2]https://www.london.gov.uk/who-we-are/city-halls-partners/old-oak-and-park-royal-development-corporation-opdc

Local creative industries

2.2 Report Structure

This report is structured as follows:

Approach

Setting out the study areas considered, data sources used and scope of the baseline.

Baseline assessment

Presenting and describing data and providing high level insights where appropriate (broken down into nine themes).

Conclusions

Bring together the insights from the baseline assessment and providing a Strengths-Weaknesses-Opportunities-Challenges (SWOT) analysis.

3. Approach

3.1 Study Areas

The study areas were chosen to provide a comprehensive understanding of OPDC and its surroundings. Best-fit Lower layer Super Output Area (LSOA) and Mid layer Super Output Area (MSOA) study areas were then constructed in order to allow for data collection. The chosen study areas are:

- **OPDC area** – Made up of 10 best-fit LSOAs[3] (see **Map 3-2**) or 3 best-fit MSOAs (**Map 3-3**) from Brent, Ealing and Hammersmith and Fulham.
- **OPDC area plus a 500m buffer (OPDC + 500m buffer)** – Made up of 37 best-fit LSOAs (**Map 3-4**) or 6 best-fit MSOAs (**Map 3-5)** from Brent, Ealing and Hammersmith and Fulham, and Kensington and Chelsea. This area has been chosen as a study area in order to consider 'spillover' impacts from activities within the OPDC area.
- **OPDC Region** – The OPDC area and a wider area that surrounds the OPDC Development Zone and comprises 35 MSOAs (**Map 3-6**). This was a study area in the previous OPDC Quantitative Baseline (2016) and has been included here for comparison.

Map 3-1 shows the OPDC area and OPDC + 500m study areas within the context of London.

The LSOAs and MSOAs which made up each study area were determined on a best-fit basis. We found that by choosing the LSOAs/MSOAs based on whether their centroid (i.e. centre of the LSOA/MSOA) is in the relevant study area boundary provided the best-fit of LSOAs/MSOAs to the study area.

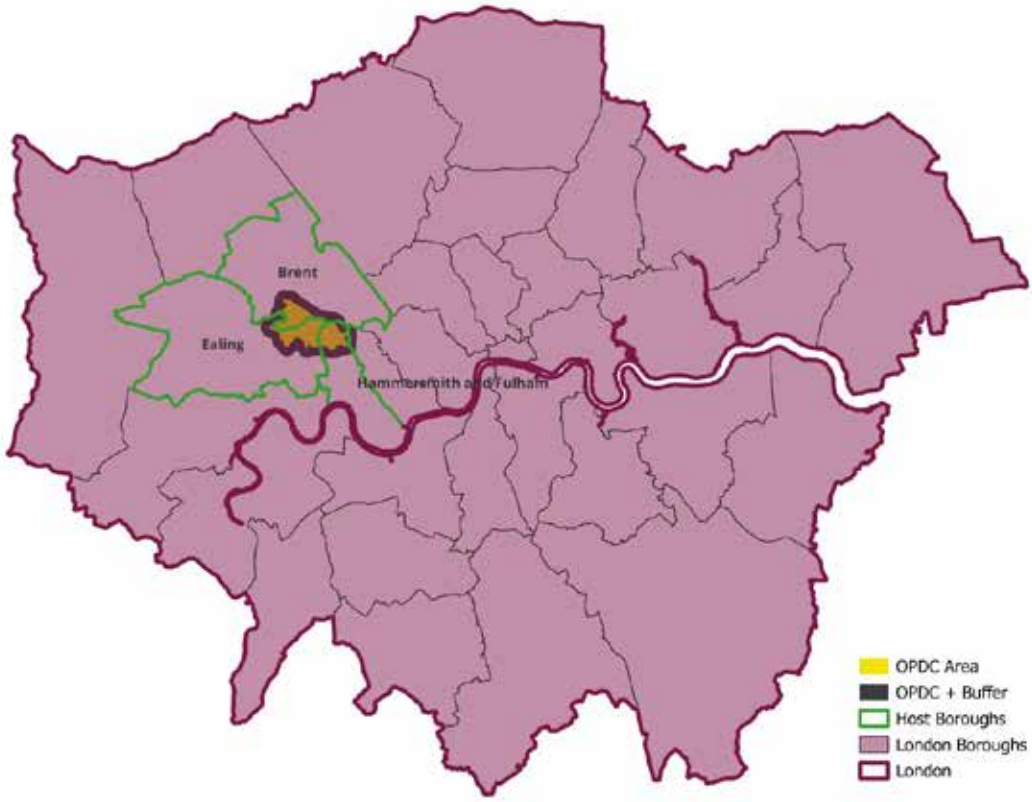
Analysis has been undertaken using the LSOA based study area where data is available at this level with the MSOA based study area being used where LSOA level data is not available. Where appropriate spatial trends across the OPDC have been presented, generally through mapping.

The following have been chosen as comparator areas which provide benchmarks against which to compare the study areas:

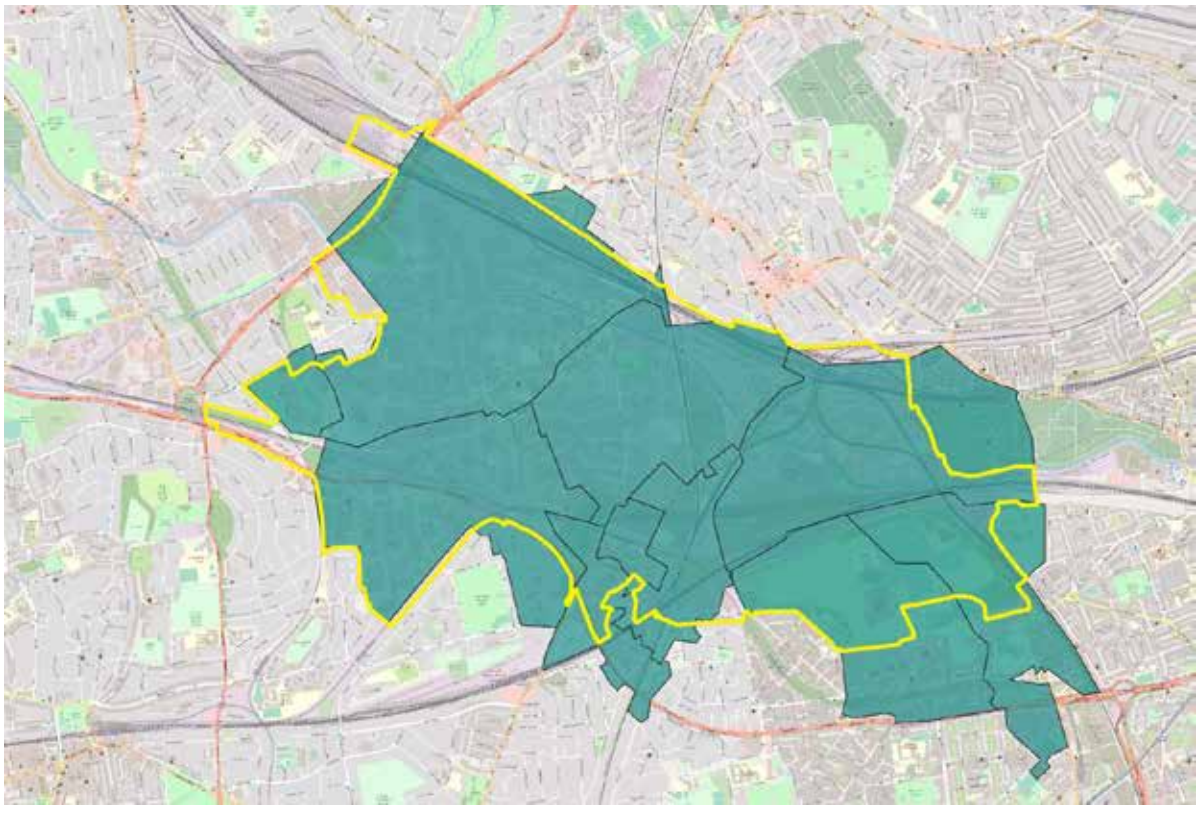
- The Host Boroughs: Brent, Ealing and Hammersmith and Fulham
- London
- England

[3]As per the 2021 boundaries. The rest of this section including the naps below refer to the 2021 boundaries. However, 2011 boundaries have been used for datasets which are collected at this level. It should be noted that the 2011 boundaries are very similar to the 2021 boundaries.

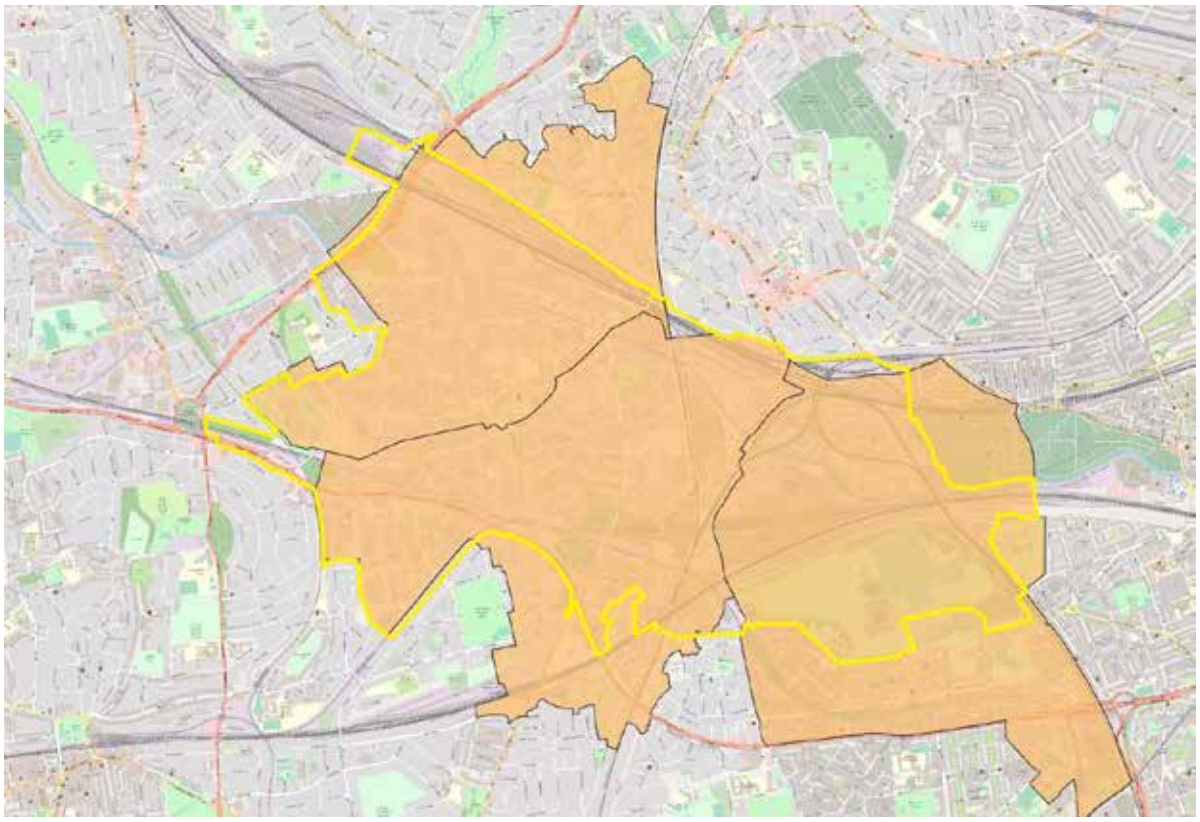
Map 3-1 - Showing OPDC in Relation to the Host Boroughs and London as a Whole.



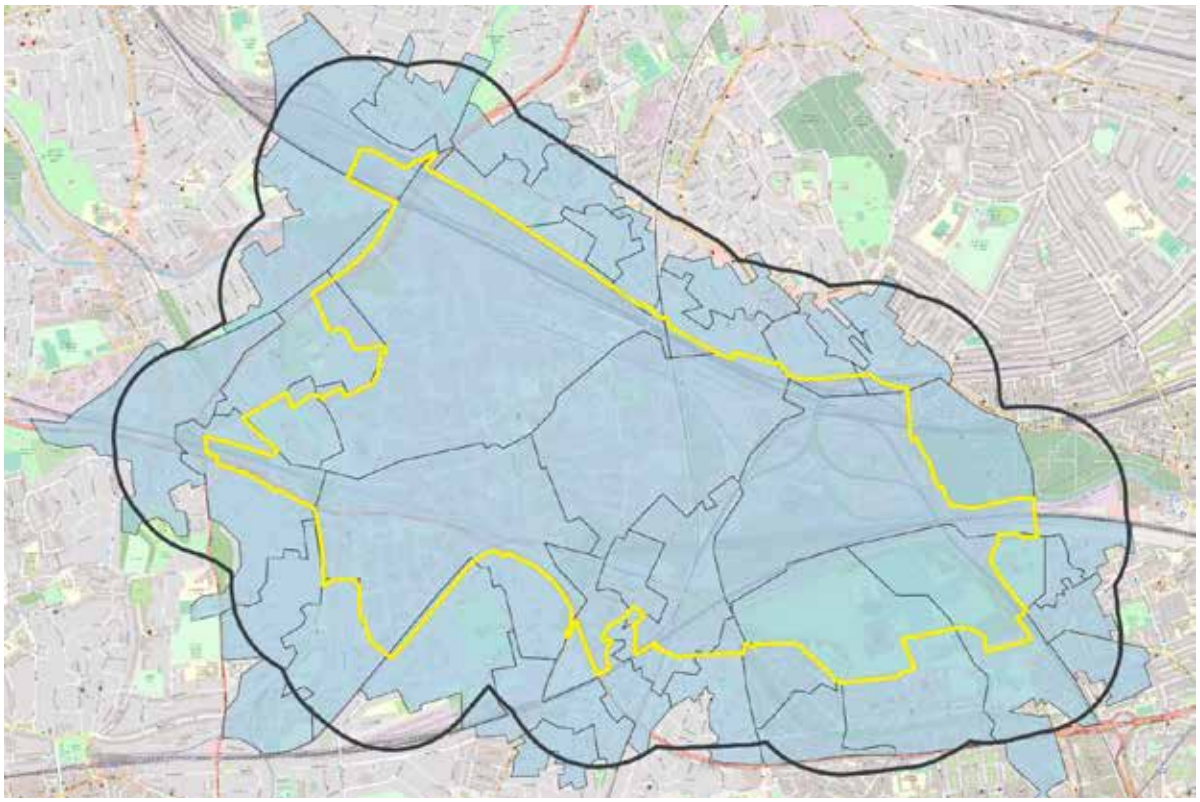
Map 3-2 - Best Fit LSOAs in OPDC Area



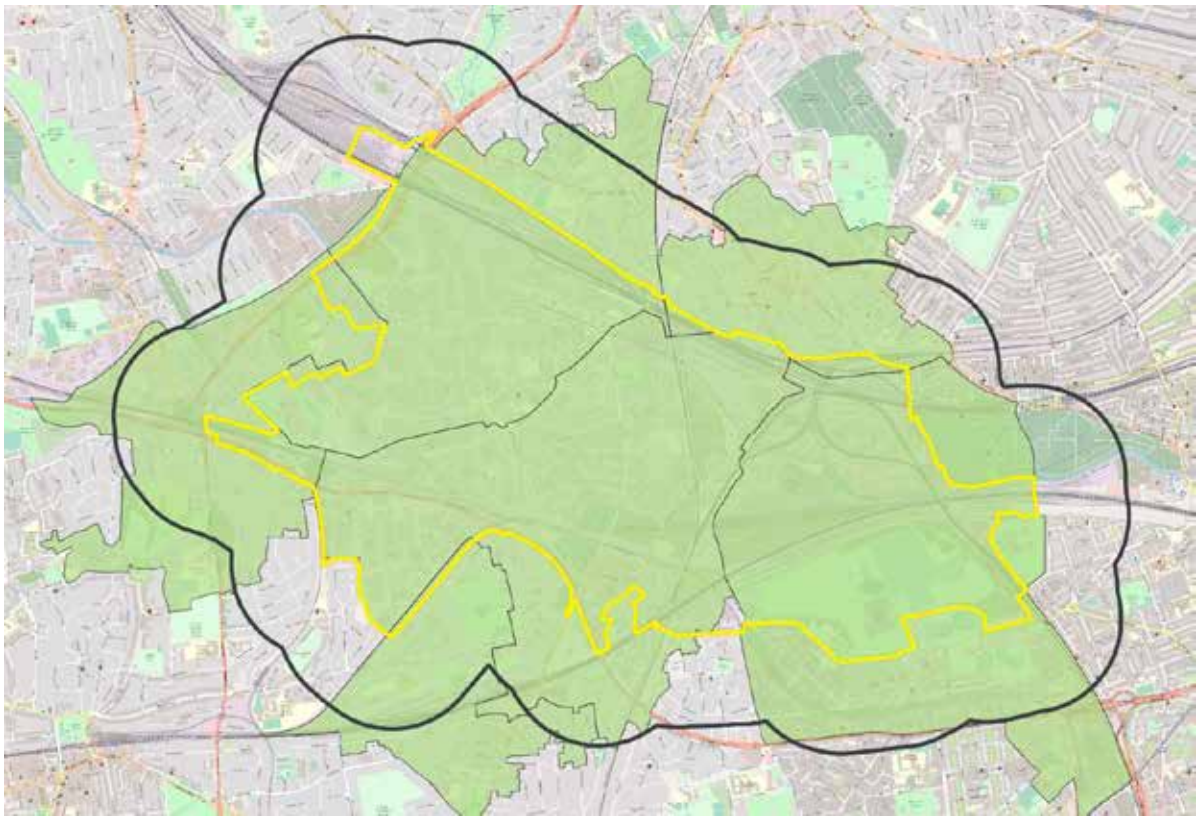
Map 3-3 - Best Fit MSOAs in OPDC Area



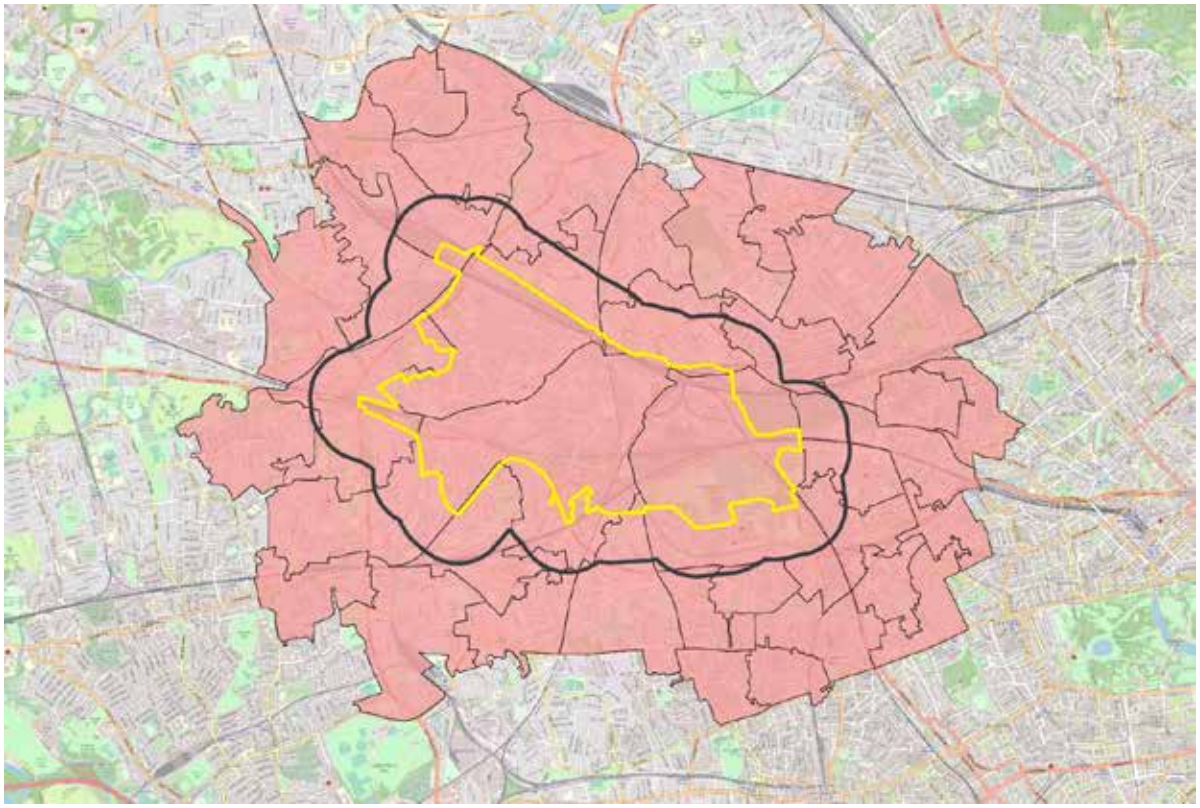
Map 3-4 - Best Fit LSOAs in OPDC Area + 500m Buffer



Map 3-5 - Best Fit MSOAs in OPDC Area + 500m Buffer



Map 3-6 - MSOAs in the OPDC Region



3.2 Scope

The table below outlines the scope of the analysis covered in this report, setting out indicators and corresponding data sources. These have been organised by theme to allow for conclusions to be made for each thematic area.

Table 3-1 – Indicators by Theme

Theme	Data Components
Geography	Land uses overview
Population and Demographics	Population by Age
	Population Growth
	Population Density
	Migration
	Ethnicity
	Sex and Gender Identity
	Sexual Orientation
Community Profile	Deprivation
	Health and Wellbeing
	Crime
	Education and Qualifications
Income and Employment	Income
	Economic Activity and Employment
	Occupation
Business	Employment
	Enterprises
Social Infrastructure	School Capacity
	Public Open Space
	Childrens Play Space
	General Practitioners
	Town Centres

Theme	Data Components
Housing	Housing Tenure
	Average Household Size
	Overcrowding
	Housing Stock
	Housebuilding Activity
	Social Housing Waiting Lists
	House Prices
	Broadband
	Energy Performance
	Fuel Poverty
Transport	Access to Public Transport
	Fatalities and Serious Injuries on Roads
	Access to a Vehicle
	Cycling
Environment	Air Quality
	Noise
	Green/Blue and Tree Cover
	Urban Heat Island Effect
	Waste

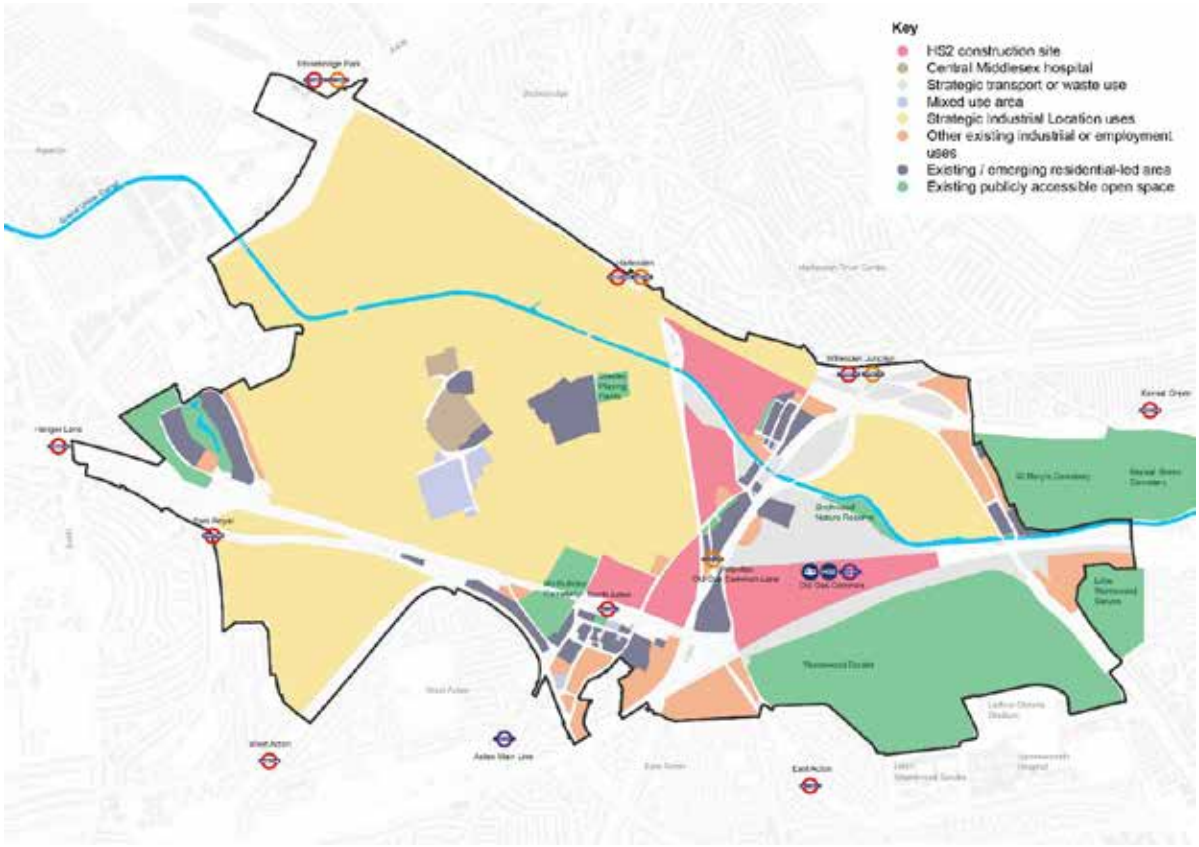
Snacks ready for shipping in Park Royal

4. Baseline assessment

4.1 Land Uses overview

Map 4-1 shows the land use locations in the OPDC area. This shows significant areas of protected industrial uses in the Strategic Industrial Locations of Park Royal and Old Oak North. Other existing industrial or employment locations are also located along Scrubs Lane in pockets along Old Oak Lane and Old Oak Common Lane and in North Acton. Existing or emerging residential-led areas are located north or Park Royal Station, in North Acton, along Old Oak Lane, Old Oak Common Lane and Victoria Road as well as on Scrubs Lane next to the Grand Union Canal. Within Park Royal there are three residential areas – two next to the Central Middlesex Hospital and next to Wesley Playing Fields. High Speed 2 construction sites make up significant portions of land located between Old Oak North and Park Royal.

Map 4-1 – Land Use Map of OPDC Area



Source: OPDC

4.2 Population and Demographics

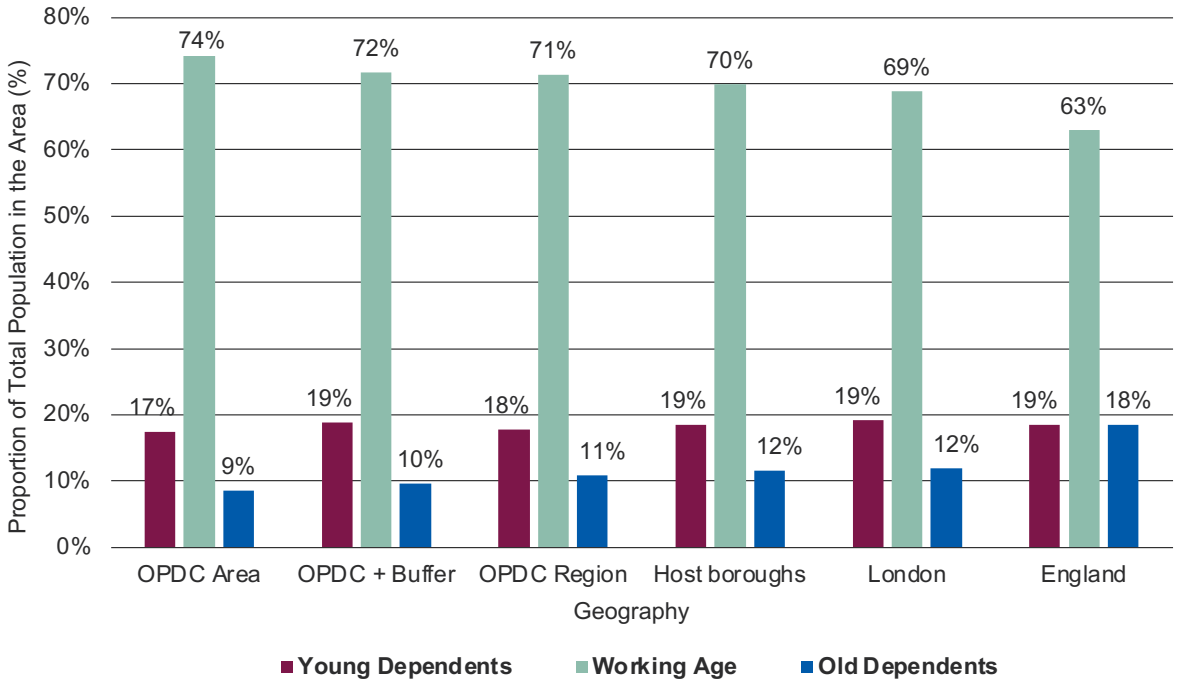
4.2.1 Population by Age

Figure 4-1 shows the proportion of residents in certain age categories: young dependents (0-15); working age (16-64); and old dependents (65+). The OPDC area's population is generally a similar age to its surrounding areas and the rest of London's population, all offset primarily by a lower share of old dependents.

Only 9% of OPDC residents were over 65 compared to 18% of residents in the whole of England. A slightly smaller share of OPDCs population are young dependents than the comparator areas. The working age population of OPDC is 11 percentage points greater than for England as a whole.

The above suggests that OPDC residents may have specific needs relating to job availability and commuting, particularly when compared to England as a whole.

Figure 4-1 - Population by Age Split by Young Dependents, Working Age and Old Dependents



Source: Nomis from the ONS 2021 – Population estimates - small area based by single year of age - England and Wales

Garages on Old Oak Common Lane

Table 4-1 shows the proportion of the population in each 10-year age band. **Table 4-1** shows absolute population figures by 10-year age band. The age band with the largest population in the OPDC area was the 20-29 age band, consisting of a fifth of all total residents. Compared to its study areas, this is a larger proportion - 5 percentage points higher than the proportion of the rest of London which is in turn higher than across England as a whole.

Table 4-1 - Population By 10-Year Age Band, Percentage

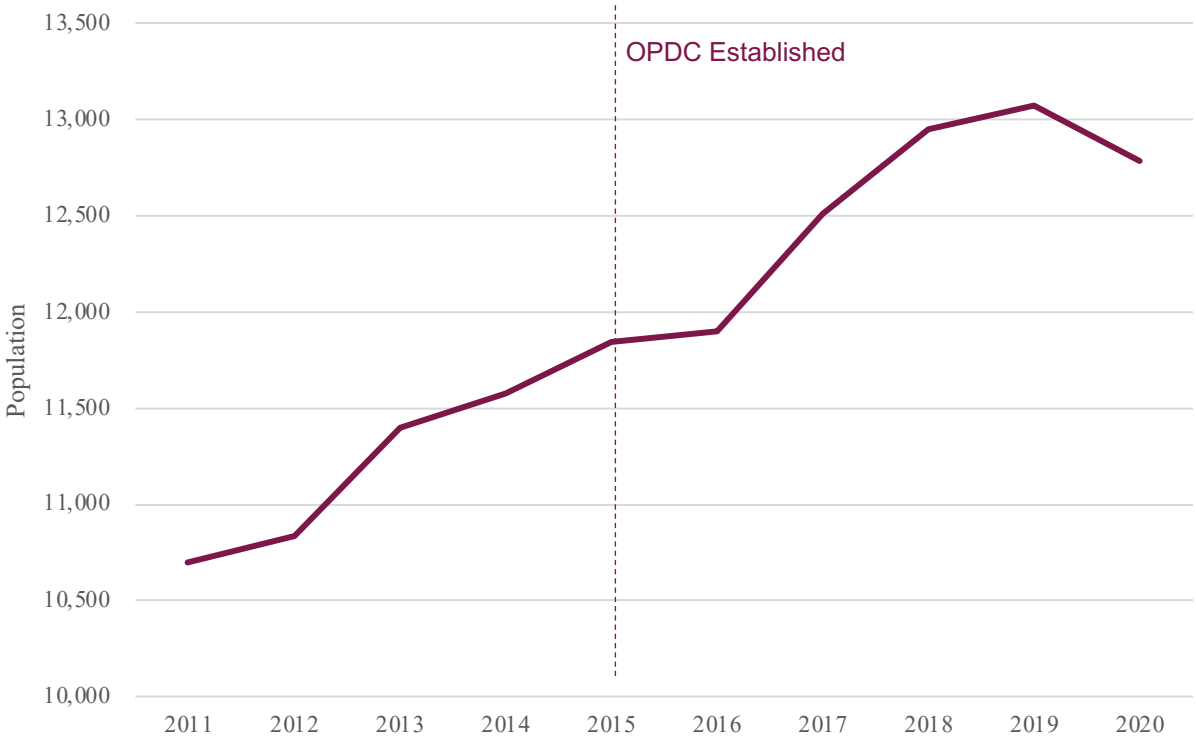
	OPDC Area	OPDC + Buffer	OPDC Region	Host Boroughs	London	England
Ages 0-10	10.6%	11.7%	10.9%	11.4%	12.1%	11.4%
Ages 10-19	14.5%	13.2%	11.7%	11.7%	11.6%	11.7%
Ages 20-29	20.3%	17.6%	17.3%	16.4%	15.6%	12.6%
Ages 30-39	17.7%	17.4%	17.5%	17.2%	17.5%	13.7%
Ages 40-49	13.1%	14.2%	14.2%	14.6%	14.3%	12.7%
Ages 50-59	11.1%	12.1%	12.8%	12.5%	12.3%	13.7%
Ages 60-69	6.8%	7.2%	8.2%	8.2%	8.1%	10.7%
Ages 70-79	3.3%	3.9%	4.6%	5.0%	5.2%	8.6%
Ages 80-89	2.0%	2.2%	2.3%	2.5%	2.6%	4.1%
Ages 90-99	0.4%	0.4%	0.5%	0.5%	0.6%	0.9%
Ages 100+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Nomis from the ONS 2021 – Age by single year

4.2.2 Population Change

Figure 4-2 shows absolute population change in the OPDC area between 2011 and 2020. The population of the area grew from 10,699 in 2011 to 12,784 in 2020 – growth of 19%.

Figure 4-2 – Population Change in the OPDC Area, 2011 - 2020



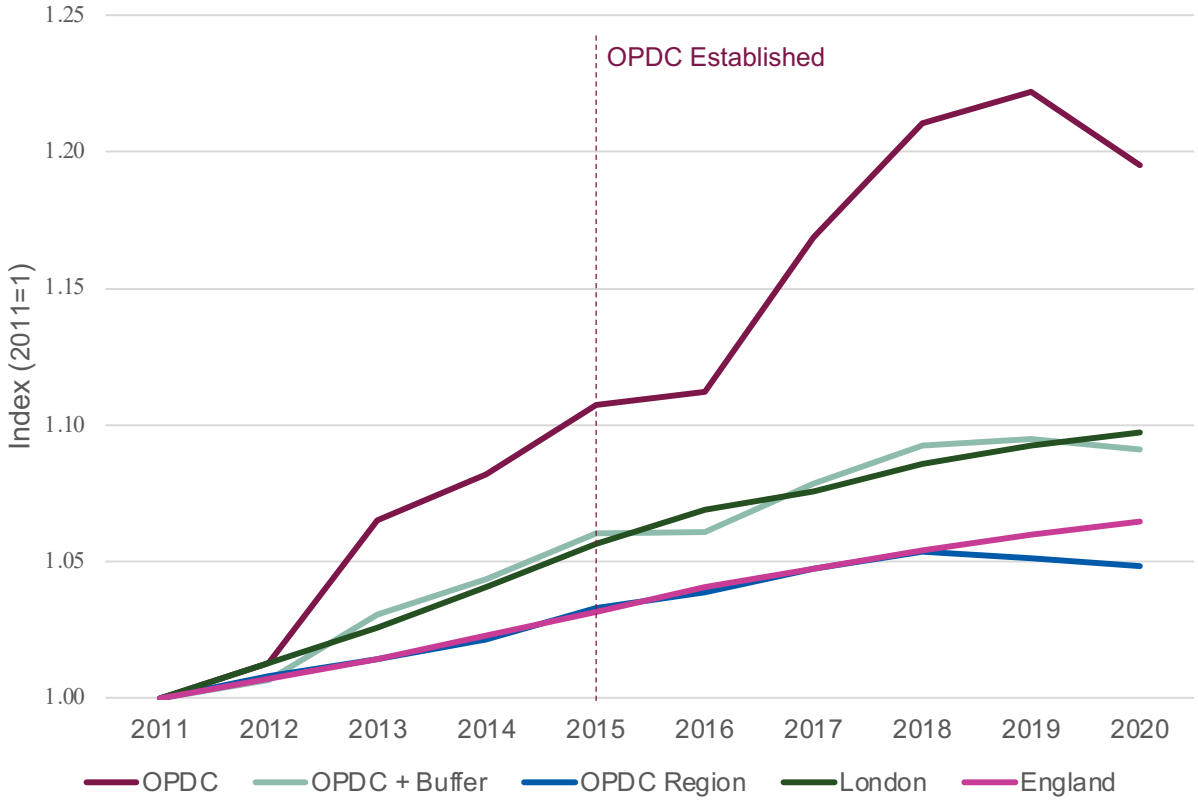
Source: Nomis from the ONS 2021 – Population estimates - small area based by single year of age - England and Wales

Figure 4-3 shows population change in the study and comparator areas between 2011 and 2020 indexed to 2011 levels.

It can be seen that the OPDC area has experienced much higher population growth since 2011 then the other study areas and comparator areas - the average growth figure across the period was 2.02% for the OPDC area compared to 1.04% for the rest of London. The OPDC area also varied greatly from the buffer area which experienced an average 0.98% annual growth and the region with 0.58%.

All OPDC study areas experienced a slowdown in growth in 2015, followed by continued fast growth. The decline in in the study areas' population including the OPDC area in 2020 is due to the impacts of the pandemic (e.g. less people moving into the area and people moving out of the area, such as students).

Figure 4-3 - 10-Year Population Change, 2011 to 2020

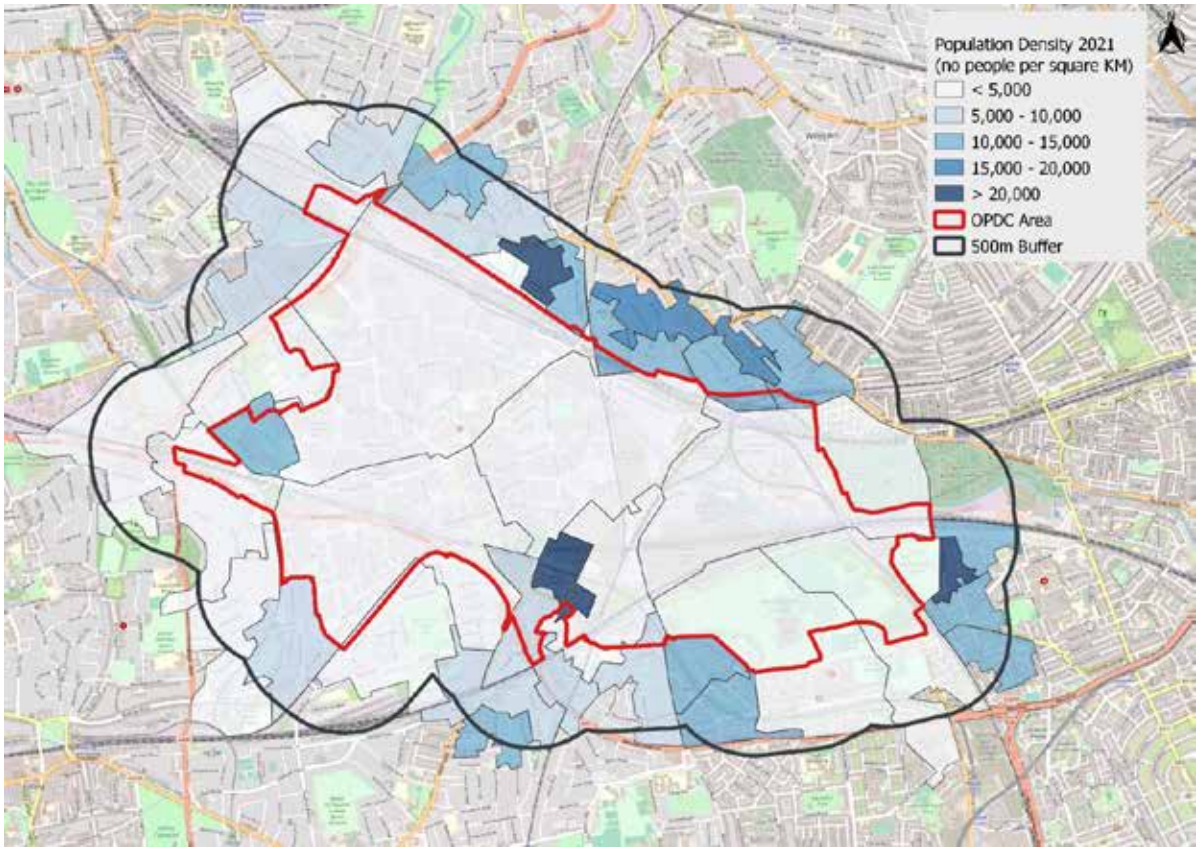


Source: Nomis from the ONS 2021 – Population estimates - small area based by single year of age - England and Wales

4.2.3 Population Density

Map 4-2 shows the geographical distribution of population density by the number of people per square kilometre. As displayed on the map, the highest density is around the periphery of the OPDC area and lowest in the middle. Due to the 2021 publication of available population density data this does not reflect recent developments in the OPDC area including Oaklands Rise. Generally, the population density inside the OPDC area is less than 5,000 people per square km, but in the buffer tends to be between 5,000 and 20,000. The densest areas are the northern and southern borders of the OPDC area. There is only one LSOA within the OPDC area with an extremely high population density of >20,000 people per km squared which includes North Acton and far exceeds the population density of many of the other LSOAs within the OPDC area. There are 2 other LSOAs with extremely high density, just outside the study area but within the buffer, one to the north and another in the east.

Map 4-2 - Population Density, Residents per KM Squared, by LSOA



Source: Nomis from the ONS 2021 – Population density - usual residents by square kilometre. Base mapping from OpenStreetMap.

4.2.4 Migration

Table 4-2 shows the flows of migration 12 months prior to the 2021 Census to and from each of the study areas and where this migration is from and to. It should be noted that migration to outside of England and Wales as this data cannot be collected through the Census.

It can be seen that 4,433 people moved out of the OPDC area (to other places within England and Wales) whilst 6,058 people moved in (including immigration). This results in a net gain of 1,625 people.

Table 4-2 - Migration Flows 12 months prior to 2021 Census

TO \ FROM	OPDC Area	OPDC Area + Buffer	OPDC Region	London	England and Wales	Outside of England and Wales	Total
OPDC Area	504	183	802	2,372	930	1,267	6,058
OPDC Area + Buffer	143	392	633	1,506	223	527	3,424
OPDC Region	757	1,037	8,693	17,783	3,233	5,801	37,304
London	3,029	2,106	18,359	716,659	90,799	141,892	972,844
England and Wales	2,774	963	8,076	296,499	2,905,454	395,543	3,609,309
Total	7,207	4,681	36,563	1,034,819	3,000,639	545,030	4,628,939

Source: NOMIS from Census 2021 - Origin-destination (flow) data

Table 4-3 below shows the destination of out-migration from each of the study areas and London as a percentage of total out-migration from each study area (and London). It can be seen that out-migration from OPDC to other areas of London was the highest, closely followed by other areas of England and Wales.

Table 4-3 - Out-Migration Flow Destinations by Study Area (and London), %

	OPDC Area	OPDC Area + Buffer	OPDC Region	London
OPDC Area	7.0%	3.9%	2.2%	0.2%
OPDC Area + Buffer	2.0%	8.4%	1.7%	0.1%
OPDC Region	10.5%	22.2%	23.8%	1.7%
London	42.0%	45.0%	50.2%	69.3%
England and Wales	38.5%	20.6%	22.1%	28.7%

Source: NOMIS from Census 2021 - Origin-destination (flow) data

Table 4-4 below shows the destination of in-migration to each of the study areas and London as a percentage of total in-migration to each study area (and London). In-migration to OPDC from other areas of London was the highest. It can also be seen that migration to outside of England and Wales from the OPDC area was higher compared to migration to areas outside London but inside England and Wales.

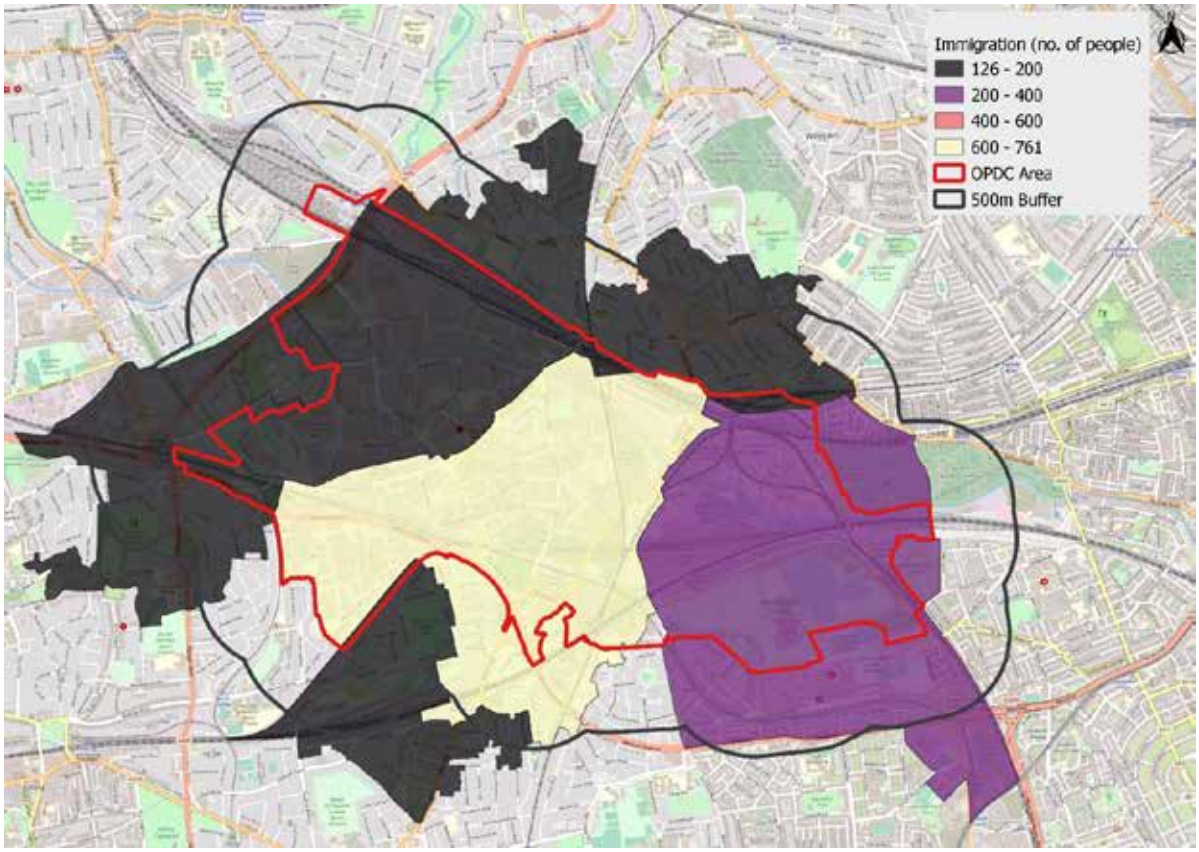
Table 4-4 - In-Migration Flow Destinations by Study Area (and London), %

	OPDC Area	OPDC Area + Buffer	OPDC Region	London	England and Wales	Outside of England and Wales
OPDC Area	8.3%	3.0%	13.2%	39.2%	15.4%	20.9%
OPDC + Buffer	4.2%	11.4%	18.5%	44.0%	6.5%	15.4%
OPDC Region	2.0%	2.8%	23.3%	47.7%	8.7%	15.6%
London	0.3%	0.2%	1.9%	73.7%	9.3%	14.6%

Source: NOMIS from Census 2021 - Origin-destination (flow) data

Immigration, international inward migration, into the OPDC area is mapped in **Map 4-3** below. The majority of the OPDC area and buffer received less than 200 immigrants from abroad in the year preceding the last census (2019/20). The east-most MSOA received more immigrants than the majority with 380 immigrants arriving that year. The middle MSOA received, by far the most immigrants. 761 immigrants moved into the heart of OPDC from abroad.

Map 4-3 - Distribution of Immigration from Outside of the UK



Source: NOMIS from Census 2021 - Origin-destination (flow) data. Base mapping from OpenStreetMap.

4.2.5 Ethnicity

Table 4-5 demonstrates the population share by ethnicity. The OPDC area contrasts England as a whole as it is a more diverse area. The OPDC Area and it's 500m buffer have a similar ethnic split and both have a much lower proportion of white residents at 40 and 41% compared to a national average of almost double (80%). Within London diversity is higher, but most residents still identify as white (54%).

The lower proportion of white residents within the OPDC area reflects the large proportion of Black, Black British, Black Welsh, Caribbean or African residents, who account for 20% of the OPDC area's population. Similarly, 19% of the population identify as Asian, Asian British or Asian Welsh, which is in line with the rest of London, but still twice as large as the national split. Within the host boroughs of Brent, Ealing and Hammersmith and Fulham altogether, there is a higher proportion of Asian residents than in the OPDC area.

Table 4-5 - Population Share by Ethnicity

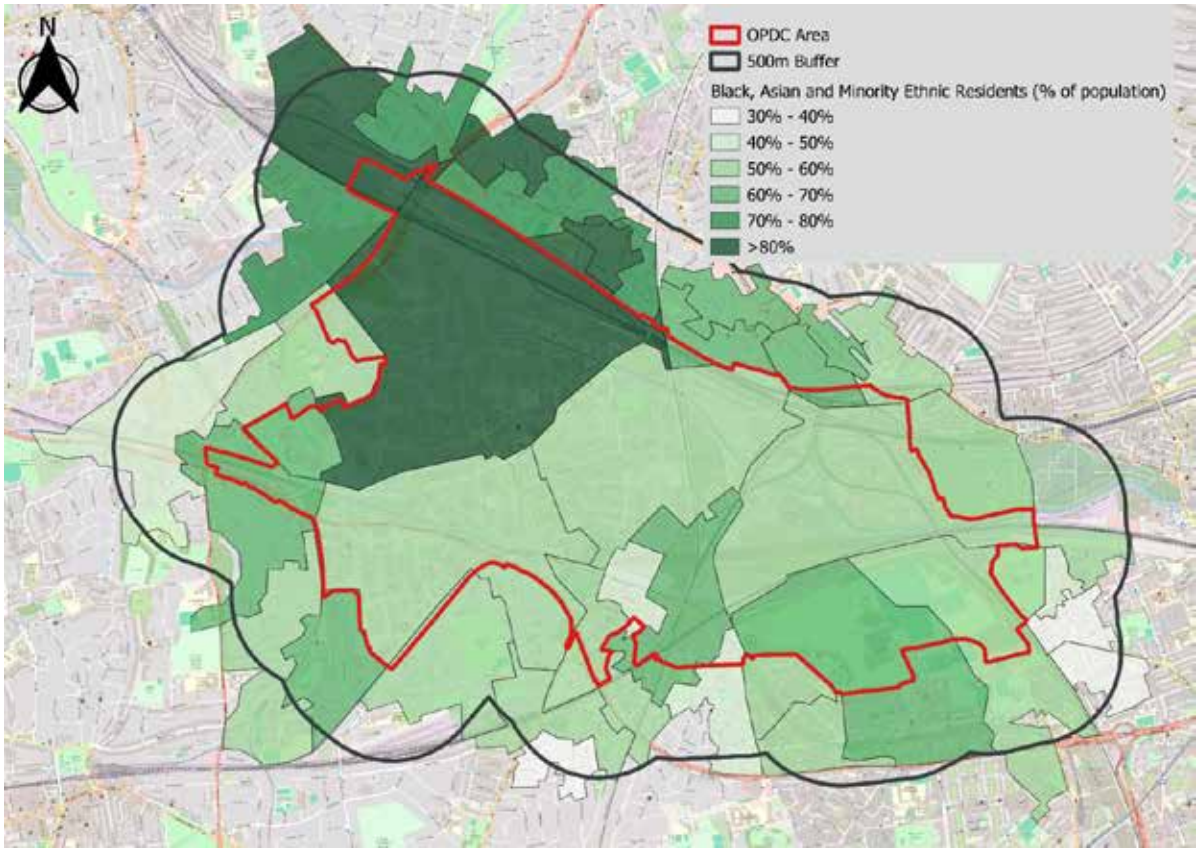
	Asian, Asian British or Asian Welsh	Black, Black British, Black Welsh, Caribbean or African	Mixed or Multiple Ethnic Groups	White	Other Ethnic Group
OPDC	18.7%	20.1%	7.0%	41.2%	13.0%
OPDC + Buffer	20.0%	21.0%	6.4%	40.1%	12.5%
OPDC Region	19.4%	17.0%	6.8%	46.0%	10.9%
Host Boroughs	24.5%	13.5%	5.7%	47.0%	9.3%
London	20.7%	13.5%	5.7%	53.8%	6.3%
England	9.6%	4.2%	3.0%	81.0%	2.2%

Source: Nomis from the ONS 2021 - Ethnic group

Map 4-4 shows the geographical distribution of Black, Asian and Minority Ethnic residents by LSOA within the study area. This map shows the highest concentration of Black, Asian and Minority Ethnic people to be in the northwest of the OPDC area, in some areas exceeding 80% of the population. There is lower concentration then this in the rest of the OPDC area, including some pockets in the far south and far east with less than 40% Black, Asian and Minority Ethnic residents.

Despite this, the area has a high proportion of Black, Asian and Minority Ethnic residents especially compared to the national ethnic mix. As seen in the table, the proportion of non-white residents in England is only 19% which contrasts with the OPDC area where nearly all areas consist of 58.8% Black, Asian and Minority Ethnic residents. Generally, along the periphery of the area there's a higher proportion of Black, Asian and Minority Ethnic residents than in the centre reflecting established neighbourhoods. Overall, OPDC is ethnically very diverse.

Map 4-4 - Distribution of Black, Asian and Minority Ethnic Residents (% of Population)



Source: Nomis from the ONS 2021 - Ethnic group. Base mapping from OpenStreetMap.

4.2.6 Sex and Gender Identity

Table 4-6 shows the gender identities of residents in the OPDC area. There is a higher proportion of people in this area than in the rest of London who do not identify with the sex that they were assigned to at birth. There are also more transgender individuals then in any of the study areas, host boroughs or the rest of London, and 4 times as many trans women than in the rest of the nation.

This indicates a high level of diversity within the OPDC area, and these minority groups together make up almost 2% of the entire area population (1.64%). In contrast, within London only 0.99% of residents do not identify with the sex they were assigned at birth and fewer across England do not (0.58%).

Table 4-6 - Proportion of Population by Gender Identity (by Sex and Overall)

	Same as Sex at Birth	No Specific Identity - but Different to Assigned at Birth	Trans Man	Trans Woman	All Other Gender Identities
OPDC	98.4%	0.8%	0.3%	0.4%	0.1%
OPDC + Buffer	98.5%	0.7%	0.3%	0.3%	0.1%
OPDC Region	98.8%	0.6%	0.2%	0.2%	0.1%
Host Boroughs	98.9%	0.6%	0.2%	0.2%	0.1%
London	99.0%	0.5%	0.2%	0.2%	0.1%
England	99.4%	0.3%	0.1%	0.1%	0.1%

Source: Nomis from the ONS 2021 – Gender identity

4.2.7 Sexual Orientation

Table 4-7 below summarises the proportion of residents who identify with certain sexual orientations. The vast majority in all areas identify as straight or heterosexual, however there is more diversity in sexual orientations within the OPDC area than the rest of London and the UK. The OPDC buffer and region also follow a similar trend to the study area and are both more diverse than London. Almost 10% of residents did not answer, perhaps in fear of judgement or exclusion from other people, which if included could influence the proportion greatly.

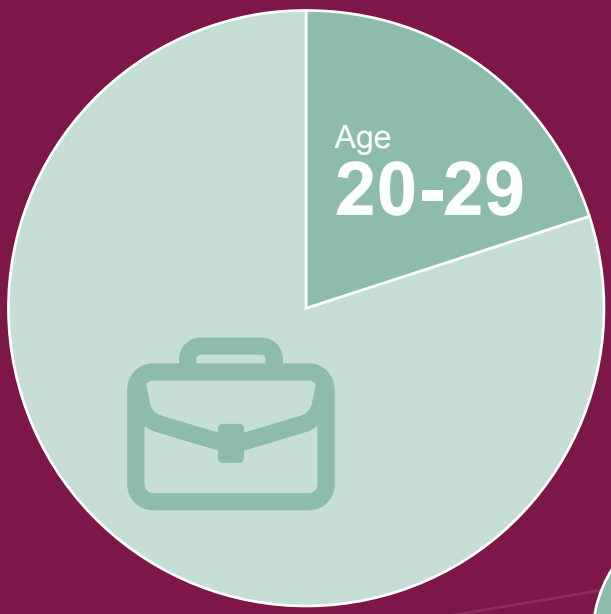
Table 4-7 - Proportion of Population by Sexual Orientation

	Straight or Heterosexual	Gay or Lesbian	Bisexual	All other
OPDC	94.7%	2.3%	2.3%	0.7%
OPDC + Buffer	95.3%	2.1%	1.9%	0.6%
OPDC Region	95.2%	2.4%	1.8%	0.6%
Host Boroughs	95.8%	2.0%	1.6%	0.6%
London	95.3%	2.5%	1.7%	0.6%
England	96.6%	1.7%	1.4%	0.4%

Source: Nomis from the ONS 2021 – Sexual orientation

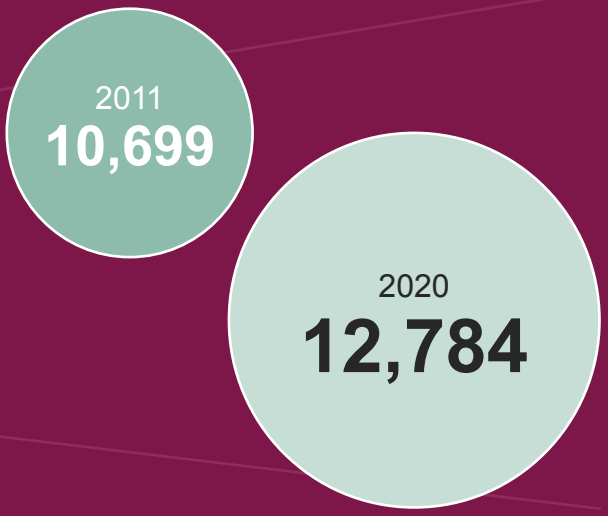
4.2.8 Summary and Insights

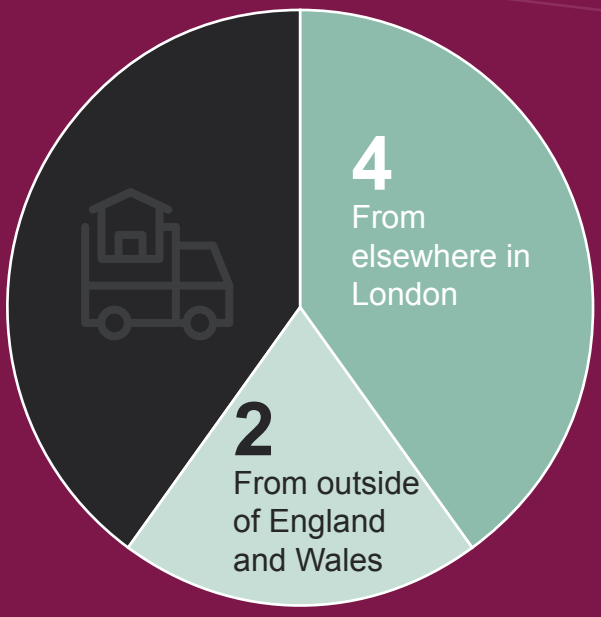
The OPDC area is very diverse in comparison to the rest of England even London. It has a young and growing population. This is demonstrated by the following:



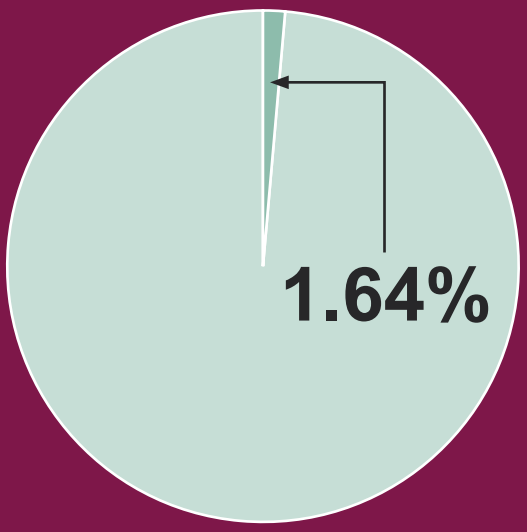
Most of the area's population are of working age, 11% more than national average. Only 9% are old dependents which is half of the national average. **A fifth of all residents are in the 20-29 age band.**

Population growth is volatile but averages 2.02% a year. The population of the area grew from **10,699 in 2011** to **12,784 in 2020**.



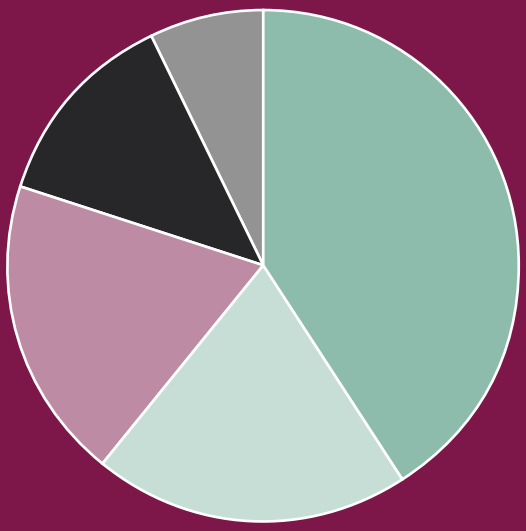


4 in 10 people moving to the area are from elsewhere in London whilst **2 in 10** come from outside of England and Wales.



A smaller proportion of people within the OPDC area identify as the same gender assigned at birth than the rest of London and England - **1.64% of people do not identify as the same sexual identity as at birth.**

There is also a lower proportion of **straight or heterosexual people** in the OPDC area when compared to the rest of London and England.



The area is very ethnically diverse with around 41% identifying as white; 20% Black, Black British, Black Welsh, Caribbean or African; 19% Asian, Asian British or Asian Welsh; 13% Other Ethnic Group; and 7% Mixed or Multiple Ethnic Groups.

The most diverse region appears to be the **Northwest** of the area.

4.3 Community Profile

4.3.1 Deprivation

The most common measure of deprivation is the Index of Multiple Deprivation (IMD). The IMD compiles information on various dimensions of household deprivation, giving different weights to each dimension, and calculates a single score. Deprivation measures include income, employment, education, health, crime, living environment, and barriers to housing and services. The IMD is a measure for deprivation in small areas. In every area, there will be people who are not deprived and those who aren't, as a result, this index is not an appropriate tool for targeting individuals. The Index of Multiple Deprivation is a measure of relative deprivation. It can determine if one area is more deprived than another, but not the extent.

The Data in **Table 4-8** shows the average rank for the areas within the OPDC area. These metrics are split into two domains, all people and Children and Young People. The 1st decile is amongst the 10% most deprived in the country and the 10th decile is the least deprived 10% in the country.

The shows that for all peoples, both the OPDC area and the OPDC Area with the 500m buffer surrounding it rank in the 3rd decile for deprivation. Meaning households in the OPDC area are within the 30% most deprived households in the country, on average. Children in the OPDC area are less deprived compared to others, ranking 5th in the children and young people domain. This suggests that most people experiencing deprivation in the area are adults.

Table 4-8 - Decile and Average Rank for IMD, All Peoples and Children and Young People Sub-Domain

	Average Rank	Decile	Average Rank - Children and Young People	Decile - Children and Young People
OPDC	7,351	3	17,520	5
OPDC + Buffer	9,468	3	17,388	5

Source: National Statistics – English Indices of Deprivation 2019

The table below summarises the number and proportion of LSOAs in the study area split by each decile of the IMD. The most common decile for deprivation of all people is 2nd decile with 11 LSOAs, making up 28% of the total study area. Meaning the most common decile for deprivation for each LSOA is amongst the 20% most deprived in the country. Followed by the 1st, 3rd, 4th, and 5th decile with 6 deciles (15%) each.

However, for Children and Young People domain the 6th decile was the most common with 12 LSOAs, comprising 30% of the total. Followed closely by the 5th decile with 11 LSOAs (28%). Demonstrating children and young people most commonly experience levels of deprivation between the 50th and 60th percentile compared to the rest of the country. Comparing these two domains, we can see a similar pattern to **Table 4-9** below.

Children and young people experience less deprivation than the 'average' person in the study area. Suggesting, once again that much of the deprivation in the study area is faced by working age adults and the elderly.

Table 4-9 - Number and Percentage of LSOA's Within the Study Area that Fall into Each Decile of IMD

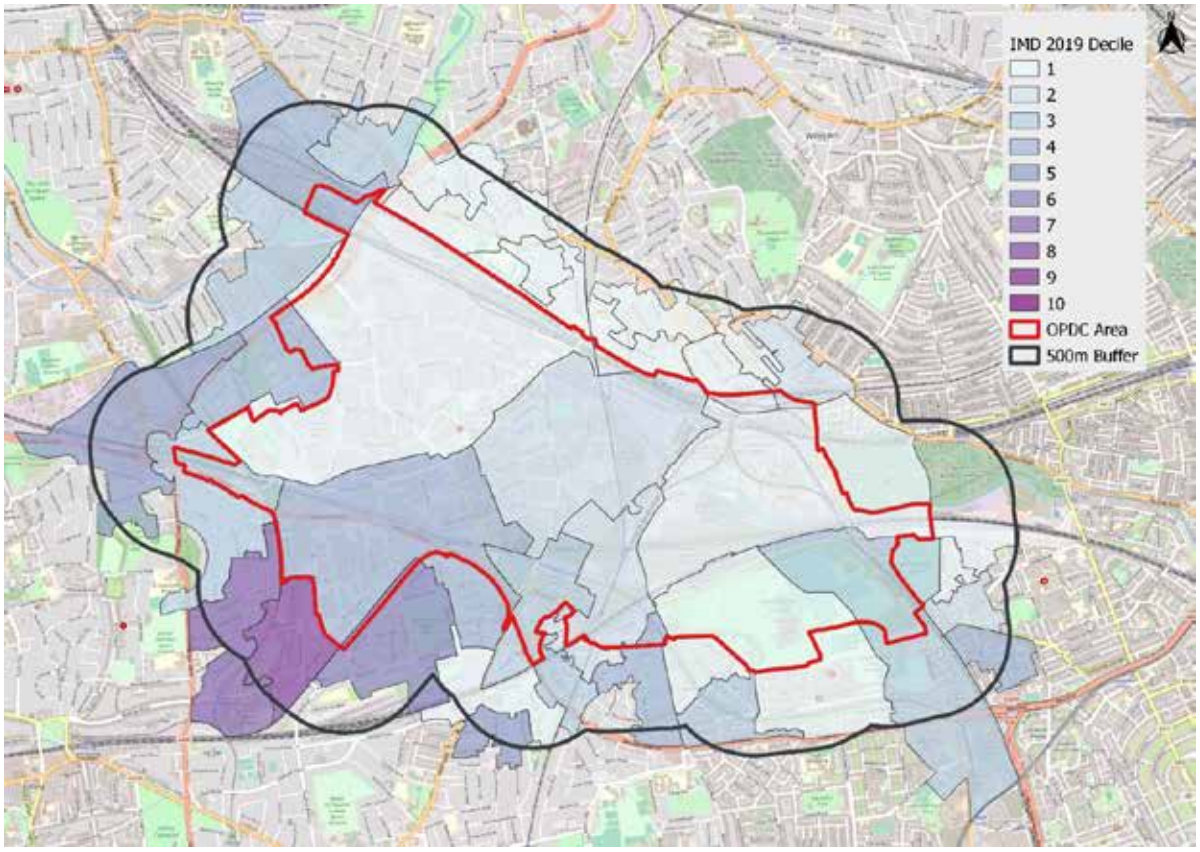
	All People		Children and Young People	
	Number	% of LSOA's in the Study Area	Number	% of LSOA's in the Study Area
1st Decile (Most)	6	15%	0	0%
2nd Decile	11	28%	1	3%
3rd Decile	6	15%	1	3%
4th Decile	6	15%	3	8%
5th Decile	6	15%	11	28%
6th Decile	2	5%	12	30%
7th Decile	1	3%	7	18%
8th Decile	1	3%	3	8%
9th Decile	1	3%	1	3%
10th Decile (Least)	0	0%	1	3%
Total	40	100%	40	100%

Source: National Statistics – English Indices of Deprivation 2019

Map 4-5 below shows the IMD rank by LSOA within the study area for all people. As suggested in the table above, the modal rank observed for each study area is the 2nd decile, with the highest concentration of deprivation located in the North and East of the region, with the vast majorities of LSOA's in this area ranking in the 3rd decile or below.

Conversely, the Southern and Western parts of the OPDC have a higher concentration of LSOA's that are in the least deprived decile. Here, more LSOA's rank above the 5th decile with 3 ranking in the 7th, 8th and 9th deciles, respectively. Observing this geographic distribution shows that much of the deprivation in the OPDC Area can be found to the North and East, while there are pockets of extreme lack of deprivation to the South and West reflecting adjacent residential neighbourhoods.

Map 4-5 - IMD by LSOA



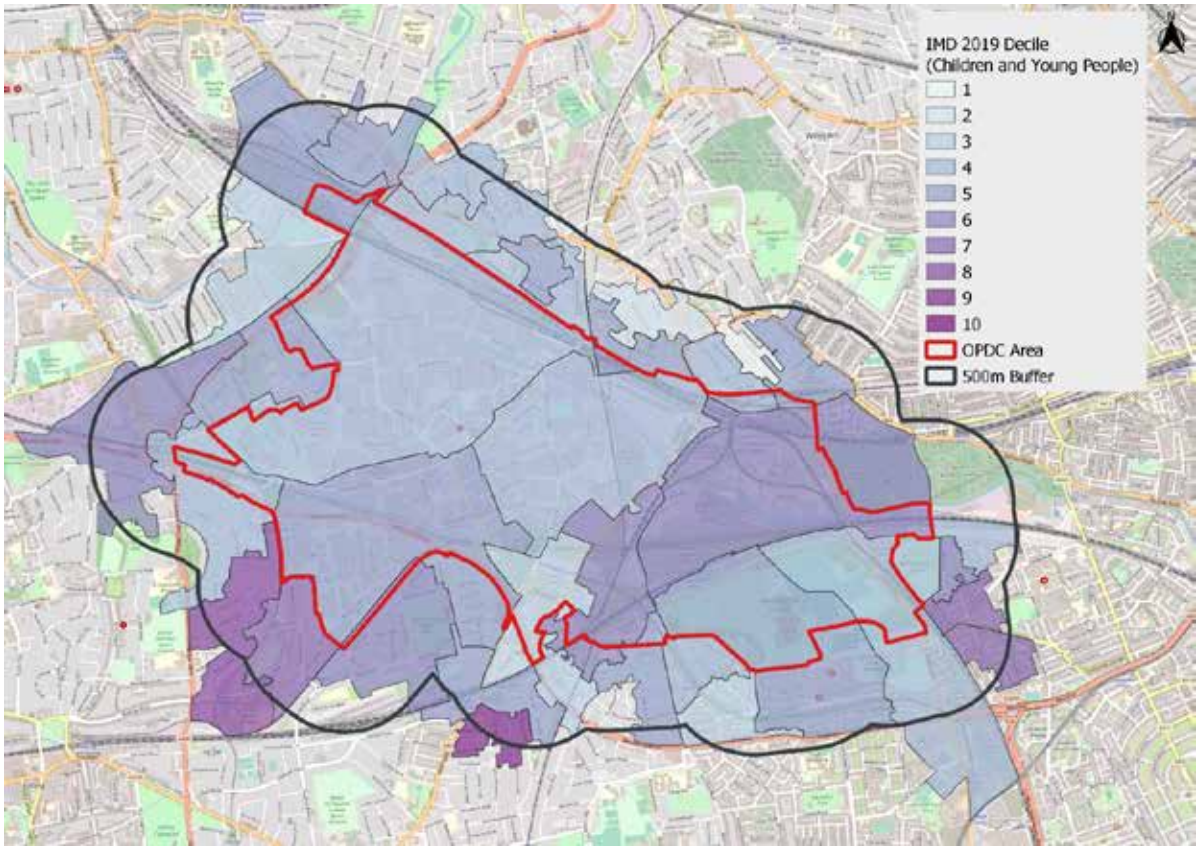
Source: National Statistics – English Indices of Deprivation 2019. Base mapping from OpenStreetMap.

Map 4-6 below shows the IMD rank by LSOA within the study area for children and young people. As suggested in the table above, the modal ranks observed with in the study area are the 5th and 6th decile. Similar to the domain for all people, above, much of the deprivation in the OPDC area is located in the north, ranking a low as the 2nd and 3rd deciles.

Many of the same LSOAs in the South/Southwest of the area, that demonstrated extremely low levels of deprivation, also show the same low levels for children and young people. There are other smaller areas of low deprivation for children and young people located in the east and west of the region.

Overall, we see much lower levels of deprivation amongst children and young people in the OPDC Area when compared to deprivation across all age groups.

Map 4-6 - IMD for Children and Young People by LSOA



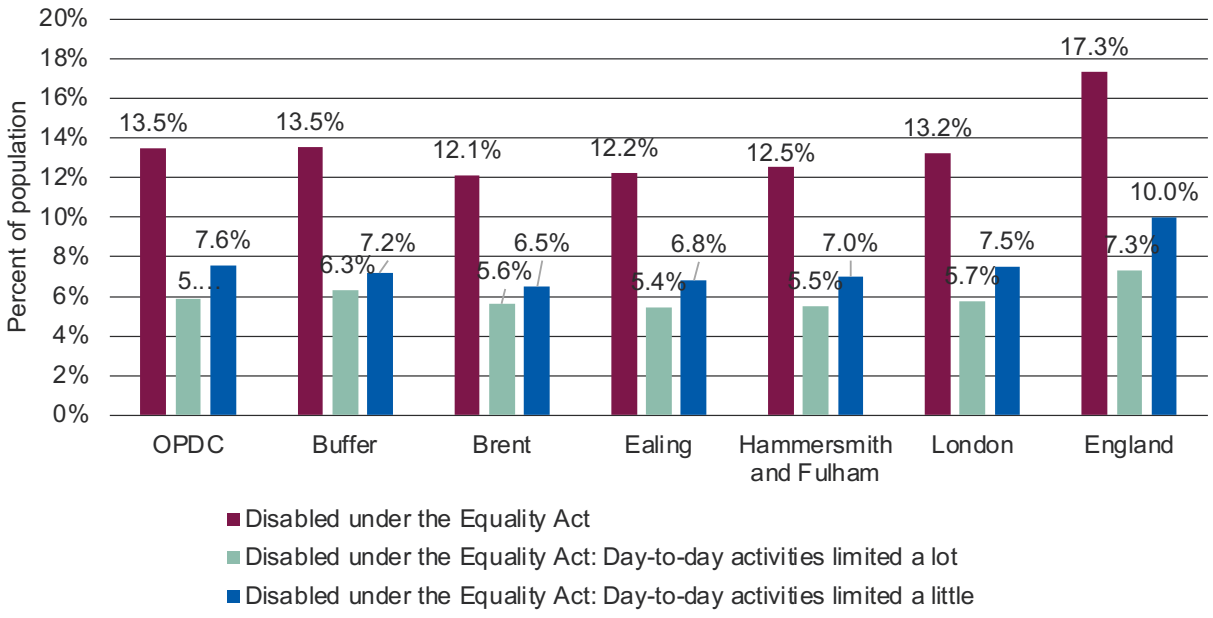
Source: National Statistics – English Indices of Deprivation 2019. Base mapping from OpenStreetMap.

4.3.2 Health and Wellbeing

Figure 4-4 shows the percentage of residents with long-term health problems or disability. That number is further sub-divided into those who's day-to-day activities are limited a lot and limited a little. Disability is defined as it is under the 2010 disability act where you one must have a "physical or mental impairment that has a 'substantial' and 'long-term' negative effect on your ability to do normal daily activities"[4].

13.5% of the study area classify themselves as disabled, with 5.9% of them considering their day-to-day activities limited a lot and 7.6% limited a little. A similar pattern can be seen in the 500m buffer surrounding the study area and across London as a whole, with the same or similar proportion of disabled people and a similar proportion of disabled people limited a lot and a little. The proportion of disabled people in the study area is between 1.0% and 1.4% higher than the host boroughs.

Figure 4-4 - Proportion of Residents with a Long-Term Health Problem or Disability Split into Percentage of Population with Day-to-Day Activities Limited a Lot or a Little.



Source: ONS – Disability 2021

[4]Gov.uk – Definition of disability under the 2010 disability act (https://www.gov.uk/definition-of-disability-under-equality-act-2010) (retrieved November 2023)

Table 4-10 displays the number and percentage of children who are overweight or obese in reception and Year 6. The OPDC study area has a higher proportion of overweight children in reception (14.1%) compared to the OPDC region and the other host boroughs. Although the overall number rises, the proportion of overweight children falls when the 500m buffer is included. The OPDC area, buffer and region all have similar proportions of obese children in reception, at 23.6% 25.2% and 24.4% respectively.

However, these proportions are all far higher than each of the host boroughs. The same is true for children in year 6. The proportion of children in the OPDC area overweight in year six (27.9%) is higher than the host boroughs (between 14.1-15.8%). However, the proportion of obese children in year 6 (38.7%) is far higher than in the individual host boroughs with between 19.9% and 23.4% of the population.

Table 4-10 - Percentage and Number of Children with Excess Weight and Obesity at Reception Age and Year 6

	Overweight Reception		Obese Reception		Overweight Year 6		Obese Year 6	
	Number	%	Number	%	Number	%	Number	%
OPDC	141	14.1%	200	23.6%	279	27.9%	328	38.7%
OPDC + Buffer	265	12.9%	422	25.2%	545	26.6%	665	39.7%
Region	1161	11.8%	2072	24.4%	2390	24.3%	3363	39.5%
Brent	445	11.3%	300	7.6%	570	14.2%	820	20.4%
Ealing	460	11.4%	395	9.8%	615	14.4%	1000	23.4%
Hammer-smith and Fulham	165	13.0%	100	7.9%	210	15.8%	265	19.9%

Source: NHS health and social care information centre - Obesity, Physical Activity and Diet 2019

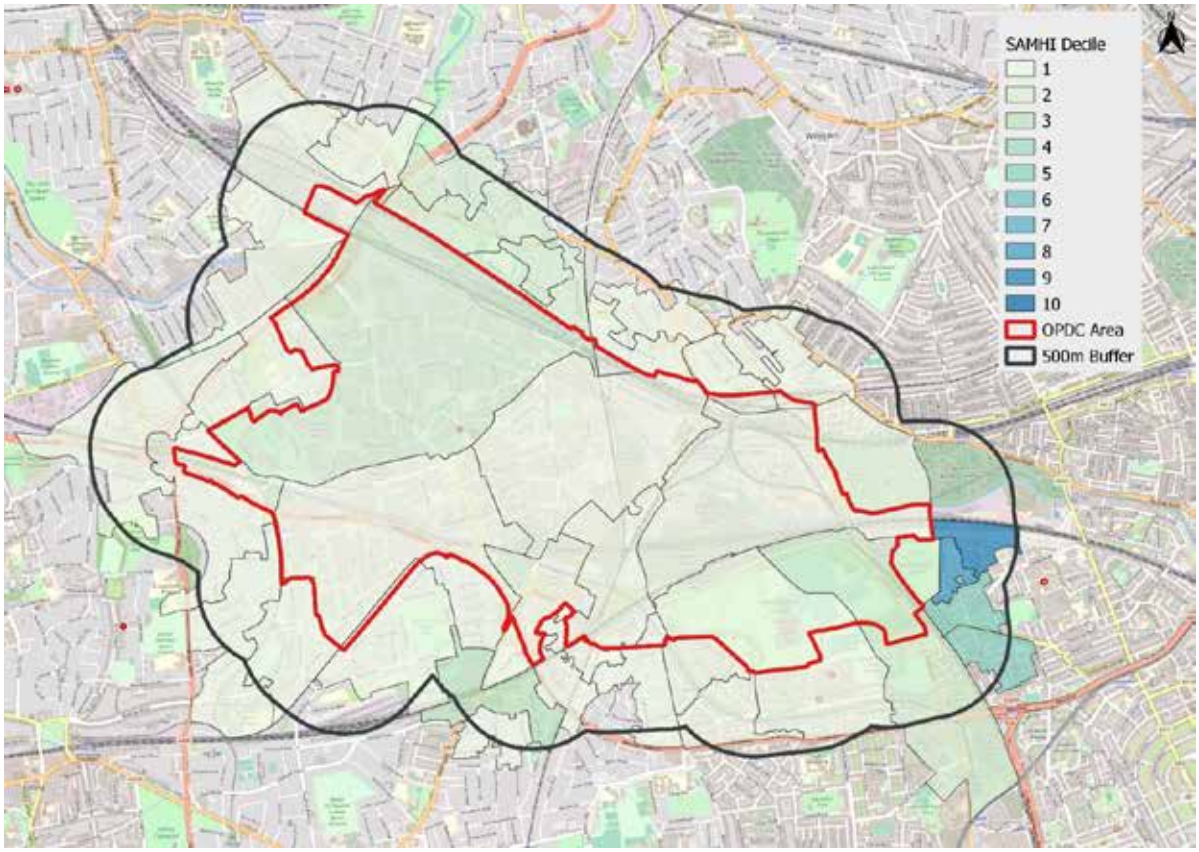
The Small Area Mental Health Index (SAMHI) is a composite measure that assesses the mental health of the population within each Lower Super Output Area (LSOA) in England annually. The SAMHI combines data on mental health from multiple sources into a single index. Including; NHS-Mental health-related hospital attendances, prescribing data of antidepressants, Quality of Outcomes Framework data on depression, and DWP data on those receiving Incapacity benefit and Employment support allowance for mental illness.

Most of the LOSA's in the OPDC area plus the 500m buffer fall into the 1st decile for the SAMHI. Out of the 34 LSOAs in the OPDC + buffer region, 17 are ranked in the 1st decile for the SAMHI, indicating that 50% of all LSOAs in that area fall into the bottom 10% of the SAMHI rankings for the entire UK. The next most common decile was the 2nd with 7 LSOAs, comprising 21% of the total in the study area. Meaning 71% of the LSOAs in our study area fall within the bottom 20% of mental health in the UK according to the SAMHI. This demonstrates a very poor state of mental health in the OPDC area.

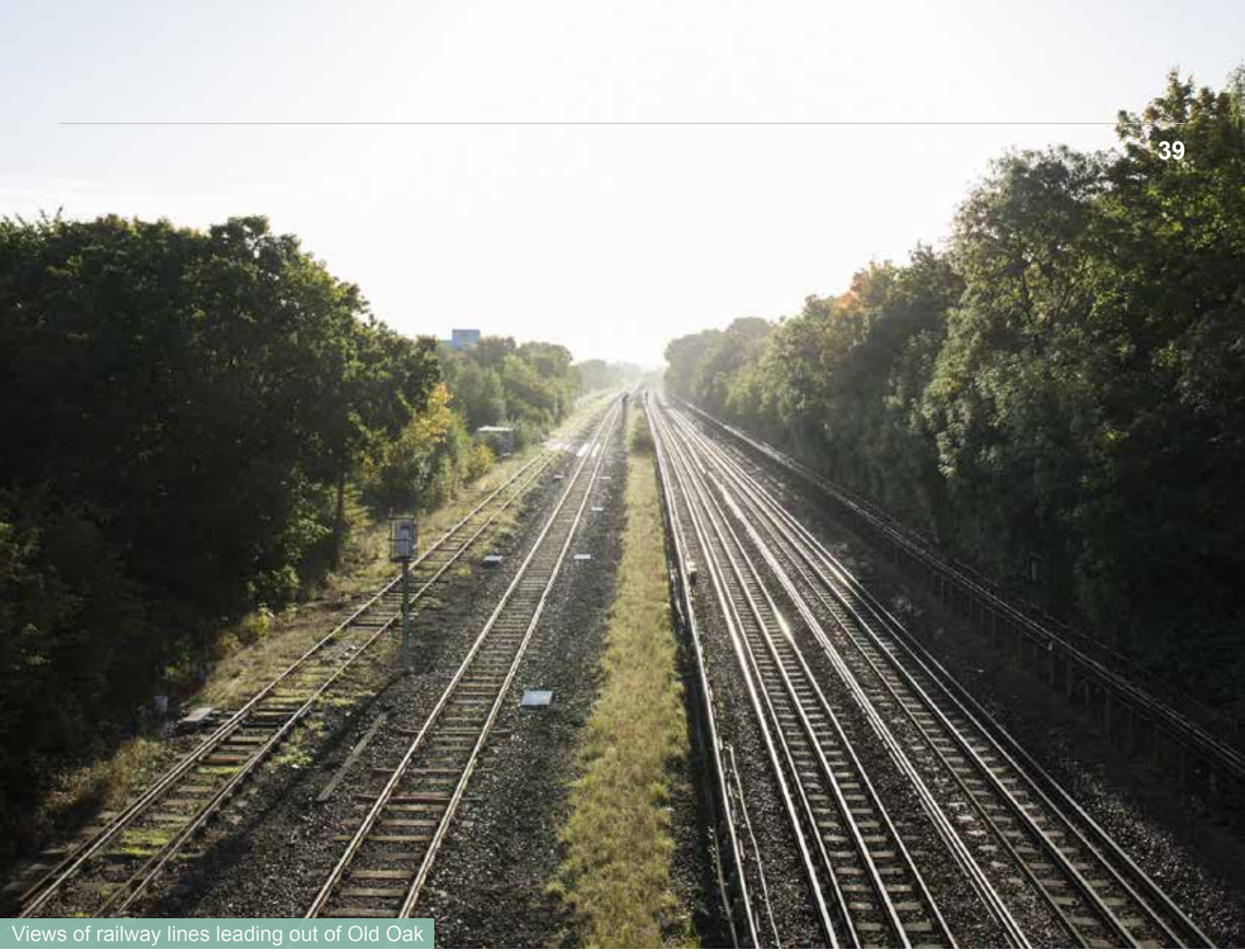
There are only 5 LSOAs that are above the 5th decile for SAMHI score. **Map 4-7** below shows the geographical distribution of the SAMHI score in the OPDC Area. As mentioned, most of the area's mental health ranks in the bottom two deciles, which are spread across the area. However, there are small areas of good mental health located in the Northwest of the East of the OPDC area. with two of the LSOAs in the east ranking in the 9th and 10th decile as having some of the best mental health in the country according to the SAMHI.

The overall picture of the SAMHI demonstrates a poor level of mental health across the OPDC Area with small pockets of very good mental health shown in West Acton and North Kensington outside of the OPDC Area.

Map 4-7 - SAMHI Score by LSOA



Source: Place-based longitudinal data resource – Small area mental health index 2019. Base mapping from OpenStreetMap.



Views of railway lines leading out of Old Oak

The general health profile in the OPDC area reveals notable insights. Around 13.5% of residents classify themselves as disabled, with 5.9% having significantly limited day-to-day activities. The percentage of disabled individuals is slightly higher than in the host boroughs. Concerningly, data on childhood health indicates higher proportions of overweight and obese children in reception and Year 6 compared to both the wider OPDC region and host boroughs.

In terms of mental health, the Small Area Mental Health Index (SAMHI) paints a concerning picture. Half of the Lower Super Output Areas (LSOAs) in the OPDC area fall within the bottom 10% of the SAMHI rankings for the entire UK, indicating a significant mental health challenge. However, pockets of better mental health are observed in the northwest and east of the area.

4.3.3 Crime

Table 4-11 contains data for the reported number of crimes per 1000 people. Crime is split by type of crime as defined by the London Metropolitan Police. The OPDC area has a much higher total number of crimes per 1000 people (386.7) compared to the host boroughs (between 12.6 and 18.4) and even the rest of London (190.7). This is because the OPDC area is primarily a commercial area with a low population density compared to London as a whole.

The most reported crime in the OPDC area was violence against a person with 124.1 offences per 1000 residents. This is considerably greater than the next two most prevalent crimes Theft and Vehicle Offences with 75.6 and 68.0 offences per 1000 people, respectively. This pattern is the same across all comparator areas with Violence against a person being the most prevalent form of offence, followed by Theft and Vehicle Offences.

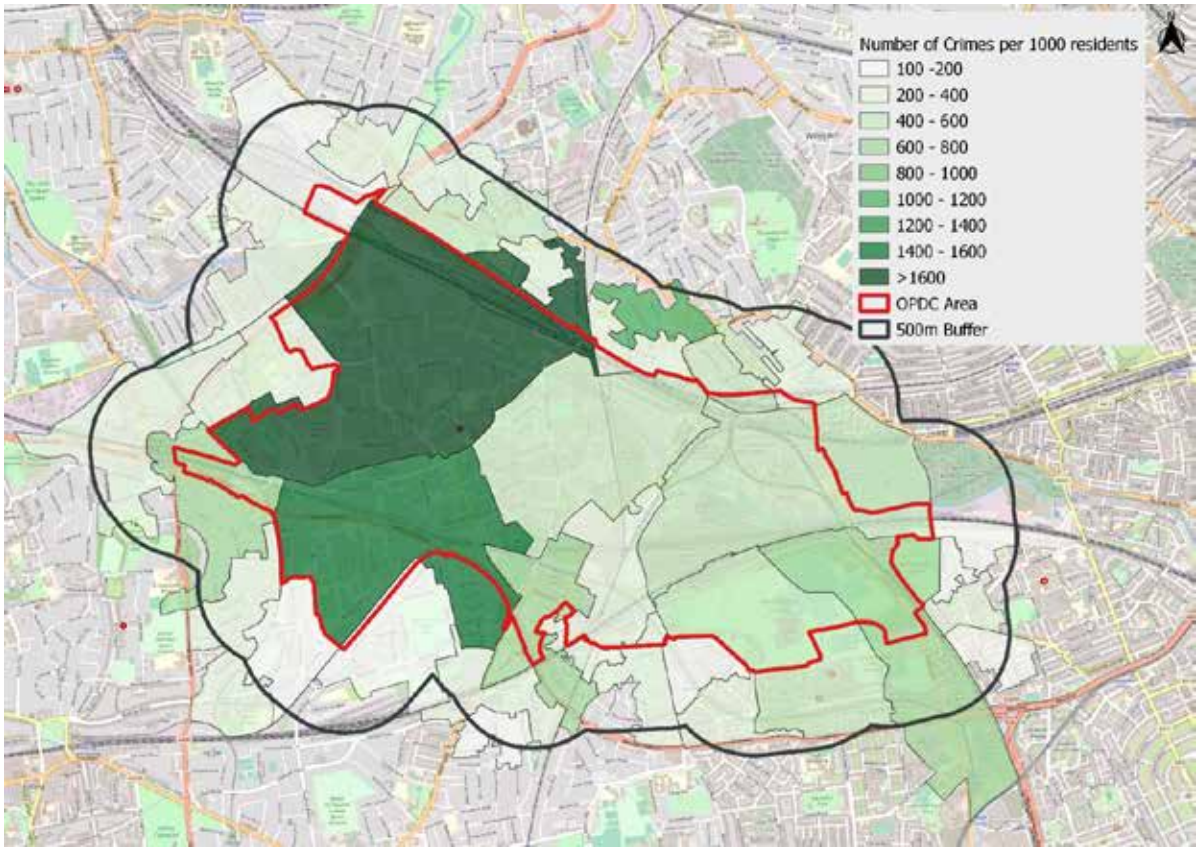
Table 4-11 - Reported Number of Crimes per 1000 People. Total and by Type

	OPDC Area	OPDC + Buffer	Brent	Ealing	Hammer-smith and Fulham	London
Total Crimes	386.7	226.8	18.4	15.8	12.6	190.7
Arson and Criminal Damage	29.2	16.9	1.4	1.1	1.1	12.2
Burglary	32.9	16.6	1.3	1.2	0.9	12.2
Drug Offences	14.4	13.7	1.4	0.6	0.8	9.7
Miscellaneous Crimes Against Society	6.4	3.0	0.2	0.2	0.3	2.7
Possession of Weapons	1.6	1.6	0.1	0.1	0.1	1.4
Public Order Offences	25.7	17.8	1.6	1.1	1.0	13.0
Robbery	8.9	6.2	0.6	0.4	0.4	6.5
Theft	75.6	41.3	3.6	2.9	2.1	54.7
Vehicle Offences	68.0	37.1	1.8	4.0	1.4	24.0
Violence Against a Person	124.1	72.7	6.4	4.3	4.7	54.4

Source: Met police - Sep 2021–Aug 2023

Map 4-8 shows the geographical distribution of all crime data. The map shows the highest concentration of crimes occurring in the west of the OPDC area, covering a portion of the Park Royal Strategic Industrial Location, with two LSOAs West of the centre having a far higher number of crimes per 1000 people than many of the others surrounding it (+1200 crimes per 1000 people). LSOA's in the South and along the periphery of the area have much lower rates of crime, some of which as low as 100-200 crimes per 1000 residents.

Map 4-8 - Reported Number of Crimes per 1,000 People by LSOA



Source: Met police - Sep 2021–Aug 2023. Base mapping from OpenStreetMap.

4.3.4 Education and Qualifications

A National Vocational Qualification (NVQ) is a work-based qualification that demonstrates the skills and knowledge a person needs to do a job. Each NVQ level is equivalent to a certain educational standard. For instance, a level 1 NVQ can be compared to 3/4 GCSE grades 1-3 or D-G. Level 2 NVQ is comparable to achieving 4-5 GCSE grades 4-9 or A*-C. NVQ Level 3 is seen as equivalent to 2 A Levels. The NVQ Level 4 is on par with a Higher Education Certificate, or BTEC.

Table 4-12 shows that 44.4% of the population in the OPDC area have a qualification equivalent to a level 4 or higher. This is the level of qualification that the largest proportion of residents possess which is above the national average of 33.9% achieving over a level 4 qualification. However, the OPDC area has a lower proportion of level 4 qualifications compared to the rest of the OPDC region and each of the host boroughs. However, it has a significantly lower number of people with no qualifications and a higher number of Level 3 qualifications than all the other comparator areas.

Table 4-12 - Percentage of Working Age Resident Population Attaining each Level of Qualification (NVQs)

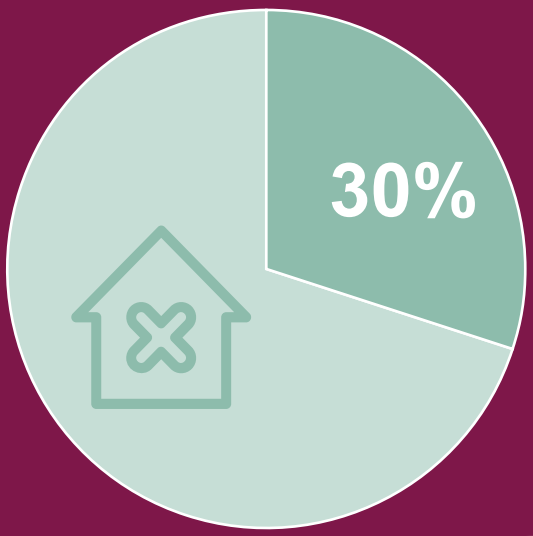
	OPDC	OPDC + Buffer	OPDC Region	Host Boroughs	London	England
No Qualifications	15.10%	19.50%	18.10%	18.10%	16.20%	18.10%
Level 1 and Entry Level Qualification	5.90%	7.80%	7.50%	7.70%	7.70%	9.70%
Level 2 Qualification	7.70%	9.00%	8.90%	9.00%	10.00%	13.30%
Apprenticeship	3.20%	3.40%	3.10%	3.20%	3.20%	5.30%
Level 3 Qualification	19.90%	14.90%	13.20%	12.70%	13.20%	16.90%
Level 4 Qualification or above	44.40%	41.50%	45.60%	45.50%	46.70%	33.90%
Other Qualification	3.80%	4.00%	3.60%	3.80%	3.10%	2.80%

Source: ONS – Highest Attained qualification, 2021 Census. Base mapping from OpenStreetMap.

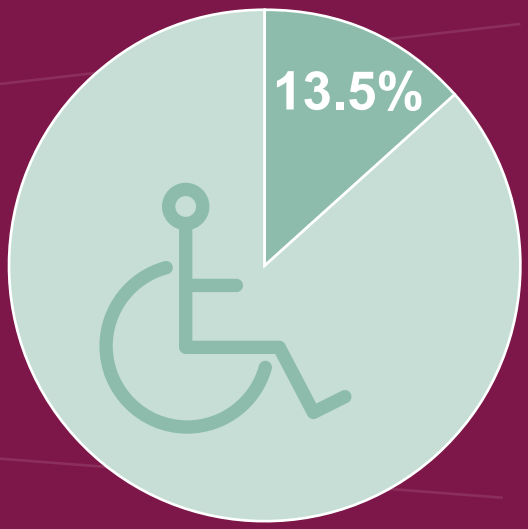
Educational attainment data for those in KS2 and KS4 has not been published in recent years at a granular enough level for our analysis to be meaningful. Therefore, this has not been analysed.

4.3.5 Summary and Insights

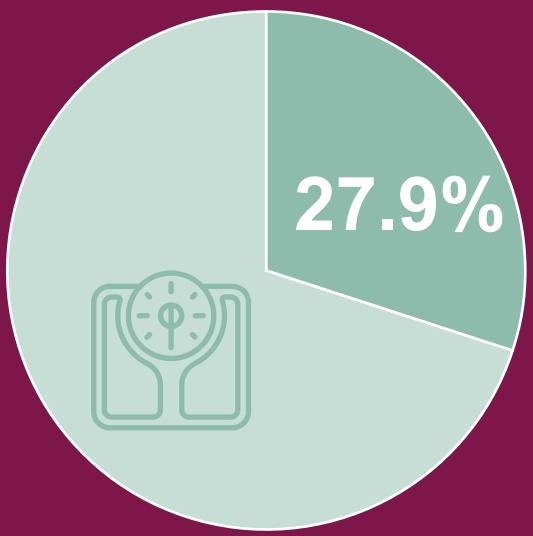
The analysis of the OPDC area reveals a complex and multifaceted community profile with varying levels of deprivation, health challenges, mental health concerns, and educational attainment. Some of the headline statistics are outlined below.



The OPDC area is relatively deprived - on average, the LSOAs OPDC are in the **top 30% of the most deprived** LSOAs in the country. Levels of childhood deprivation in the OPDC area are not as high but are still worse than the average (median) for England.

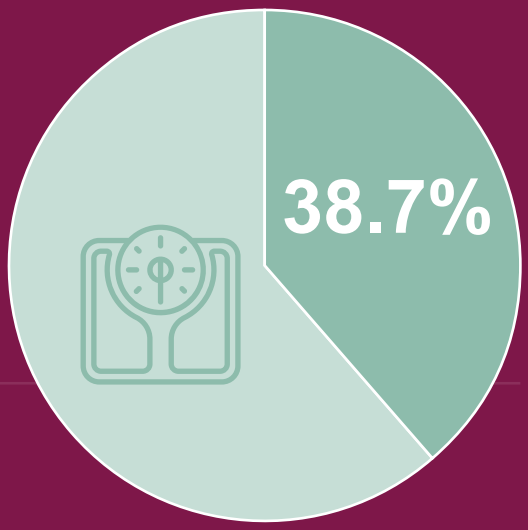


13.5% of the study area residents classify themselves as disabled with 5.9% of the OPDC Area's population's day-to-day activities are limited a lot by disability.



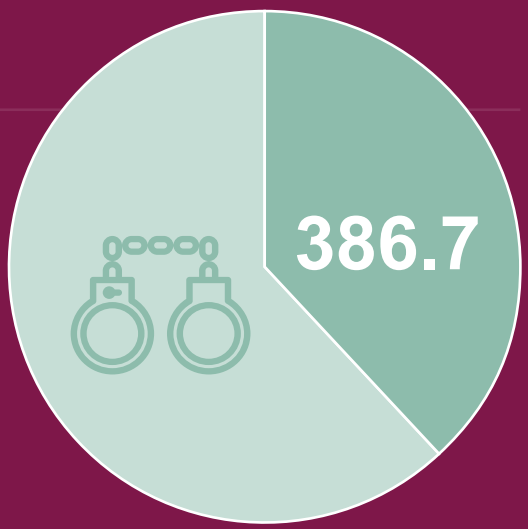
In Reception, 14.1% of children are overweight, this is higher than all of our compared areas including the proportion for the host boroughs. **27.9% in Year 6 are overweight**. This number falls when considering the buffer and whole OPDC region, but is still far higher than the proportion for the host boroughs.

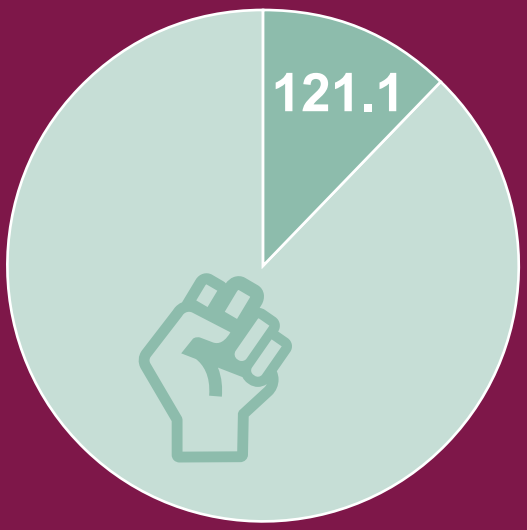
In Reception, 23.6% of children are obese, and **38.7% in Year 6 are obese**. Both of these proportions are far higher than the proportions for the comparator areas, double the proportion of some of the host boroughs.



Levels of mental health in the OPDC area are poor - **50% of LSOAs in the OPDC area fall within the bottom 10% of the SAMHI rankings for the UK**. There are only 5 LSOAs above the top 50% of the rankings.

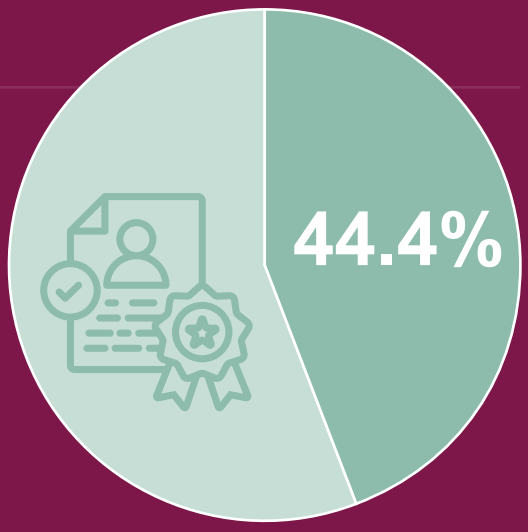
The OPDC area has a much higher total number of **crimes per 1,000 people (386.7)** compared to the host boroughs and rest of London. This is because the OPDC area is primarily a commercial area with a low population density compared to London as a whole.





Violence against a person is the most reported crime in the OPDC as it is across London, with 124.1 offenses per 1,000 residents.

The OPDC area has a relatively well qualified population - **44.4% of the population in the OPDC area have a qualification** equivalent to a level 4 or higher compared to 33.9% across England. The area has a lower proportion of level 4 qualifications compared to the rest of the OPDC region and host boroughs but has fewer people with no qualifications and more with Level 3 qualifications.



4.4 Income and Employment

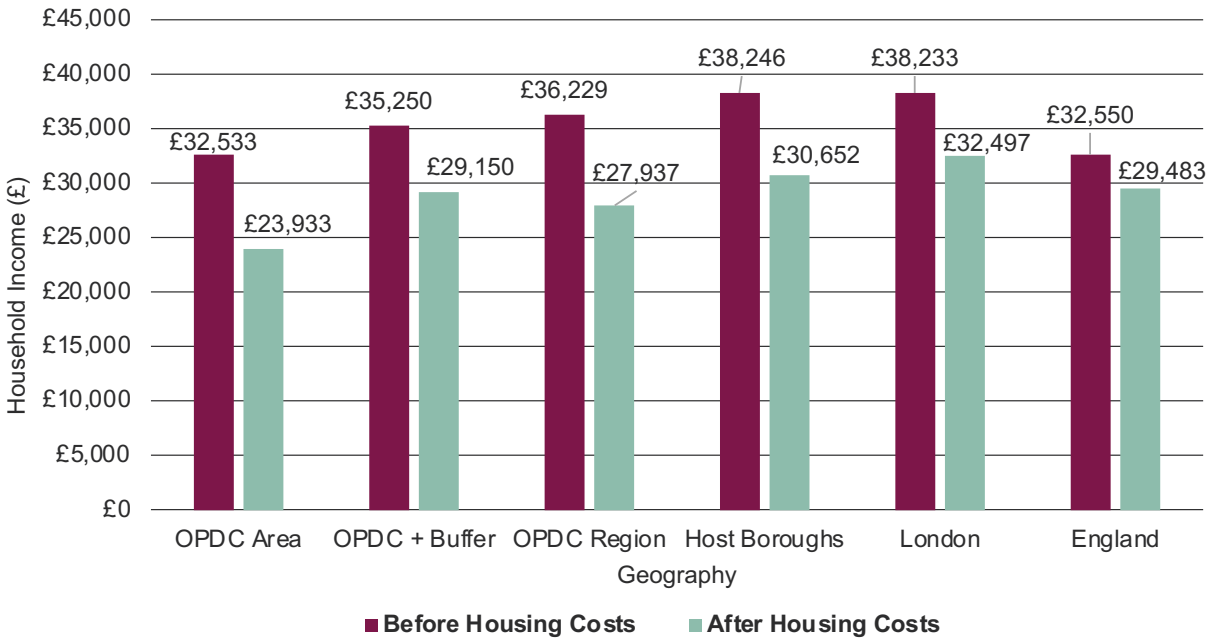
4.4.1 Income

Figure 4-5 shows the average (mean) household income before and after housing costs. The OPDC area has the lowest household income of all comparator geographies in both categories, at £32,533 before housing costs, and £23,933 after. This average household income, before housing costs are included, is very similar to the national average household income.

However, once housing is taken into consideration, average household income for the OPDC area falls by £8,600 (24%) compared to London housing costs only reducing household income by £5,700 (15%). This difference emphasises the high housing costs in the area. Therefore, OPDC residents have less disposable income than an identical income counterpart in London and are relatively poorer.

There is variation especially within smaller areas, as the buffer appears to have lower housing costs than other OPDC geographies, despite the region having higher salaries.

Figure 4-5 - Average Household Income Before and After Housing Costs



Source: ONS - Income estimates for small areas, England and Wales 2020

4.4.2 Economic Activity and Employment

Claimant rate is a good indicator of unemployment as benefits claimed are unemployment related and more recent data is available than for the official unemployment rate. However, not all unemployed people will claim benefits, so this rate is likely to be is an underestimate of unemployment.

The data in **Table 4-13** shows that the claimant rate in 2023 for the OPDC area was lower than for the Host Boroughs, London and England. However, the claimant rate in the OPDC + Buffer area and OPDC Region was higher than for the comparator areas.

Table 4-13 - Claimant Rate by Age

	16-24	25-34	35-44	45-54	55-64	Total
OPDC	1.84%	3.07%	3.41%	3.13%	2.97%	2.84%
OPDC + Buffer	4.35%	6.85%	6.97%	6.25%	7.57%	6.41%
OPDC Region	4.58%	6.02%	6.78%	5.91%	6.50%	6.09%
Host Boroughs	4.37%	5.64%	6.01%	5.52%	5.78%	5.61%
London	4.28%	4.88%	5.25%	4.74%	4.79%	4.91%
England	3.93%	4.62%	4.44%	2.98%	2.52%	3.76%

Source: Nomis from ONS – Claimant count by sex and age 2023

Table 4-14 shows the number of claimants in each age group. Within the OPDC area the age groups with the most claimants are ages 25-34 (16 claimants) and 35-44 (14 claimants). This follows a similar trend to the comparator areas where the most claimants fall between these ages.

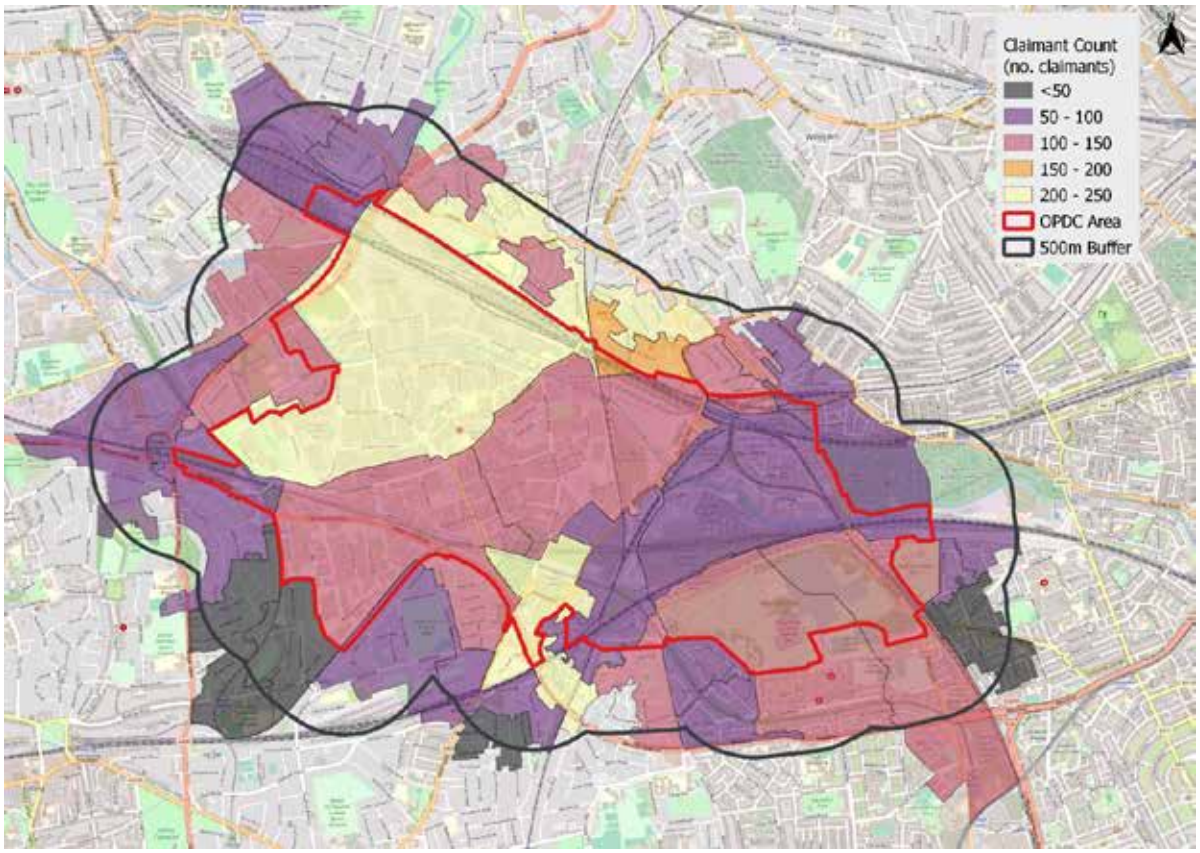
Table 4-14 - Showing Distribution of Claimants by Age, Percentage

	16-24	25-34	35-44	45-54	55-64	65+	Total Claimants
OPDC	15.9%	28.3%	24.6%	18.1%	13.0%	0.0%	58
OPDC + Buffer	13.8%	26.5%	24.1%	17.9%	15.9%	1.8%	50
OPDC Region	13.1%	25.6%	23.8%	18.2%	15.8%	3.5%	217
Host Boroughs	12.9%	25.7%	23.9%	18.8%	15.2%	3.5%	5,923
London	13.8%	25.7%	24.4%	18.3%	14.5%	3.2%	151,280
England	17.3%	26.1%	24.0%	16.5%	13.1%	3.1%	680,270

Source: Nomis from ONS – Claimant count by sex and age 2023

Map 4-9 shows the distribution of claimants in by LSOA. It can be seen that there is a large concentration of claimants to the north of the OPDC area in the buffer area.

Map 4-9 Claimant Count by LSOA

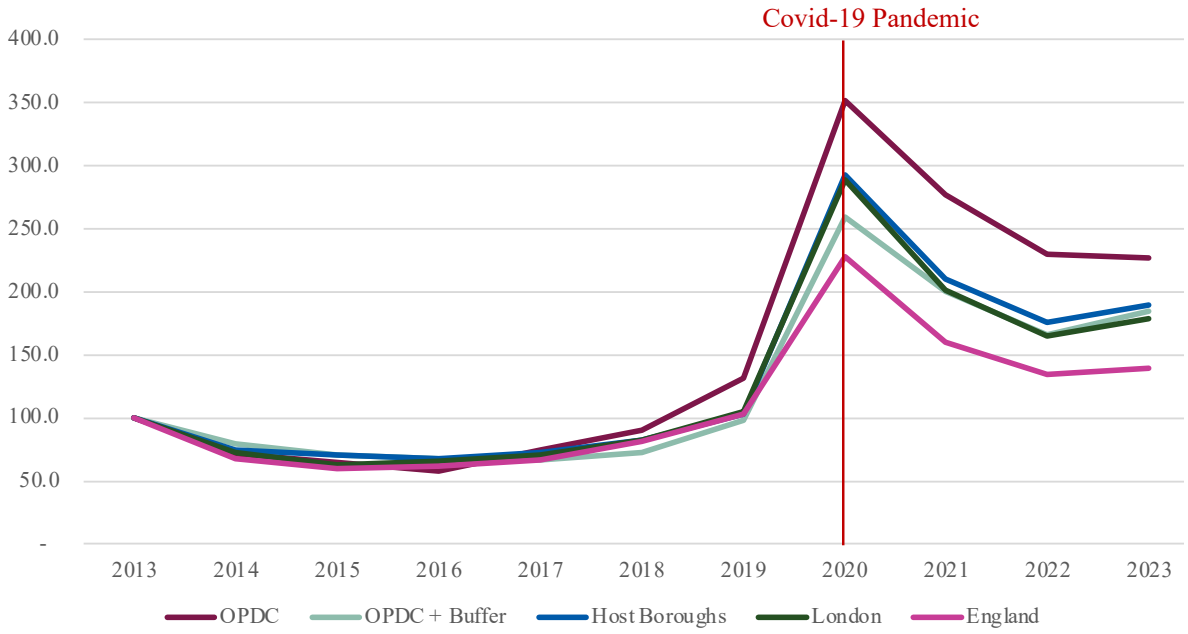


Source: Nomis from ONS – Claimant count by sex and age 2023. Base mapping from OpenStreetMap.

Figure 4-6 shows an indexed claimant count over time (2013=100). The data was collected in December of each year. The data for all study and comparator areas shows a small fall from 2013 to 2016 followed by a small rise up until 2019. In December 2020 claimant across all study and comparator areas including OPDC saw a high peak following the first year of the Covid 19 Pandemic. After 2020 the claimant count fell steadily and then flattened out or risen slightly in 2023.

Whilst the trends are similar across all study and comparator areas, they appear to be more exaggerated in the OPDC area compared to all other areas. However, it should be remembered that due to the size of the OPDC area small changes in the claimant count represent larger comparative changes in the index.

Figure 4-6 - Claimant Count (2013-2023)

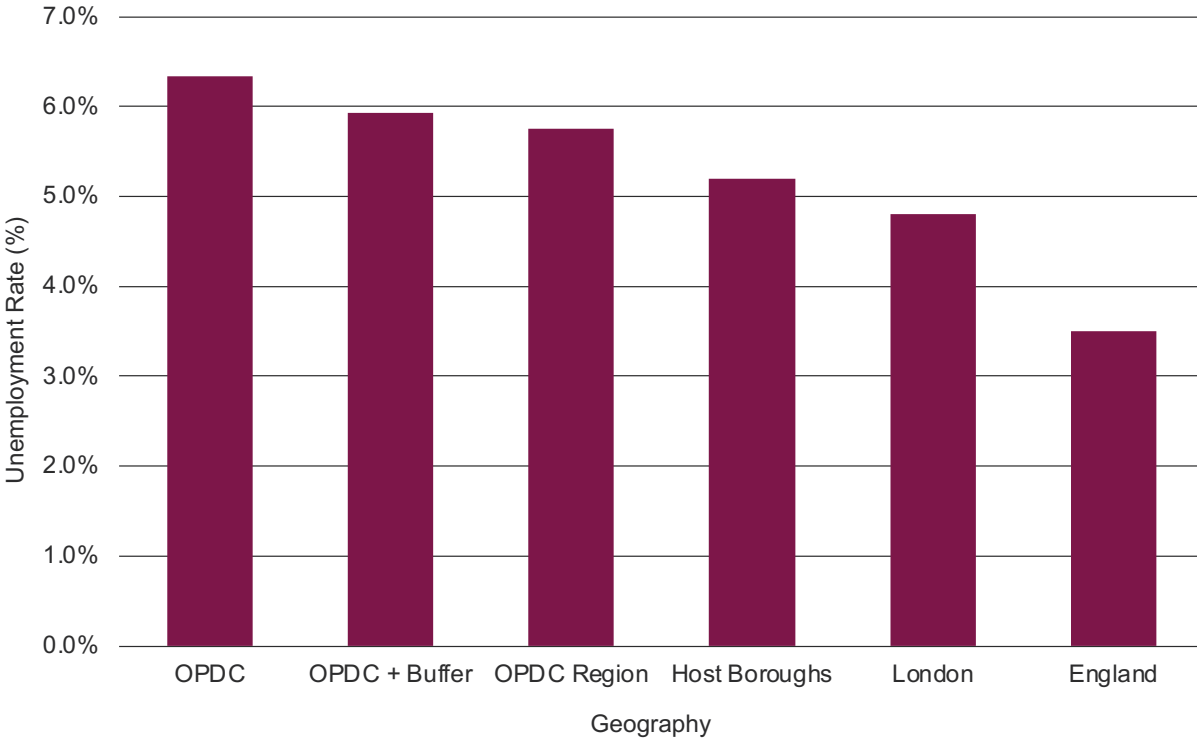


Source: Nomis from ONS – Claimant Count 2013-2023

We have provided analysis of official unemployment rate data below. However, given claimant rate data is more up to date it is suggested that this is used to supplement unemployment data for the OPDC area.

Figure 4-7 displays the 2021 unemployment rate for all OPDC and comparator areas. The unemployment rate in the OPDC area was higher than that of any other area (6.3%) and was 2.8% higher than the national average. Further out of the OPDC area, unemployment decreased gradually, with the surrounding buffer being second highest (5.9%) and the whole region slightly lower (5.8%). This doesn't deviate far from the London average, which is only 1 percentage point lower, at 5.2%. London as a whole does not perform well nationally. The host boroughs differ, Brent having the highest rate of unemployment (5.4%) and Hammersmith and Fulham having the lowest (5.0%).

Figure 4-7 - Unemployment Rate



Source: Nomis from ONS – Economic activity status 2021

Excelsior Studios

Table 4-15 shows the economic activity rate for working age residents, unemployment rate, and the proportion of economically active which are full-time students. The economic activity rate for the OPDC area and its study areas are very similar to each other and to the national average (61-64%). London and the three host boroughs have a slightly higher activity rate than the OPDC area, at 66%. More people who are 16-64 are working.

A higher proportion of economically active people within the OPDC are also full-time students. This is due to the vast student population and the younger demographic of the OPDC area. Comparator areas including the buffer and region all have less than 5% of full-time students making up its economically active population.

Table 4-15 - Economic Activity Rate for Working Age Residents, Unemployment Rate, Percentage of Those Economically Active which are Full-Time Students

	Economic Activity Rate for Working Age Residents	Economically Active who are Full-Time Students	Unemployment Rate
OPDC	61%	8.1%	6.3%
OPDC + Buffer	62%	4.4%	5.9%
OPDC Region	64%	4.7%	5.8%
Host Boroughs	66%	4.5%	5.2%
London	66%	4.1%	4.8%
England	61%	3.8%	3.5%

Source: Nomis from ONS – Economic activity status 2021

Table 4-16 splits economically inactive residents by the reason they are not in work. The OPDC area differs from national trends, as fewer inactive residents are retired and many more are students. This reflects the young population of area. In the study areas more people are inactive due to looking after homes or family than the national average, but the OPDC area is like the rest of England at 13%. The buffer and region also vary from the OPDC area's split greatly, with half as many of the inactive being students and 50% more being in retirement. The surrounding areas are likely to have older populations, whilst the OPDC area's is very young. It must be noted that 15% of people are in the 'other' category which could mean many different reasons.

Table 4-16 - Split of Economically Inactive Residents

	Retired	Student	Looking After Home or Family	Long Term Sick/ Disabled	Other
OPDC	18.1%	44.4%	13.0%	9.3%	15.3%
OPDC + Buffer	32.2%	21.4%	20.7%	11.2%	14.5%
OPDC Region	30.5%	24.5%	18.4%	12.4%	14.2%
Host Boroughs	34.3%	22.6%	19.2%	10.4%	13.5%
London	38.0%	21.3%	17.7%	10.7%	12.3%
England	54.9%	14.4%	12.3%	10.4%	8.0%

Source: Nomis from ONS – Economic activity status 2021

Table 4-17 displays the split between workers in full time, part time or self-employment. The OPDC area has the greatest proportion of full-time workers than any surrounding area or comparator, but the lowest proportion of part time employees. This is likely offset by the number of people working full time. There are more self-employed residents compared to England as a whole, by 2% proportion, however compared to other areas in London there is less self-employment. The Surrounding buffer and OPDC region follow a slightly different trend and tend to have more part time workers than the OPDC area. All study areas still have a similar split and have majority full time workers.

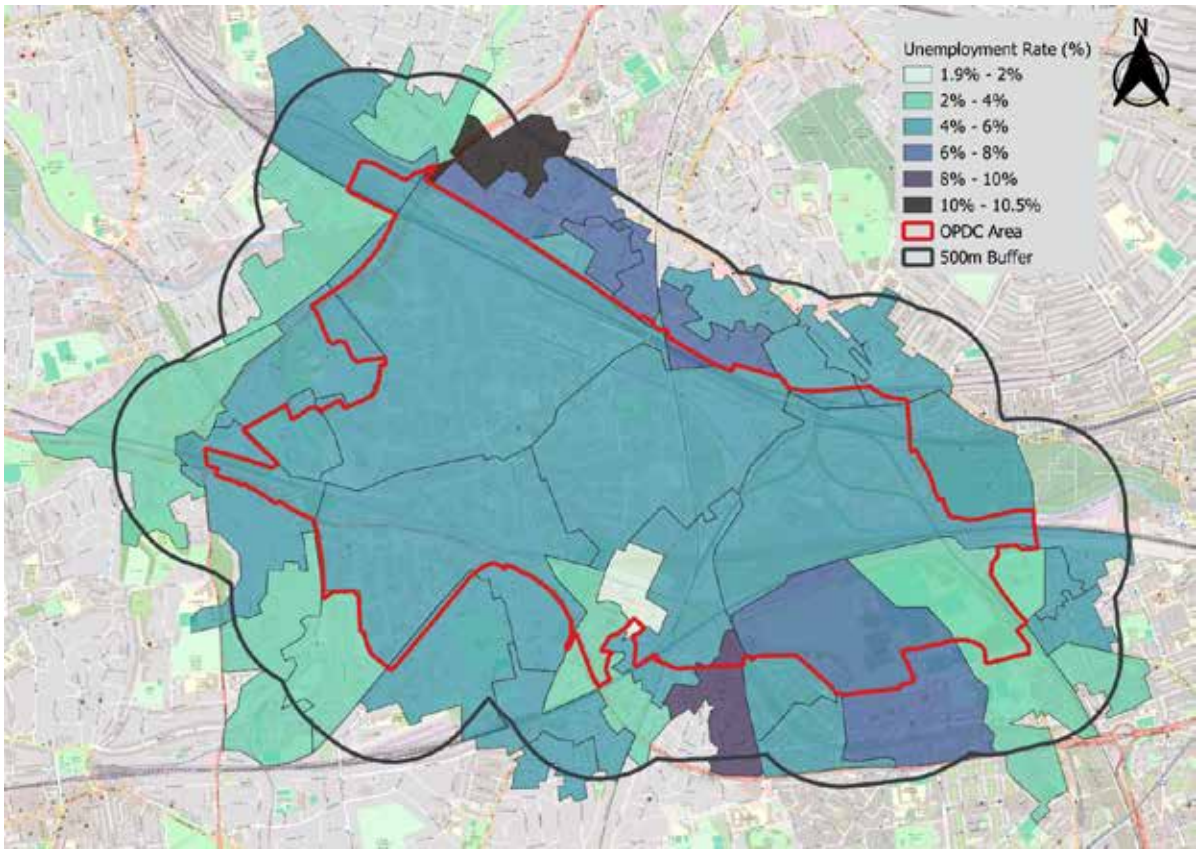
Table 4-17 - Full-Time to Part-Time to Self-Employed Split

	Part Time	Full Time	Self Employed
OPDC	19%	62%	19%
OPDC + Buffer	22%	56%	22%
OPDC Region	20%	59%	21%
Host Boroughs	19%	59%	22%
London	19%	60%	20%
England	23%	60%	17%

Source: Nomis from ONS - Economic activity status 2021

Map 4-10 shows the geographical distribution of unemployment within the OPDC area and buffer by LSOA in 2021. The highest incidence of unemployment at up to 10.5% is to the north of the OPDC area within the 500m buffer. There are a number of LSOAs in this area with an unemployment rate of over 6%.

Map 4-10 - Unemployment Rates in Study Area by LSOA



Source: Nomis from ONS - Economic activity status 2021. Base mapping from OpenStreetMap.

4.4.3 Occupation

Table 4-18 shows the occupational categories of residents into 9 occupational groups, with group 1 being highest skill level and often associated with high pay. In the OPDC area and OPDC + Buffer, 47% of residents are in the top 3 occupational groups, similar to the figure for England but much lower than the figure for London.

The most prevalent occupational group in the OPDC Area is professional occupations (20%), which is consistently prevalent across all geographies. In general, the OPDC Area has very similar occupational split to the rest of England. In the OPDC area and OPDC + Buffer, 26% of residents are in the bottom 3 occupational groups, similar to the figure for England but much higher than the figure for London.

Table 4-18 – Share of Workers in Each Occupation

	OPDC Area	OPDC + Buffer	OPDC Region	Host Boroughs	London	England
1. Managers, Directors, and Senior Officials	11%	12%	15%	14%	15%	13%
2. Professional Occupations	24%	22%	23%	23%	26%	20%
3. Associate Professional and Technical Occupations	13%	13%	16%	14%	15%	13%
4. Administrative and Secretarial Occupations	8%	8%	8%	8%	8%	9%
5. Skilled Trades Occupations	8%	9%	7%	8%	8%	10%
6. Caring, Leisure, and other Service Occupations	10%	10%	8%	8%	8%	9%
7. Sales and Customer Service Occupations	8%	7%	7%	7%	6%	7%
8. Process, Plant, and Machine Operatives	6%	6%	6%	6%	5%	7%
9. Elementary Occupations	12%	12%	10%	11%	9%	10%

Source: ONS - Census 2021

4.4.4 Commuting into the OPDC area

Table 4-19 shows the origin of commuters into the OPDC area (as well as the number of people living and working in the OPDC area) based on 2021 Census data. It should be noted that this data was collected during the COVID-19 pandemic and may have changed significantly. However, it still provides a useful indication of commuting patterns.

It can be seen that 23.9% of those working in the OPDC area also live in the OPDC area. The majority (70.7%) of workers in the OPDC area come from elsewhere in London with 18.4% coming from elsewhere in Brent, 12.3% coming from elsewhere in Ealing and just 4.1% coming from elsewhere in Hammersmith and Fulham. Combining the host boroughs and other west London boroughs, 50.1% of commuters are seen to be coming from west London (outside of the OPDC area). The majority of OPDC workers commuting from outside of London come from the South-East region (3.1%) and East of England region (1.6%).

Table 4-19 – Commuting to the OPDC area

Origin of Workers	Number of Workers	% of Workers
OPDC	**7,949**	**23.9%**
London	**23,525**	**70.7%**
Brent	6,120	18.4%
Ealing	4,107	12.3%
Hammersmith and Fulham	1,351	4.1%
Harrow	1,549	4.7%
Hillingdon	1,477	4.4%
Barnet	1,074	3.2%
Hounslow	990	3.0%
Westminster	614	1.8%
Wandsworth	515	1.5%
Kensington and Chelsea	494	1.5%
Haringey	472	1.4%
Camden	394	1.2%
Enfield	382	1.1%
Lambeth	367	1.1%
Newham	327	1.0%
Southwark	314	0.9%

Origin of Workers	Number of Workers	% of Workers
Waltham Forest	307	0.9%
Richmond upon Thames	267	0.8%
Islington	254	0.8%
Redbridge	229	0.7%
Merton	226	0.7%
Hackney	209	0.6%
Croydon	207	0.6%
Tower Hamlets	194	0.6%
Lewisham	173	0.5%
Barking and Dagenham	172	0.5%
Havering	137	0.4%
Greenwich	134	0.4%
Kingston upon Thames	134	0.4%
Sutton	112	0.3%
Bromley	111	0.3%
Bexley	96	0.3%
City of London	16	0.0%
South-East	**1,023**	**3.1%**
Buckinghamshire	528	1.6%
Slough	191	0.6%
Windsor and Maidenhead	86	0.3%
Wokingham	45	0.1%
Bracknell Forest	44	0.1%
Medway	38	0.1%
Milton Keynes	35	0.1%
Reading	22	0.1%
Brighton and Hove	14	0.0%
West Berkshire	9	0.0%
Portsmouth	6	0.0%
Southampton	4	0.0%
Isle of Wight	1	0.0%

Origin of Workers	Number of Workers	% of Workers
East of England	**529**	**1.6%**
Luton	210	0.6%
Central Bedfordshire	182	0.5%
Thurrock	34	0.1%
Bedford	30	0.1%
Southend-on-Sea	26	0.1%
Peterborough	12	0.0%
Huntingdonshire	11	0.0%
South Cambridgeshire	9	0.0%
Cambridge	9	0.0%
Fenland	6	0.0%
West Midlands	**85**	**0.3%**
Yorkshire and The Humber	**57**	**0.2%**
North-West	**44**	**0.1%**
East Midlands	**36**	**0.1%**
South-West	**36**	**0.1%**
North-East	**12**	**0.0%**
Grand Total	**33,296**	**100.0%**

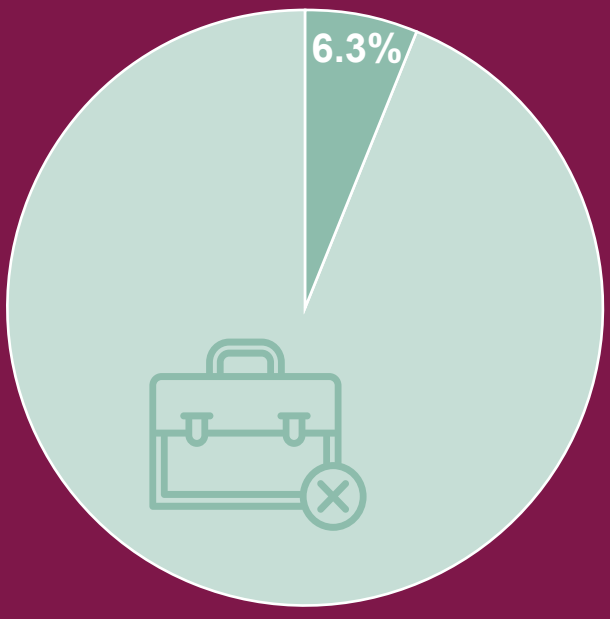
Source: ONS, Census 2021 – Origin-Destination Workplace Data

4.4.5 Summary and Insights

This section suggests that the OPDC area has a number of issues associated with income and unemployment. This is evidenced by the headline findings below:

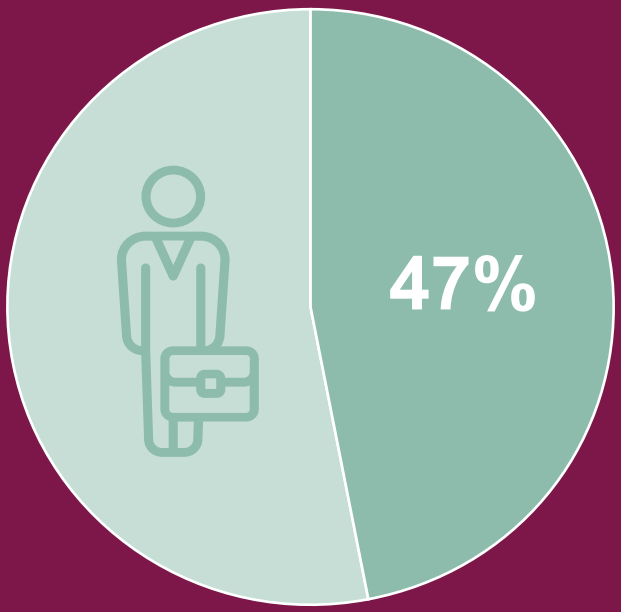
The OPDC area has a **lower household income** of all London comparator geographies in both before housing costs (£32,533), and after housing costs (£23,933).

High housing costs - average household income after housing costs for the OPDC area is £8,600 (24%) lower than household income before housing costs, compared to a £5,700 (15%) reduction at the London level.



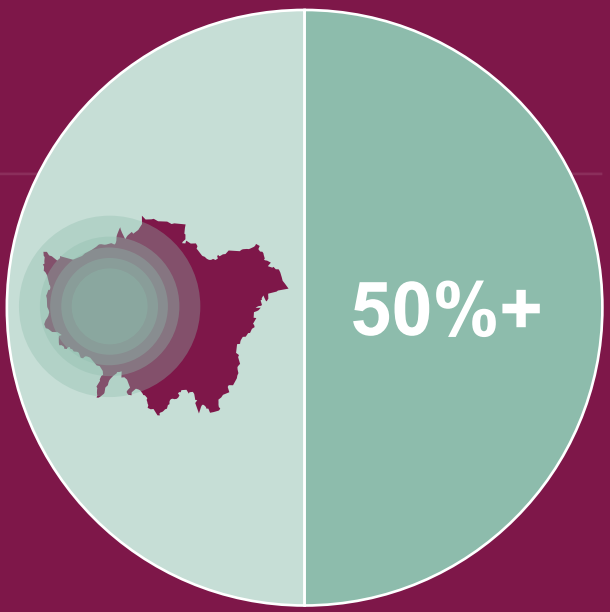
The 2021 unemployment rate in the OPDC area was 6.3% which is 1.5% higher than the London average and 2.8% higher than the national average. Unemployment levels in 2021 were elevated due to the impacts of the Covid-19 pandemic. However, in 2023 the OPDC area had a lower claimant rate than the comparator areas suggesting levels of unemployment have decreased.

The OPDC area is mostly made up of full-time workers and has a lower proportion of part time employees than it's comparators. There are 2% more self-employed residents than nationally, but fewer than London.



Only 47% of residents in the OPDC area in the top 3 occupational groups, compared to 56% across London.

Just over **50% of workers are from west London boroughs** including 34.8% from the host boroughs (excluding any commuters from within the OPDC area). 23.9% of workers reside in the OPDC area.



4.5 Business

4.5.1 Employment

Table 4-20 contains the share of employment by SIC section in the OPDC Area, study areas and comparator areas. The OPDC area's largest industry by employment is wholesale retail and trade, employing 23.6% of the area's workforce. This is greater than the proportion of employment for the host boroughs (19.3%), and much higher than London (11.4%) or England (14.4%). Two other large sectors are manufacturing (16.5%) and transportation and storage (11.1%). Both of which are far higher proportions of the workforce than for London and England. This fact demonstrates a strong presence of heavy industries in the area.

Primary industries like agriculture, forestry and fishing and mining and quarrying do not employ anyone in the OPDC area. This is consistent with all comparator areas in London. Only 0.3% of the OPDC area are employed in the financial services sector this is far below the London (8.0%) and English (3.6%) proportion.

Table 4-20 - Share of Employment by SIC Section

	OPDC	OPDC + Buffer	Host Boroughs	London	England
A : Agriculture, forestry and fishing	0.0%	0.0%	0.0%	0.0%	0.6%
B : Mining and quarrying	0.0%	0.1%	0.0%	0.0%	0.1%
C : Manufacturing	16.5%	14.0%	5.4%	2.1%	7.5%
D : Electricity, gas, steam and air conditioning supply	0.1%	0.0%	0.1%	0.4%	0.4%
E : Water supply; sewerage, waste management and remediation activities	0.9%	0.4%	0.6%	0.3%	0.7%
F : Construction	2.8%	4.7%	4.3%	3.5%	4.8%
G : Wholesale and retail trade; repair of motor vehicles and motorcycles	23.6%	21.6%	19.3%	11.4%	14.4%
H : Transportation and storage	11.1%	2.6%	5.3%	4.3%	5.2%
I : Accommodation and food service activities	4.6%	3.8%	7.5%	7.4%	7.5%
J : Information and communication	3.7%	9.2%	7.7%	8.4%	4.6%

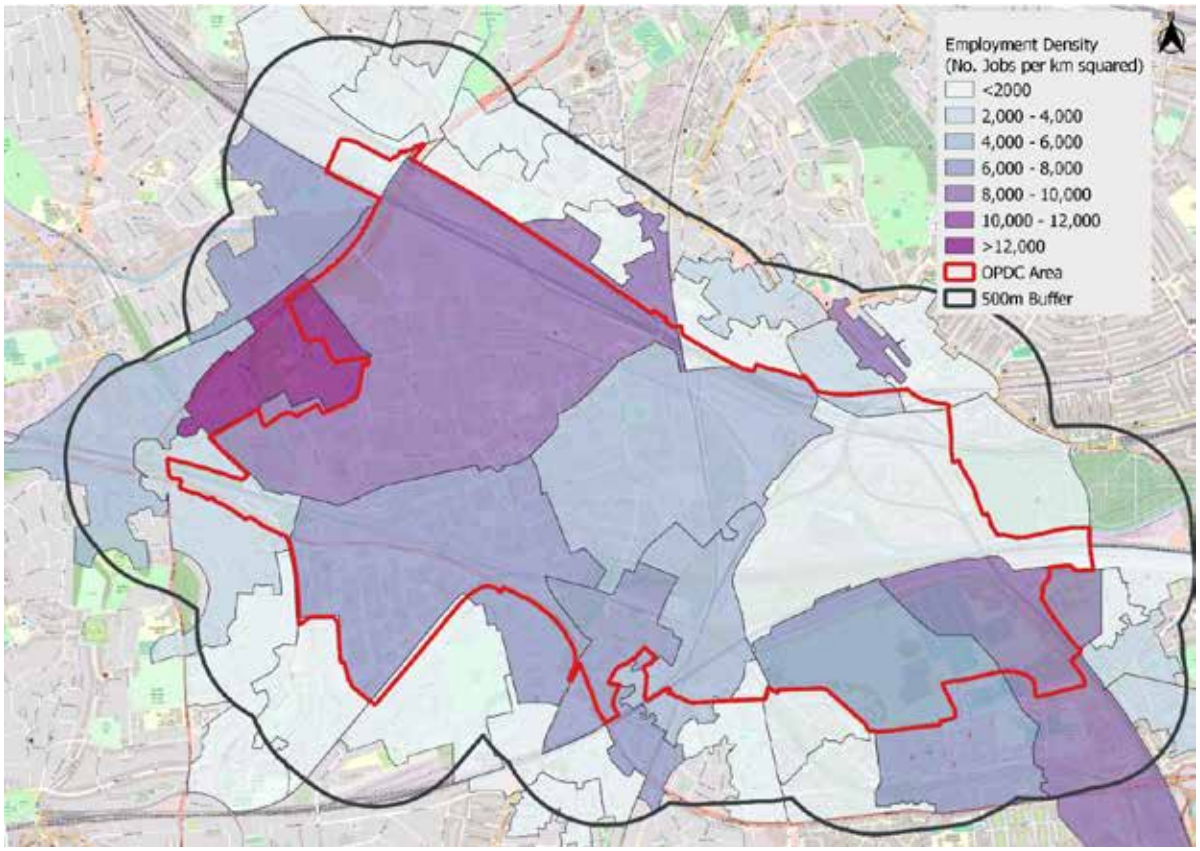
	OPDC	OPDC + Buffer	Host Boroughs	London	England
K : Financial and insurance activities	0.3%	2.0%	1.3%	8.0%	3.6%
L : Real estate activities	0.9%	1.5%	2.2%	2.5%	1.8%
M : Professional, scientific and technical activities	8.6%	8.9%	9.0%	14.2%	9.3%
N : Administrative and support service activities	8.9%	20.5%	9.0%	9.7%	9.0%
O : Public administration and defence; compulsory social security	1.3%	1.0%	3.4%	4.6%	4.3%
P : Education	1.1%	3.5%	7.5%	7.3%	8.7%
Q : Human health and social work activities	12.8%	4.1%	12.4%	10.6%	13.3%
R : Arts, entertainment and recreation	1.3%	0.8%	3.1%	2.8%	2.3%
S : Other service activities	1.5%	1.4%	1.9%	2.5%	1.9%
T : Activities of households as employers; undifferentiated goods-and services-producing activities of households for own use	0.0%	0.0%	0.0%	0.0%	0.0%
U : Activities of extraterritorial organisations and bodies	0.0%	0.0%	0.0%	0.0%	0.0%
Total Number of Employees	**42,000**	**70,655**	**387,820**	**5,341,000**	**26,600,000**

Source: ONS - Regional gross value added (balanced) by industry 2021

4.5.2 Employment Density

Map 4-11 shows employment density in the OPDC Area. Job density is measured by number of employees per kilometers squared. The map shows the highest concentrations of over 10,000 jobs in the north west and south east of the OPDC area. With a higher density of jobs in the main OPDC Area and less within the 500m buffer.

Map 4-11- Employment Density



4.5.3 Green Jobs

WPI economics and the Institute for Employment studies produced a report in March 2022 on green jobs and skills in west London for the West London Alliance. This provides data on the number of green jobs by ‘sector’ in the three brough’s across which OPDC lies which are presented in the table below. It can be seen that between 2.2% and 2.9% of employment in in the three boroughs are classed as green.

Table 4-21 - Green Jobs in the OPDC Boroughs

	Brent		Ealing		Hammersmith and Fulham	
	Jobs	% of employment	Jobs	% of employment	Jobs	% of employment
Climate adaptation, green infrastructure, reducing localised pollution	90	0.1%	<50	-	<50	-
Climate change Research and Development	60	0.05%	70	0.05%	60	0.04%
Climate change strategy, policy, monitoring and planning	80	0.1%	70	0.05%	50	0.04%
Green finance	60	0.05%	<50	-	<50	-
Homes and Buildings	1,050	0.8%	1,060	0.8%	800	0.6%
Industrial decarbonisation, hydrogen and CCUS	<50	-	<50	-	<50	-
Low Carbon Transport	260	0.2%	330	0.2%	460	0.3%
Power	1,920	1.5%	1,800	1.3%	1,630	1.1%
Reduce, reuse, recycle	250	0.2%	320	0.2%	160	0.1%
All Green Jobs	**3,800**	**2.9%**	**3,800**	**2.7%**	**3,200**	**2.2%**

Source: WPI Economics and Institute for Employment Studies for West London Alliance - Green Jobs and Skills in West London

4.5.4 Estimated Gross Value Added

Gross Value Added (GVA) is the value generated by any unit engaged in the production of goods and services. In simpler terms, GVA shows how much value is created within a specific area or industry after accounting for the costs of producing it. It's a way to understand the economic contribution of a particular sector or region to the overall economy. GVA is only available as far as the Local Authority (LA) level, for the purpose of this assessment we have gathered GVA data on the 3 local authorities that comprise the OPDC area; Kensington & Chelsea and Hammersmith & Fulham, Bent and Ealing.

Real Estate Services is the largest contributor to GVA in all 3 LAs. Contributing 24.1%, 26.1% and 28.0% of local GVA for Kensington & Chelsea and Hammersmith & Fulham, Brent and Ealing, respectively. Kensington & Chelsea and Hammersmith & Fulham's next largest industry by GVA is Information and Communication at 21.6% of total GVA for the LA. This is a far greater proportion of GVA compared to the other 2 LAs, London (11.6%) and England (7.3%). Brent's next largest industry by GVA is Construction, contributing 12.8% to total GVA. Finally, Ealing's next largest industry is manufacturing at 8.9% of total GVA. Less than Ealing's proportion (12.8%), but higher than that for London (4.6%) and England (6.4%). Each LA's next largest sector is noticeably smaller than Real Estate Services, demonstrating a reliance on Real Estate Activities for generating value in their local economies.

Table 4-22 - Share of Gross Value Added by Industry

	Kensington & Chelsea and Hammersmith & Fulham	Brent	Ealing	London	England
Agriculture, forestry, and fishing; mining and quarrying	0.0%	0.0%	0.1%	0.1%	0.7%
Manufacturing	1.5%	7.9%	9.8%	2.1%	10.7%
Electricity, gas, water; sewerage and waste management	0.9%	0.7%	0.9%	1.2%	3.0%
Construction	1.8%	12.8%	8.7%	4.6%	6.4%
Wholesale and retail trade; repair of motor vehicles	14.5%	10.1%	8.6%	6.4%	9.2%

	Kensington & Chelsea and Hammersmith & Fulham	Brent	Ealing	London	England
Transportation and storage	2.0%	6.2%	7.9%	2.9%	3.3%
Accommodation and food service activities	5.1%	2.4%	2.0%	2.4%	2.5%
Information and communication	21.6%	2.7%	5.0%	11.6%	7.3%
Financial and insurance activities	0.3%	2.5%	1.3%	20.0%	9.4%
Real estate activities	24.1%	26.1%	28.0%	14.6%	14.1%
Professional, scientific, and technical activities	6.2%	4.4%	4.3%	12.8%	8.2%
Administrative and support service activities	3.0%	5.5%	7.0%	5.9%	5.4%
Public administration and defence	3.0%	2.8%	3.2%	3.8%	4.5%
Education	6.1%	5.1%	5.1%	4.3%	5.8%
Human health and social work activities	6.4%	7.0%	5.3%	4.1%	6.4%
Arts, entertainment and recreation	2.4%	2.4%	1.5%	1.8%	1.4%
Other service activities	0.7%	1.1%	1.1%	1.3%	1.4%
Activities of households	0.2%	0.3%	0.3%	0.1%	0.2%

Source: Business Register and Employment Survey

4.5.5 Enterprises

An enterprise is an organisational unit producing goods or services. Enterprises are made up of companies, public corporations, non-profit organisations, partnerships, and sole proprietors. Most enterprises are companies or what we would commonly call businesses.

Enterprises are made up of local units (i.e. sites of an enterprise). Inter Departmental Business Register data is accessible and has been taken from two sources - lists of local units for the three host boroughs (labelled IDBR lists in the table) or aggregated data on NOMIS (labelled NOMIS in the table). The table below provides an estimate of local units per thousand people – i.e. the business density.

It should be noted that the NOMIS data suggests that there are more local units in the host boroughs than the IDBR list data. This is because certain local units are excluded from the IDBR lists. From this point we will refer to local units as businesses.

As the NOMIS data is not available at lower than district level we have estimated the actual business count based for the study areas (based on the ratio of the IDBR list business count to the NOMIS business count for the host boroughs).

As expected for a historically industrial area, the OPDC area has a very high business density (192 business per thousand people). Consequently, the OPDC + Buffer area also has relatively a high business density (78 business per thousand people) compared to the host boroughs and London as a whole.

Food production in Park Royal

Table 4-23 – Business density - Businesses Numbers and Businesses per Thousand People

	Business Count (IDBR lists)	Business Count (NOMIS)	Business Count	Population (2020)	Businesses per thousand people
OPDC Area (Estimate)	1,968	N/A	2,457	12,784	192
OPDC + Buffer (Estimate)	4,139	N/A	5,167	66,406	78
Brent	13,435	16,925	16,925	343,988	49
Ealing	15,515	19,175	19,175	367,936	52
Hammersmith and Fulham	11,040	13,825	13,825	186,555	74
Host Boroughs	39,990	49,925	49,925	898,479	56
London	N/A	584,415	584,415	8,867,008	66
England	N/A	2,737,105	2,737,105	56,325,961	49

Source: Inter Departmental Business Register 2023

The table below shows the share of enterprises by sector. The shading provides a visual indication of the size of sectors where darker green represents larger sectors and darker red represents smaller sectors.

It can be seen that the OPDC area is particularly strong in Admin and support services (14.8%), Manufacturing (10.7%), Transportation and storage (7.2%), Trade and repair of motor vehicles (6.0%) and the Wholesale trade (12.5%).

It should be noted that the size of the Admin and support services sector in the OPDC area is likely to be due to the support services side of the sector which includes activities such as cleaning and other domestic and commercial support services.

Table 4-24 - Businesses by Sector

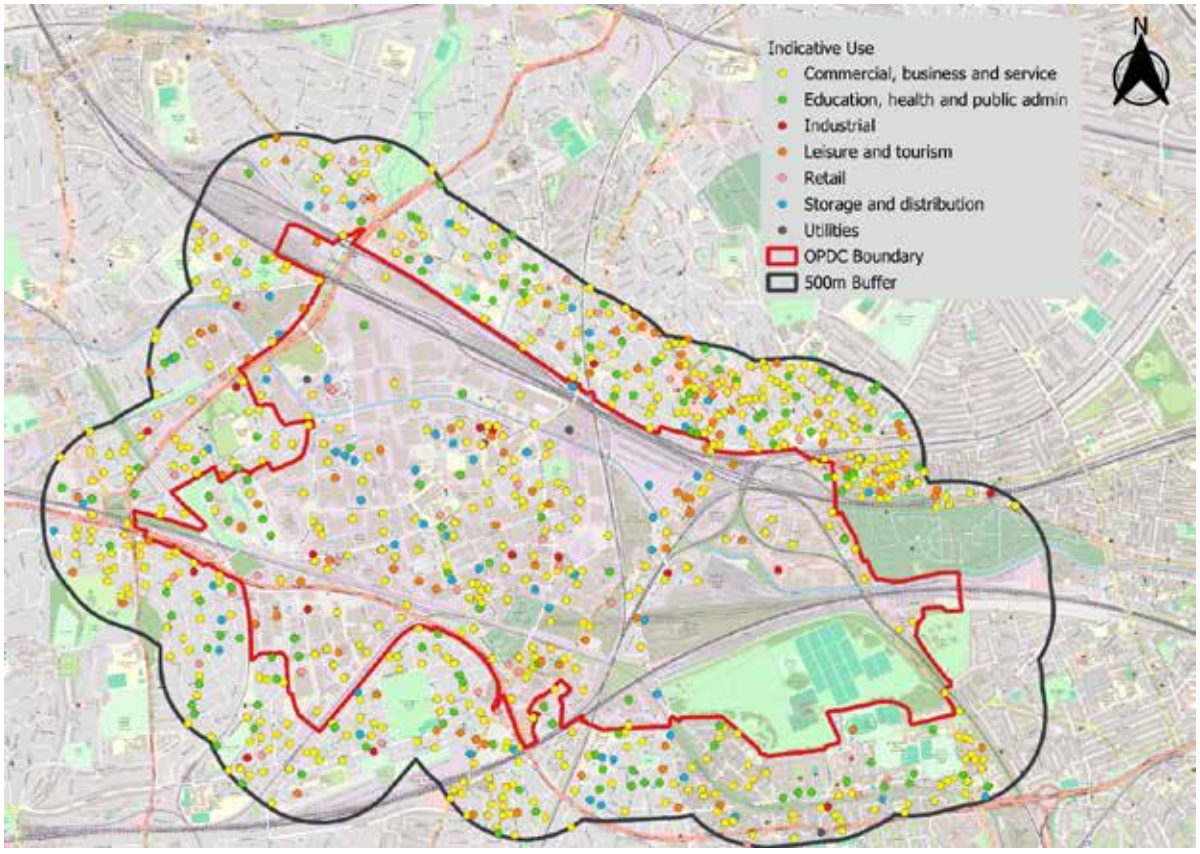
Industry	OPDC Area (IDBR businesses only)	OPDC + Buffer (IDBR businesses only)	Host Boroughs	London	England
Accommodation and food service activities	6.7%	6.7%	6.1%	6.1%	6.9%
Administrative and support service activities	14.8%	14.5%	9.3%	9.8%	8.7%
Agriculture, forestry and fishing	0.1%	0.1%	0.1%	0.2%	3.5%
Arts, entertainment and recreation	1.3%	1.7%	3.2%	3.6%	2.8%
Construction	7.9%	10.2%	12.0%	10.7%	12.4%
Education	1.2%	1.9%	2.2%	2.2%	2.4%
Electricity, gas, steam and air conditioning supply	0.3%	0.2%	0.1%	0.3%	0.2%
Financial and insurance activities	1.3%	1.2%	1.6%	2.9%	2.3%
Human health and social work activities	2.2%	4.6%	4.6%	4.5%	5.2%
Information and communication	6.5%	7.4%	9.6%	10.7%	6.6%
Manufacturing	10.7%	6.9%	3.2%	2.6%	4.6%
Mining and quarrying	0.2%	0.1%	0.0%	0.0%	0.1%
Other service activities	1.6%	2.3%	4.0%	3.8%	3.8%

Industry	OPDC Area (IDBR businesses only)	OPDC + Buffer (IDBR businesses only)	Host Boroughs	London	England
Professional, scientific and technical activities	7.8%	10.2%	15.6%	18.7%	14.3%
Public administration and defence; compulsory social security	0.1%	0.2%	0.3%	0.3%	0.7%
Real estate activities	3.9%	3.9%	5.1%	5.3%	4.1%
Retail trade, except of motor vehicles and motorcycles	7.4%	8.9%	10.9%	9.4%	9.6%
Transportation and storage	7.2%	5.2%	4.2%	3.3%	4.6%
Water supply; sewerage, waste management and remediation activities	0.6%	0.4%	0.2%	0.2%	0.4%
Wholesale and retail trade and repair of motor vehicles and motorcycles	6.0%	4.3%	2.1%	1.4%	2.9%
Wholesale trade, except of motor vehicles and motorcycles	12.5%	8.9%	5.3%	4.0%	4.0%

Source: Inter Departmental Business Register 2023

The map below shows the location of enterprises categorized by indicative use[6]. It can be seen that the majority of enterprises in the OPDC area are classed as Commercial business and service. There are also a significant number of Storage and distribution enterprises.

Map 4-11a - Enterprises by Indicative Use



Source: Inter Departmental Business Register. Base mapping from OpenStreetMap.

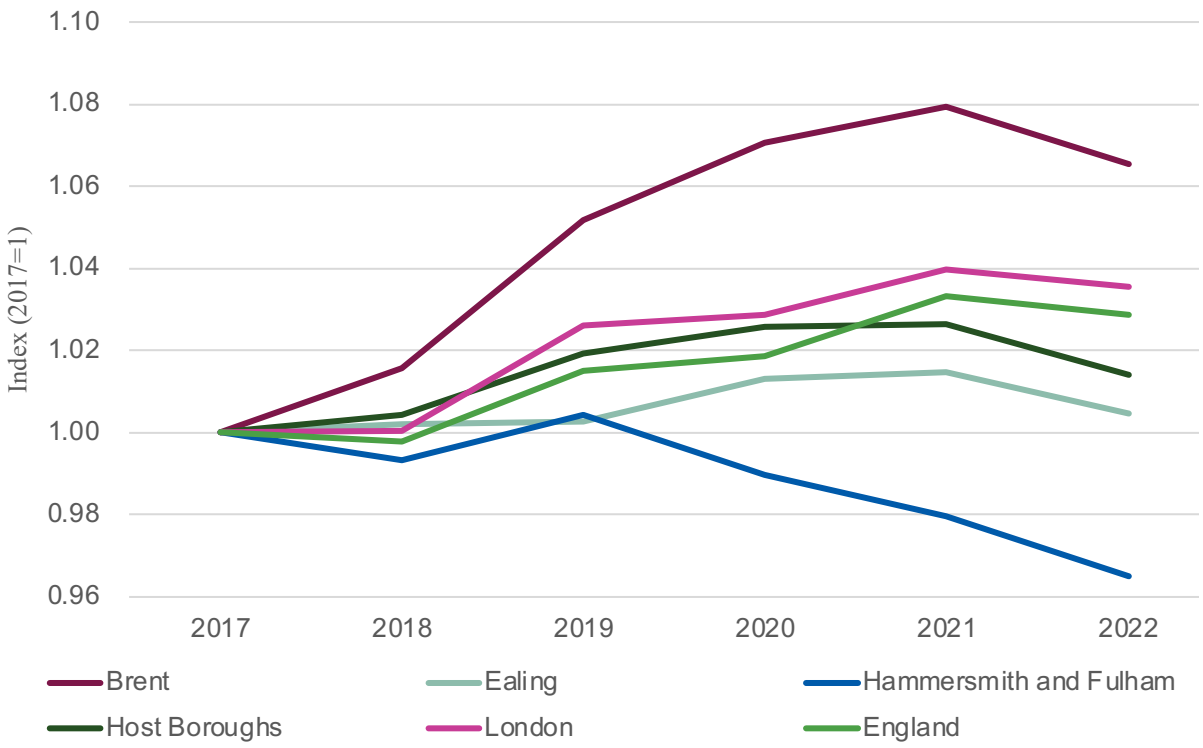
Data on changes in business numbers, and birth and survival rates is only available at a district level. Therefore, data for the host Boroughs and the comparator areas has been presented below.

The graph below shows the indexed (to 2017) change in business numbers between 2017 and 2022. It can be seen that growth in business numbers in the host boroughs was lower than for London and England as a whole. However, business growth in Brent was higher than each of the comparator areas.

[6]A combination of likely planning use classes and sectors.

Biscuit production in the McVities Factory

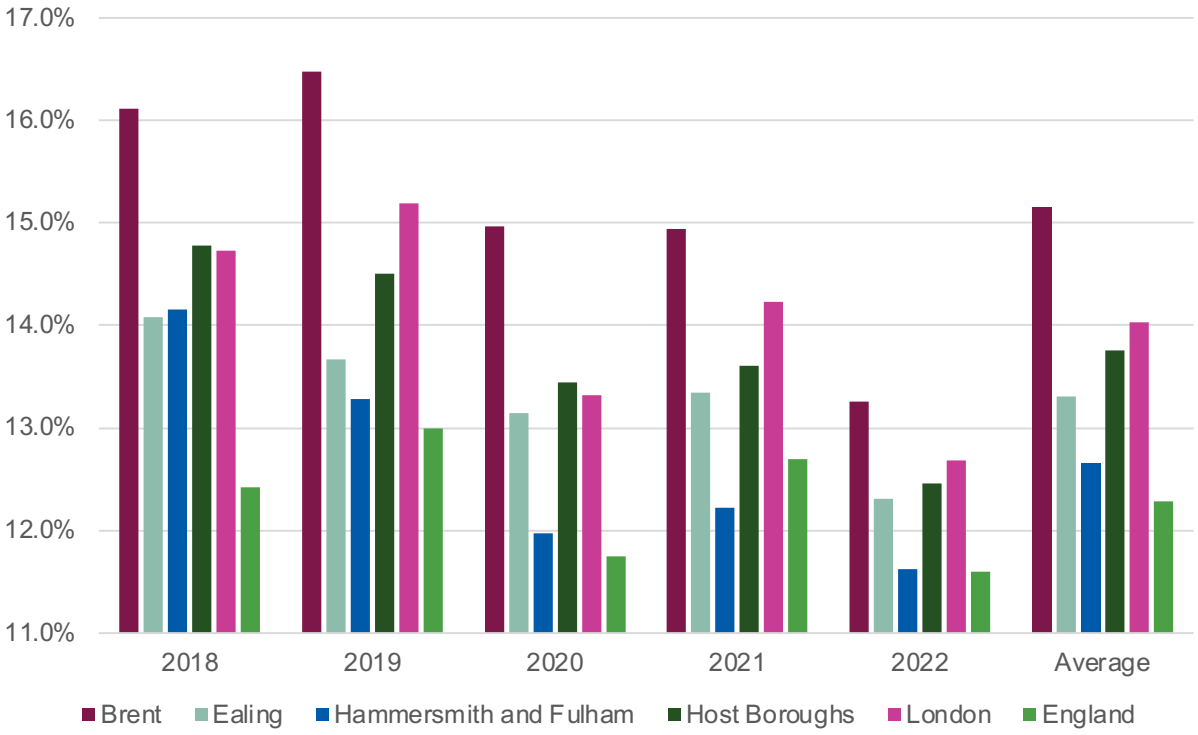
Figure 4-7a - Indexed Business Count Growth



Source: ONS Business Demography UK (2023)

The graph below shows business birth rates by borough (% increase on previous year) over the past 5 years and an average for the 5 year period. It can be seen that the host boroughs have a similar average birth rate (13.8%) to London (14.0%) which is higher than England (12.3). Out of the three host Boroughs Brent has by far the highest birth rate at 15.1%.

Figure 4-7b - Business Birth Rates



Source: ONS Business Demography UK (2023)

The table below shows business survival rates for different periods for a range of different business birth years. It can be seen that three of the business survival rates in Brent are over one percentage point lower than that of London, whereas three of the business survival rates in Ealing and two of the business survival rates in Hammersmith and Fulham are over one percentage point higher than that of London. This suggests that business survival is better in Ealing and Hammersmith and Fulham than Brent.

Table 4-25 – Business Survival Rates

	2017 Births (5-year survival)	2018 Births (4-year survival)	2019 Births (3-year survival)	2020 Births (2-year survival)	2021 Births (1-year survival)
Brent	39.1	46.5	54.4	69.7	92.9
Ealing	41.7	48.1	57.6	72.5	93.6
Hammersmith and Fulham	39.0	47.6	54.8	72.3	95.3
London	39.2	46.4	55.5	72.3	94.1
England	39.4	47.2	55.9	71.1	93.5

Source: ONS Business Demography UK (2023)

4.5.6 Manufacturing Deep Dive

Table 4-26 below shows the breakdown of employment and Businesses in the Manufacturing Standard Industrial Classification (SIC) Section by SIC Division for the OPDC area. The shading provides a visual indication of the size of SIC Divisions where darker green represents larger SIC Divisions and darker red represents smaller SIC Divisions.

It can be seen that the majority (71%) of manufacturing employment in the OPDC area is in the Manufacture of food products. This is greater than the figure for the host boroughs (56%) and far greater than the figure for London (27%) and England (17%). This shows that the OPDC area has a significant concentration of food manufacturing activity. This is backed up by the large proportion of food manufacturing businesses in the OPDC area (33%), much higher than the proportion across all of the comparator areas. Whilst food manufacturing has the most businesses of a manufacturing division across all size bands, it should be noted that 7 of the 8 large (250 employees or more) manufacturing businesses in the OPDC area are in food manufacturing.

Table 4-26 – Manufacturing Employment and Businesses by SIC Division (OPDC area)

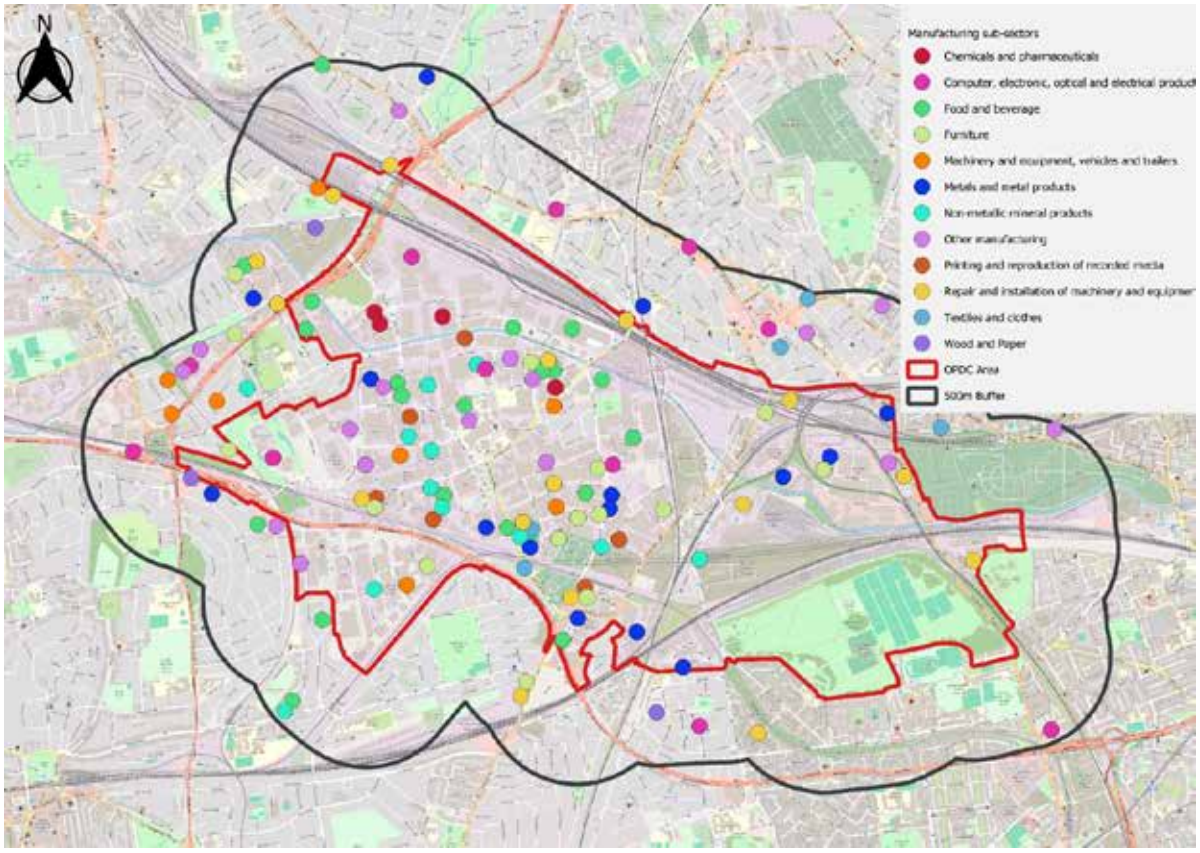
SIC Division	Number in Employment	% of Manufacturing Employment	Number of Businesses	% of Manufacturing Businesses
Basic metals	23	0%	2	1%
Basic pharmaceutical products and pharmaceutical preparations	358	4%	6	3%
Beverages	19	0%	2	1%
Chemicals and chemical products	40	0%	3	1%
Computer, electronic and optical products	117	1%	5	2%
Electrical equipment	8	0%	2	1%
Fabricated metal products, except machinery and equipment	213	2%	20	10%
Food products	6,912	71%	70	33%
Furniture	283	3%	16	8%

SIC Division	Number in Employment	% of Manufacturing Employment	Number of Businesses	% of Manufacturing Businesses
Machinery and equipment n.e.c.	49	1%	6	3%
Motor vehicles, trailers and semi-trailers	43	0%	1	0%
Other manufacturing	222	2%	14	7%
Other non-metallic mineral products	347	4%	16	8%
Paper and paper products	2	0%	2	1%
Printing and reproduction of recorded media	257	3%	14	7%
Repair and installation of machinery and equipment	691	7%	10	5%
Rubber and plastic products	59	1%	4	2%
Textiles	24	0%	7	3%
Wearing apparel	24	0%	4	2%
Wood and of products of wood except furniture	17	0%	6	3%
Grand Total	**9,708**	**100%**	**210**	**100%**

Source: IDBR

Map 4-12 shows the geographical distribution of manufacturing businesses by sub-sector in the OPDC area and Buffer area. The sub-sectors are made up of combinations of SIC Divisions. This has been done to limit the number of colour codes on the map.

Map 4-12 – Manufacturing Businesses by Sub-sector



Source: IDBR

4.5.7 Wholesale Deep Dive

Table 4-27 shows the breakdown of employment and businesses in the Wholesale SIC Division by SIC Group for the OPDC area.

It can be seen that the majority (67%) of wholesale employment in the OPDC area is in the Wholesale of food, beverages and tobacco. This is around double the figure for the host boroughs (34%) and more than double the figure for London (24%) and England (19%). This shows that the OPDC area has a significant concentration of food, beverage and tobacco wholesale activity which is also reflected in food manufacturing and employment. This is backed up by the large proportion of food, beverage and tobacco wholesale businesses in the OPDC area (26%). All three large (250 employees or more) and eight of eleven medium (100 employees or more) wholesale businesses in the OPDC area are in food, beverage and tobacco wholesale.

It can also be seen that a significant proportion (25%) of wholesale businesses in the OPDC area are in the wholesale of household goods SIC group. The fact that just 11% of OPDC's employment in wholesale is in this group suggests that there are lots of smaller businesses in this group. This is backed up by the data which shows that there are no large businesses in this group and one medium business, with 71% being micro.

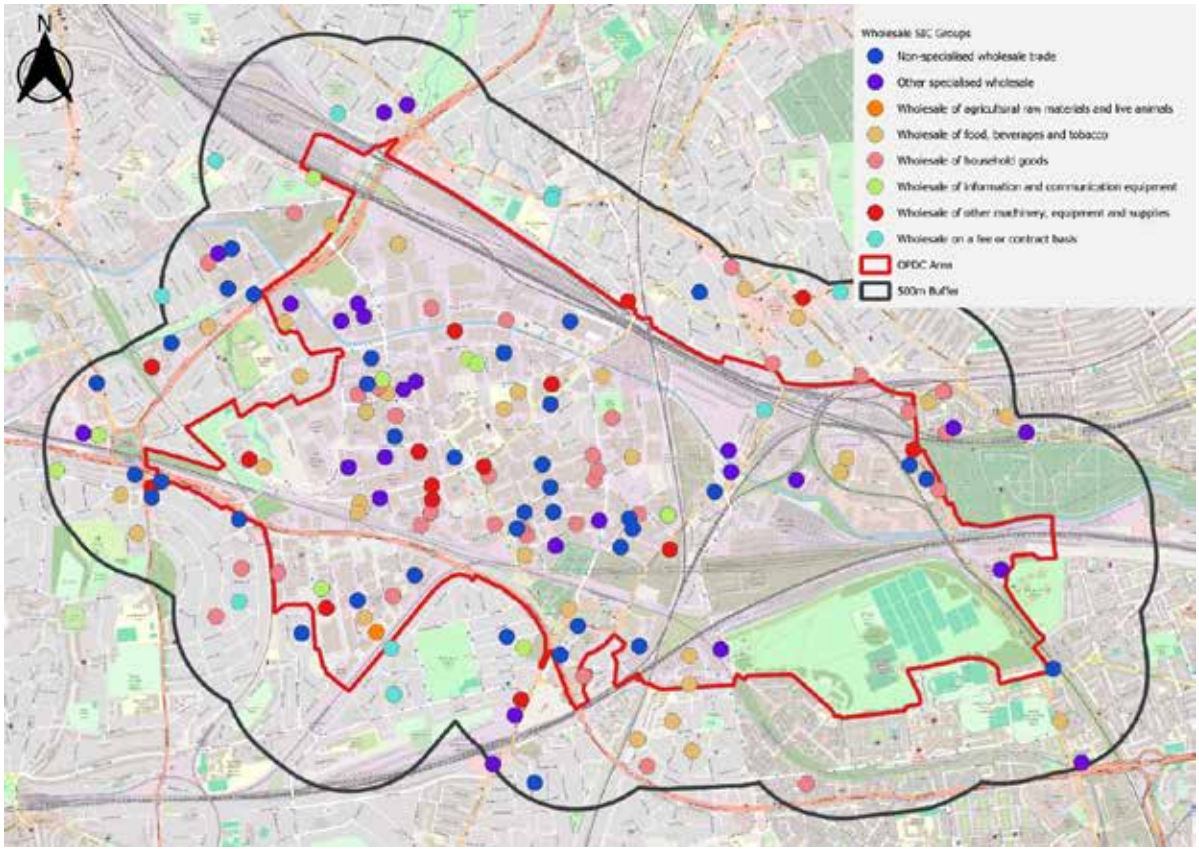
Table 4-27 – Wholesale Employment and Businesses by SIC Group (OPDC area)

SIC Group	Number in Employment	% of Wholesale Employment	Number of Businesses	% of Wholesale Businesses
Non-specialised wholesale trade	247	4%	31	13%
Other specialised wholesale	463	8%	36	15%
Wholesale of agricultural raw materials and live animals	34	1%	4	2%
Wholesale of food, beverages and tobacco	3,767	67%	64	26%
Wholesale of household goods	641	11%	65	26%
Wholesale of information and communication equipment	141	3%	10	4%
Wholesale of other machinery, equipment and supplies	213	4%	19	8%
Wholesale on a fee or contract basis	83	1%	17	7%
Grand Total	**5,589**	**100%**	**246**	**100%**

Source: IDBR

Map 4-13 shows the geographical distribution of Wholesale businesses by SIC Group across the OPDC area and buffer area.

Map 4-13 – Wholesale Businesses by SIC Group



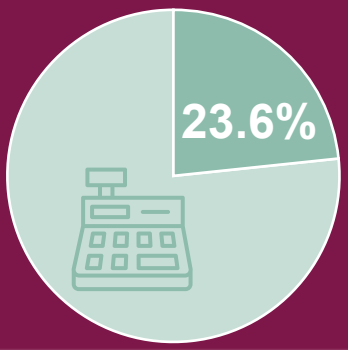
Source: Inter Departmental Business Register 2023

Food production employees

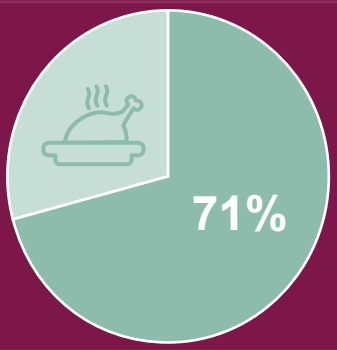
4.5.8 Summary and Insights

The employment landscape highlights a substantial presence of industrial sectors, notably led by wholesale retail and trade. Additionally, our analysis of GVA reveals that Real Estate Services plays a pivotal role, emerging as the predominant contributor in the three local authorities comprising the OPDC area. Headline statistics are outlined below:

Employment:



In the OPDC area, the largest industry by employment is **wholesale retail and trade, employing 23.6% of the workforce**, exceeding proportions in the host boroughs (19.3%), London (11.4%), and England (14.4%). Of the wholesale employment, 67% is in the wholesale of food, beverages and tobacco reflecting the OPDC's area strong food and beverage sector.



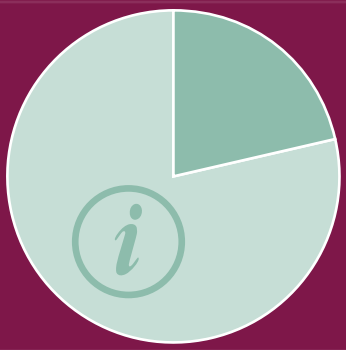
Manufacturing (16.5%) and transportation and storage (11.1%) are other significant sectors, with much higher proportions of the workforce than London and England, indicating a strong presence of these industries. **A significant proportion of manufacturing employment (71%) is within food production** complementing the high proportion of wholesale employment relating to food.

Primary industries like agriculture, forestry, fishing, and mining and quarrying employ no one in the OPDC area, consistent with all comparator areas in London.

Only 0.3% of the OPDC area is employed in the financial services sector, significantly below London (8.0%) and England (3.6%).

Estimated Gross Value Added (GVA):

Real Estate Services is the largest contributor to GVA in all 3 local authorities (LAs) within the OPDC area, contributing 24.1%, 26.1%, and 28.0% for Kensington & Chelsea and Hammersmith & Fulham, Brent, and Ealing, respectively.



Kensington & Chelsea and Hammersmith & Fulham's next largest industry by GVA is **Information and Communication (21.6%)**, far exceeding proportions in other LAs, London (11.6%), and England (7.3%).

Brent's next largest industry by GVA is **Construction (12.8%)**, and Ealing's is manufacturing (8.9%).

Each LA's next largest sector is noticeably smaller than Real Estate Services, indicating a **significant reliance on real estate activities** for generating value in their local economies.

Enterprises:

As expected for a historically commercial area, **the OPDC area has a very high business density (192 business per thousand people)** and the OPDC + Buffer area also has relatively high business density (78 businesses per thousand people) compared to the host boroughs and London as a whole.

The OPDC area has particularly **high concentration of Admin and support services**, Manufacturing, Transportation and storage, Trade and repair of motor vehicles and Wholesale trade businesses.

Growth in business numbers in the host boroughs was lower than for London and England as a whole. However, business growth in Brent was higher than each of the comparator areas.

The host boroughs have a similar average business birth rate (13.8%) to London (14.0%) which is higher than England (12.3). Out of the three host Boroughs Brent has by far the highest birth rate at 15.1%.

Business survival is better in Ealing and Hammersmith and Fulham than Brent.

Business activity including larger business activity is concentrated in the west of the OPDC area.

The OPDC area is a centre for food related manufacturing (33% of manufacturing businesses) and food related wholesale (26% of wholesale businesses).

Baklava production in Park Royal

4.6 Social Infrastructure

4.6.1 School Capacity

Table 4-28 below shows all the primary schools based in the OPDC area as well as the 500m buffer. The table contains the number of pupils in each school as well as the capacity of the school. From here, a capacity ratio is calculated by dividing the number of pupils by the capacity, to see how over or under subscribed each primary school is. There is only one primary school in the study area which is slightly undersubscribed. Of the 14 schools in the study area + buffer, school's capacity varies from 50% up to 101%. The majority of the primary schools are slightly to significantly under subscribed. With the overall capacity ratio for all primary schools in the area being 74%, demonstrating a great amount of capacity in existing primary schools within the area. This pattern in undersubscribed schools is comparable to other schools in similar zones across London.

It should however be noted that the OPDC Social Infrastructure Needs Study Addendum 2021 concluded that a three form of entry (3FE) primary school (630 pupils) will be required to open by 2031 but this would be kept under review.

Table 4-28 - Number of Primary School Pupils and Capacity Ratio

Area	School name	Location	Number of Pupils	Capacity	Capacity Ratio
OPDC Area	Advance Education	Abbey Road	140	150	93%
OPDC + Buffer	West Twyford Primary School	Twyford Abbey Road	454	470	97%
OPDC + Buffer	Old Oak Primary School	Braybrook Street	237	470	50%
OPDC + Buffer	Ark Bentworth Primary Academy	Bentworth Road	181	240	75%
OPDC + Buffer	Kenmont Primary School	Rigeley Road	186	240	78%
OPDC + Buffer	Furness Primary School	Palermo Road	340	545	62%
OPDC + Buffer	John Keble Church of England Primary School	Crownhill Road	151	210	72%
OPDC + Buffer	Harlesden Primary School	Minet Avenue	311	639	49%
OPDC + Buffer	Our Lady of Lourdes RC primary School	Milton Avenue	429	450	95%
OPDC + Buffer	The Stonebridge School	Milton Avenue	227	660	34%

Area	School name	Location	Number of Pupils	Capacity	Capacity Ratio
OPDC + Buffer	John Perryn Primary School	Lond Drive	402	472	85%
OPDC + Buffer	Ark Conway Primary Academy	Hemlock Road	206	210	98%
OPDC + Buffer	West Acton Primary School	Braybrook Street	237	470	50%
Noel Road	675	666	101%	240	75%
OPDC + Buffer	Holy Family Catholic Primary School	Rigeley Road	186	240	78%
Vale Lane	420	447	94%		
		TOTAL	**4,359**	**5869**	**74%**

Source: gov.uk – Search for Schools by location 2023

There are no secondary schools in the OPDC area however there are 4 within the wider 500m buffer surrounding it. Three of the four secondary schools are undersubscribed ranging from 71% to 91% capacity, with only Woodlane High School being oversubscribed. The overall capacity ratio for secondary schools in the area is 85% showing a reasonable amount of spare capacity in the secondary school system suitable for any future changes in population and demographics. However, there is less capacity within secondary schools than there are for primary schools.

The OPDC Social Infrastructure Needs Study Addendum 2021, does not conclude that there is a need for a further secondary school in the Local Plan period (i.e. by 2028) but that monitoring of the need for a further secondary school should begin in 2033.

Table 4-29 - Number of Secondary School Pupils and Capacity Ratio

Area	School name	Location	Number of Pupils	Capacity	Capacity Ratio
OPDC + Buffer	Woodlane High School	Du Cane Road	113	100	113%
OPDC + Buffer	Ark Burlington Danes Academy	Wood Lane	1087	1200	91%
OPDC + Buffer	Newman Catholic College	Harlesden Road	712	1000	71%
OPDC + Buffer	St Claudines Catholic School for Girls	Crownhill Road	941	1044	90%
		TOTAL	**2,853**	**3344**	**85%**

Source: gov.uk – Search for Schools by location

4.6.2 School Ratings

The majority of schools are rated Good by OFSTED with three rated outstanding, one requiring improvement and one independent school rated inadequate but showing subsequent improvements.

Table 4-30 - Schools by OFSTED Rating

Area	School name	OFSTED rating	Date of inspection
OPDC Area	Advance Education	Inadequate	1 November 2022
OPDC + Buffer	West Twyford Primary School	Good	12 September 2023
OPDC + Buffer	Old Oak Primary School	Good	20 June 2023
OPDC + Buffer	Ark Bentworth Primary Academy	Good	16 January 2019
OPDC + Buffer	Ark Bentworth Primary Academy	Good	16 January 2019

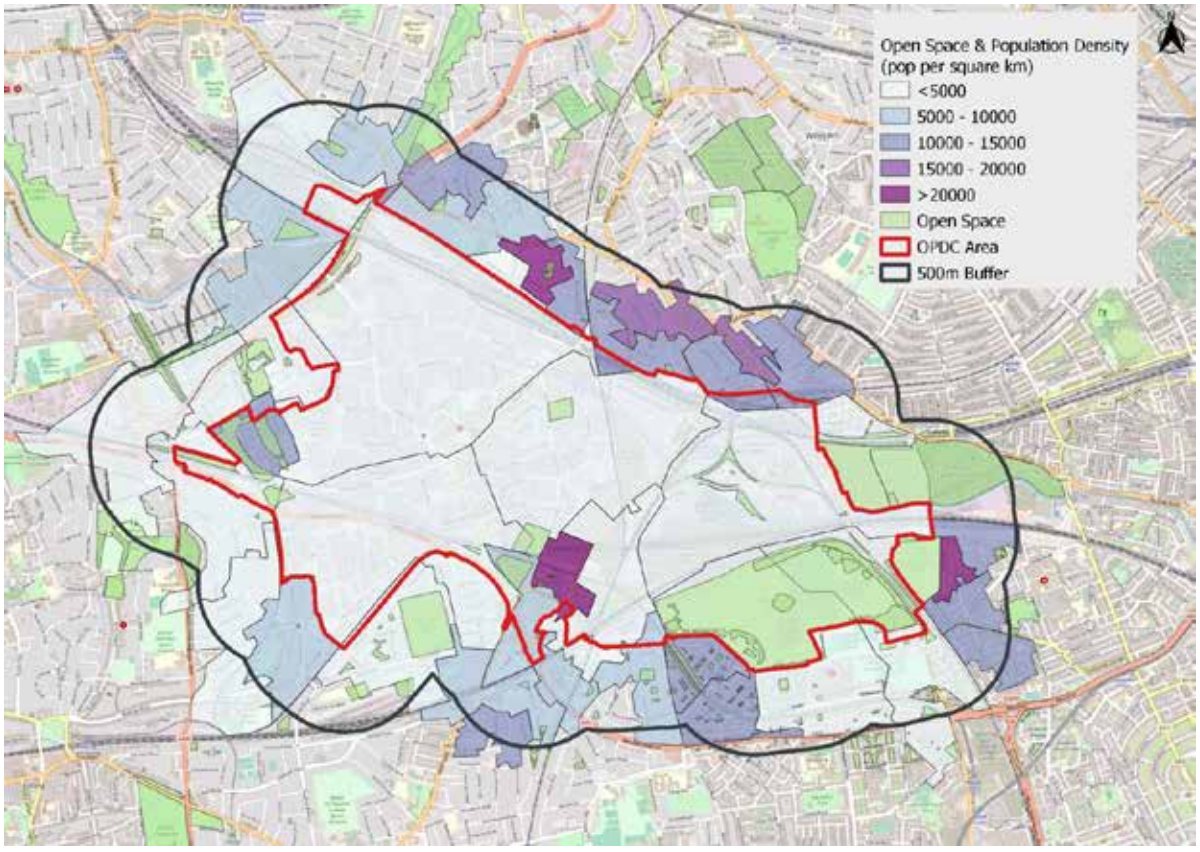
Area	School name	OFSTED rating	Date of inspection
OPDC + Buffer	Kenmont Primary School	Good	25 January 2023
OPDC + Buffer	Furness Primary School	Good	30 November 2021
OPDC + Buffer	John Keble Church of England Primary School	Good	17 January 2023
OPDC + Buffer	Harlesden Primary School	Good	7 June 2022
OPDC + Buffer	Our Lady of Lourdes RC primary School	Good	25 April 2023
OPDC + Buffer	The Stonebridge School	Requires improvement	18 July 2023
OPDC + Buffer	John Perryn Primary School	Good	11 May 2023
OPDC + Buffer	Ark Conway Primary Academy	Outstanding	15 October 2020
OPDC + Buffer	West Acton Primary School	Good	16 January 2019
Good	22 February 2023	Good	16 January 2019
OPDC + Buffer	Holy Family Catholic Primary School	Inadequate	1 November 2022
Outstanding	21 January 2014	Good	12 September 2023
OPDC + Buffer	Woodlane High School	Outstanding	21 May 2019
OPDC + Buffer	Ark Burlington Danes Academy	Good	13 July 2022
OPDC + Buffer	Newman Catholic College	Good	4 May 2022
OPDC + Buffer	St Claudines Catholic School for Girls	Good	11 October 2022

Source: reports.ofsted.gov.uk 2024

4.6.3 Public Open Space

There are several public open spaces in and around the OPDC area for residents to access open space for walking, cycling, sports and other recreational activities. **Map 4-14** shows where these open spaces are located overlaid onto a map of population density. Some of the principal areas of open space in and around the OPDC Area include Wormwood Scrubs, Little Wormwood Scrubs, Kensal Green and St Mary's cemeteries, Acton Cemetery, Acton Playing fields and Wesley Playing Fields. Due to historic industrial and railway uses in the OPDC Area, there is little existing public open space. There is somewhat of a disparity between presence of public open space and population density. Large areas of open space can be found west and south of the OPDC Area, where there are pockets of high population density but also large areas of low density. The northern section of the OPDC buffer area is densely populated but only has access to a small number of local open spaces. Residents in this area will have to travel further to reach nearby open spaces.

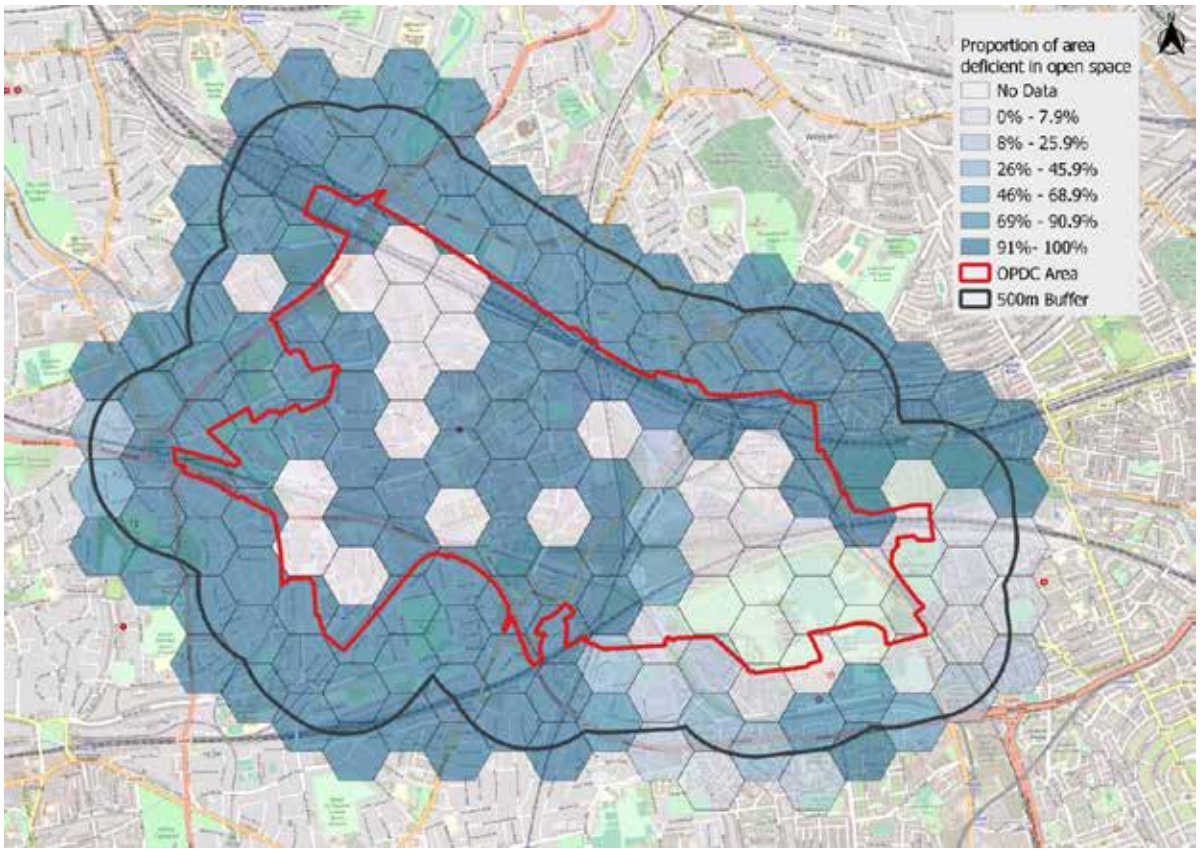
Map 4-14 - Public Open Space Access in and around the OPDC Area



Source: OpenStreetMap. Base mapping from OpenStreetMap.

Map 4-15 shows the proportion of each area that are deficient in access to public open space. The majority of the hexagons in the OPDC Area have 68% or more of their population living in an area that is deficient in access to open space. With exceptions being in the southeast where residents have access to Wormwood Scrubs and other recreation spaces. We have chosen to include this map as well as **Map 4-14** as they provide different sets of information surrounding open space. We can see that despite the numerous open spaces located around the OPDC area, the majority of residents live in an area that is deficient in public space.

Map 4-15 - Proportion of Area Deficient in Open Space



Source: London Data Store – Areas deficient in open space. Base mapping from OpenStreetMap.

4.6.4 Children's Play Space

Within much of the aforementioned public open space, there are a number of children's play spaces. **Table 4-31** shows some of the largest open spaces in the OPDC Area + 500m buffer and the available children's play spaces each of them have available to the public. These facilities include parks, sports grounds, playing fields and outdoor gyms.

Table 4-31 - Publicly Available Play Spaces

Space	Facilities
Wormwood Scrubs	Children's Playground, London Sports Youth Baseball and Softball Club
Wesley Playing Fields	Children's Playground
Midland Terrace Gardens	Children's Playground
Little Wormwood Scrubs	Little Wormwood Scrubs outdoor gym, The Little Scrubs Play Hut
North Acton Playing Fields	Playground West Acton, Tennis Courts, Pavilion
Royal Waterside	Park Royal Children's playgrounds 1-3
Abbey Estate Open Space	Open Space
Stonebridge Park	Stonebridge Recreation Ground

Source: OpenStreetMap

4.6.5 General Practitioners

There are 9 GP surgeries within the OPDC + Buffer area where 47.1 Full-time Equivalent (FTE) GPs serve 156,191 registered patients equating to 3,316 patients per FTE GP. This is higher than the national average of 2,294 patients per FTE GP[7].

The OPDC Social Infrastructure Needs Study Addendum 2021 sets out a need for a new health facility within the Local Plan period while also recognising the need for flexibility as health demands change. The study recommends that this should be delivered through a phased approach starting with 1,088 sq.m in 2024, expanding to 1,564 sq.m at the end of the Local Plan period (2038) and potentially expanding to a final size of 2,608 sq.m at the end of the development trajectory period (2048). The Clinical Commissioning Group's preferred delivery approach is for a central hub facility. North Acton and Acton Wells has been identified as an appropriate area of search for the facility reflecting its significant development capacity and accessibility by public transport and active travel networks.

[7]https://www.rcgp.org.uk/representing-you/key-statistics-insights

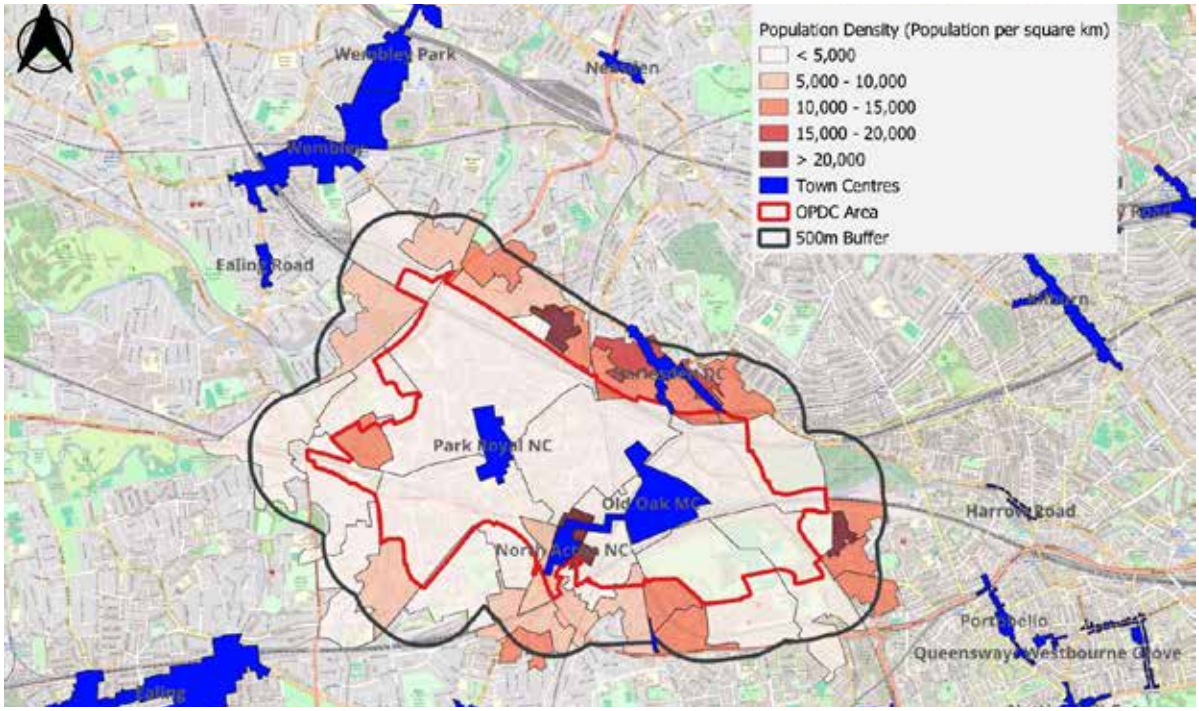
4.6.6 Town Centres

Map 4-16 shows several local Town Centres as defined by the London Plan 2021 , overlain onto a map of population density for the OPDC area. Within the OPDC area there are three town centres designated by the OPDC Local Plan. The Old Oak major centre (MC) includes various locations in the centre of the OPDC area. The Park Royal neighbourhood centre (NC) is located in the west of the OPDC area and the North Acton neighbourhood centre is located in the south of the OPDC area. Harlesden district centre is an established district centre (DC), located in the north section of the 500m buffer. Harlesden is in a densely populated area suggesting many people living here have access to a town centre.

The Harlesden district centre contains 21,550 sq.m of retail space. 5,680sq.m of which is dedicated to leisure, culture and arts, with a further 1,473 sq.m of dedicated office space[9]. Please note that these figures are from 2016 and these allocations of floor space are likely to have changed over time, especially with the impact of the Covid-19 pandemic in 2020 reducing demand for high street retail and physical office space.

Large and significant town centres are also located in the area surrounding OPDC such as Ealing, Acton, Shepherd's Bush, Willesden and Wembley. Many people living inside the OPDC area will currently likely have to travel further afield to reach a large town centre.

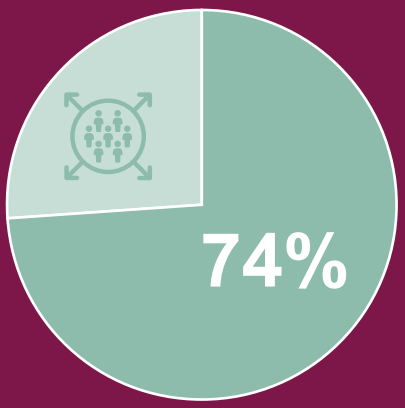
Map 4-16 - GLA Recognised Town Centres and Population Density by LSOA



[8]Mayor of London – The London Plan (2021) - https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf
[9]2017 London Town Centre Health Check Analysis Report

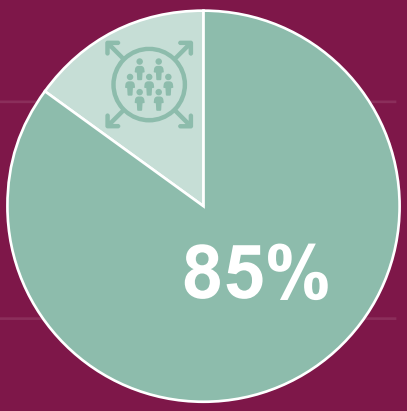
4.6.7 Summary and Insights

This section provides key insights into the OPDC's education, public open space, healthcare facilities, and town centres. It highlights school undersubscription patterns and a lack of accessible public open spaces in some parts of the area. The headline findings are as follows:



There is one slightly undersubscribed 1 form entry primary school in the OPDC area, and of the 14 schools in the study area + buffer, the majority are slightly to significantly undersubscribed, with an **overall capacity ratio of 74%**. A 3-form-entry primary school is projected to be required by 2031.

There are no secondary schools in the OPDC area, but four within the 500m buffer. Three of these are undersubscribed (71% to 91% capacity), with an **overall capacity ratio for secondary schools in the area at 85%.**



Despite the availability of various open spaces, some areas, particularly in the north, have **deficient access to public open space**.

There are 9 GP surgeries within the OPDC + Buffer area where **47.1 Full-time Equivalent (FTE) GPs** serve 156,191 registered patients equating to 3,316 patients per FTE GP. This is higher than the national average of 2,294 patients per FTE GP[10].

[10]https://www.rcgp.org.uk/representing-you/key-statistics-insights

The Island Triangle Railway Workers Cottages

4.7 Housing

4.7.1 Housing Tenure

Housing Tenure categories whether households own or rent the accommodation that it occupies[11]. As displayed in **Table 4-32**, housing tenure in the OPDC area varies, with the largest section of residents, 39.3%, living in private rented housing. The proportion is lower when you include the 500m buffer (35.2%) or consider the entire OPDC region (34.7%). Demonstrating the main OPDC area as having a high concentration of private rented accommodation compared to the surrounding area. The OPDC area also has a considerably higher concentration of private rented accommodation compared to the competitor areas ranging from 4% higher than the host borough average to 18.8% higher than the total for England.

Social Rented and owner-occupied are the next most common types of housing tenure. The OPDC area, buffer and Region have a higher proportion of socially rented homes (30.6%) compared to all the comparator areas. Conversely, the OPDC and wider areas have a considerably lower proportion of owner-occupied homes, with the OPDC's proportion of owner-occupied housing being 36.2% lower than the proportion for England as a whole. Those living rent free or in shared ownership homes make up a much smaller and less significant proportion of the residents in the OPDC area. However, there is a slightly higher proportion of shared ownership within OPDC compared to the wider and comparator areas. These figures do not reflect recent residential planning permissions since the Census was undertaken. OPDC's Authority Monitoring Report 2022/23 identifies that 40% of all new homes secured by OPDC at time of publication were affordable housing. 75% of these were Intermediate tenures and 25% were Affordable Rent products. These elements will show an increase in the proportion of affordable homes for the OPDC area.

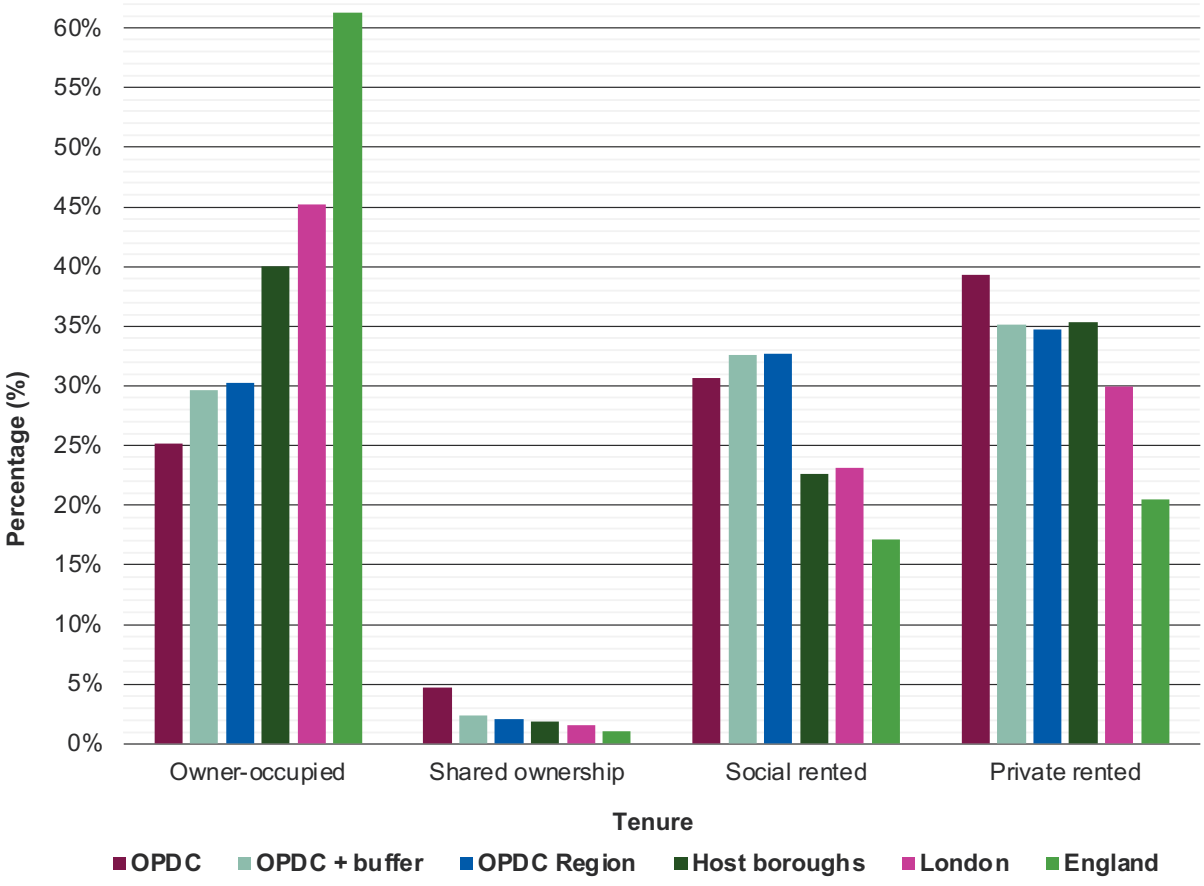
[11]ONS – Tenure of Household - https://www.ons.gov.uk/census/census2021dictionary/variablesbytopic/housingvariablescensus2021/tenureofhousehold#:~:text=Type%3A%20Derived%20variable-,Definition,owns%20all%20of%20the%20accommodation (retrieved November 2023)

Table 4-32 - Split of Housing by Tenure

	Owner-Occupied	Shared Ownership	Social Rented	Private Rented	Lives Rent Free	Total Households
OPDC	25.1%	4.7%	30.6%	39.3%	0.2%	7,008
OPDC + Buffer	29.6%	2.4%	32.6%	35.2%	0.2%	24,619
OPDC Region	30.2%	2.1%	32.7%	34.7%	0.2%	134,731
Host Boroughs	40.0%	1.8%	22.6%	35.3%	0.2%	333,513
London	45.2%	1.5%	23.1%	30.0%	0.2%	3,423,889
England	61.3%	1.0%	17.1%	20.5%	0.1%	23,436,085

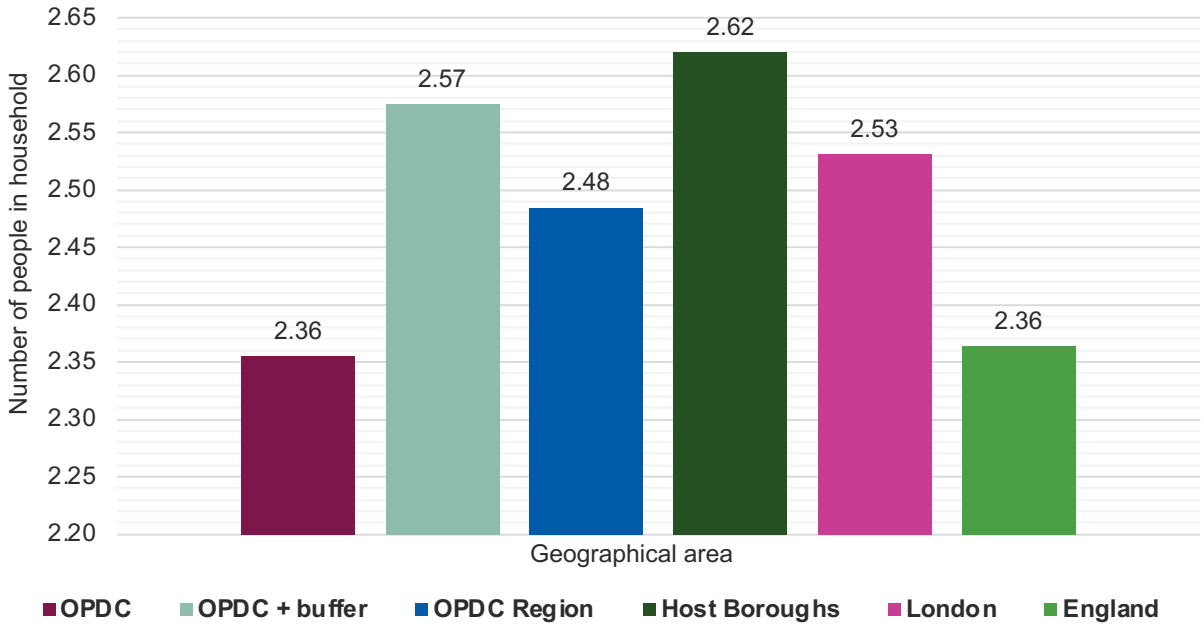
Source: Census 2021 – Housing by Tenure

Figure 4-8 - Percentage of Housing by Tenure, Census 2021 Data*



**Living rent free has been omitted from the figure due to its insignificant size, see Table 4 27*
Source: ONS – Census 2021, Tenure by household type

Figure 4-9 - Average Household Size



Source: ONS – Census 2021, Household Size

The average household size in the OPDC area is 2.36 people per household, according to the table in **Figure 4-9**. This is the same as the national average, but below the average for London and the host boroughs. The average rises to 2.57 with the addition of the 500m buffer and rises by slightly less to 2.48 when looking at the OPDC Region. This suggests that larger multi-person households are in the periphery around the central OPDC area.

Table 4-33 shows the number and proportion of households in the OPDC Area and comparator areas by number of bedrooms. The majority of dwellings in the OPDC area are one and two bedroom (34.6% and 31.1% respectively), as with the OPDC + Buffer area and the comparator areas aside from England. However, unlike the OPDC area, there are more two bedroom than one bedroom dwellings in the OPDC + Buffer area and the comparator areas. The host boroughs, London and England also have a higher proportion of three and four bedroom dwellings than the OPDC area.

Table 4-33 - Dwellings by Number of Bedrooms

Geography	Total	1 bedroom	2 bedrooms	3 bedrooms	4 bedrooms or more
	No.	%	%	%	%
OPDC	7,184	34.6	31.1	22.2	9.6
OPDC + Buffer	24,805	26.3	30.0	26.5	16.5
Host Boroughs	333,515	23.2	30.4	27.1	19.2
London	3,423,890	21.2	31.4	29.5	17.9
England	23,436,085	11.6	27.3	40.0	21.1

Source: ONS – Census 2021, Number of Bedrooms

4.7.2 Overcrowding

Table 4-34 shows the occupancy rating for bedrooms of households in the OPDC area and beyond. The occupancy rating categorizes a household's accommodation as overcrowded, ideally occupied, or under-occupied. The calculation is made by comparing the number of bedrooms needed by the household with the number of bedrooms that are available[12]. A score of -1 or less indicates that a household's accommodation lacks the necessary number of bedrooms and is considered overcrowded, while a rating of +1 or more suggests that the accommodation has an excess of bedrooms and is categorized as under-occupied. A rating of 0 signifies that the household's accommodation has an appropriate and ideal number of bedrooms.

A majority of the households in the OPDC have a core of 0 (54%), meaning they have an ideal number of bedrooms. This is higher than the proportion of households for the host boroughs (42.1%), London (40%) and considerably higher than that of England at 26.8%. The number of households that have either one or two more bedrooms are the next largest categories. These proportions for these categories in the OPDC Area are smaller than those for the comparator areas, suggesting there are less homes here that have too many bedrooms compared to London, England and the surrounding boroughs.

[12]ONS – Occupancy rating - https://www.ons.gov.uk/census/census2021dictionary/variablesbytopic/housingvariablescensus2021/occupancyratingforbedrooms#:~:text=An%20occupancy%20rating%20of%3A,an%20ideal%20number%20of%20bedrooms (retrieved November 2023)

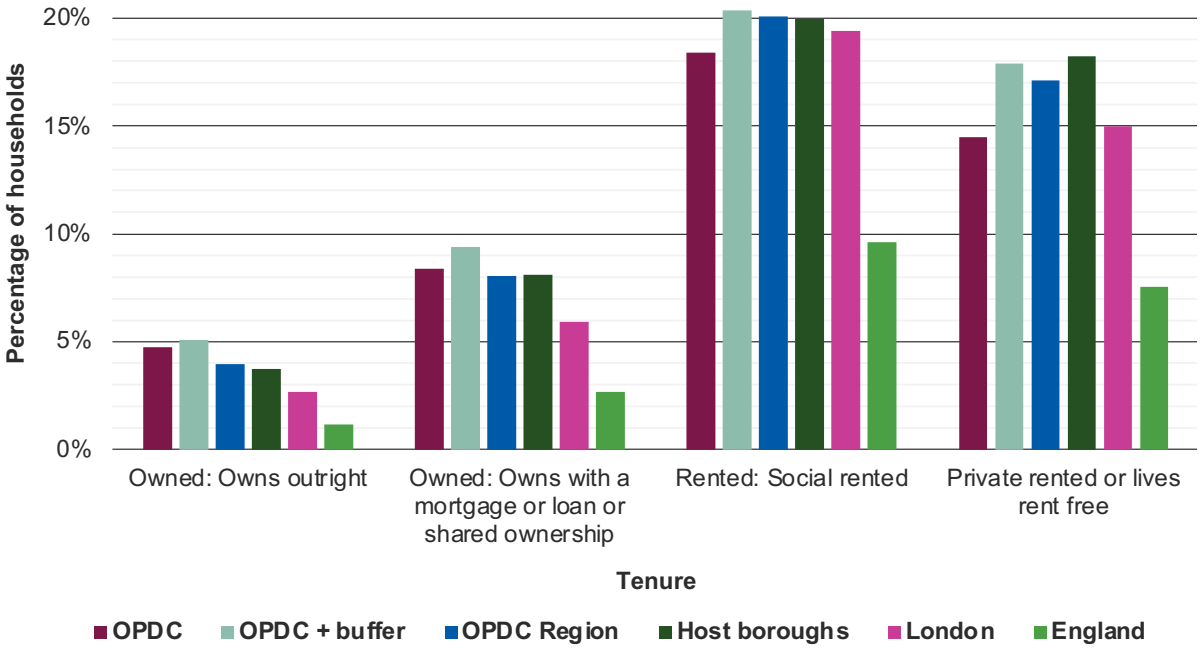
Table 4-34 - Percentage of Housing Stock with each Occupancy Rating according to the Bedroom Standard

Geography	Occupancy Rating of Bedrooms: +2 or more	Occupancy Rating of Bedrooms: +1	Occupancy Rating of Bedrooms: 0	Occupancy Rating of Bedrooms: -1	Occupancy Rating of Bedrooms: -2 or less
OPDC	12.0%	20.6%	54.0%	11.0%	2.5%
OPDC + Buffer	16.9%	22.0%	45.8%	11.9%	3.4%
OPDC Region	15.7%	23.1%	46.7%	11.1%	3.4%
Host Boroughs	20.1%	24.3%	42.1%	10.5%	3.0%
London	21.8%	27.1%	40.0%	8.9%	2.2%
England	35.6%	33.2%	26.8%	3.6%	0.7%

Source: Census 2021 – Occupancy rating for bedrooms

Figure 4-10 shows the share of households with insufficient bedrooms by tenure. Across all study areas social rented housing has the highest number of households with insufficient bedrooms. However, the OPDC area has a lower percentage of homes compared to the comparator areas such as the host boroughs, London, and England. OPDC has a lower proportion of households with insufficient bedrooms across all tenure types. However, when including the 500m buffer, OPDC has a higher percentage of households compared to the comparator areas. This suggests an issue with overcrowding in the periphery areas around OPDC.

Figure 4-10 - Share of Households with Insufficient Bedrooms by Tenure



Source: ONS – Census 2021, Occupancy rating for bedrooms

Table 4-35 shows a variation between boroughs for the number of households on waiting lists for the London boroughs that OPDC and the buffer sit in. Brent is the highest by far as 25,218 households in 2022 needed social housing. This is 14 times greater than the number of households in Hammersmith and Fulham. Kensington and Chelsea is also low in comparison to Ealing which has 12,094 households. This larger amount is still only half of the number in Brent, emphasising the very high need for social housing provision in this area.

Table 4-35 – Number of Households on Waiting Lists for Local Authority Housing

	Hammersmith and Fulham	Brent	Ealing	Kensington and Chelsea
Total	1,719	25,218	12,094	3,055

Source: DCLG - Households on Local Authority Waiting List - 2022

4.7.3 Housebuilding Activity

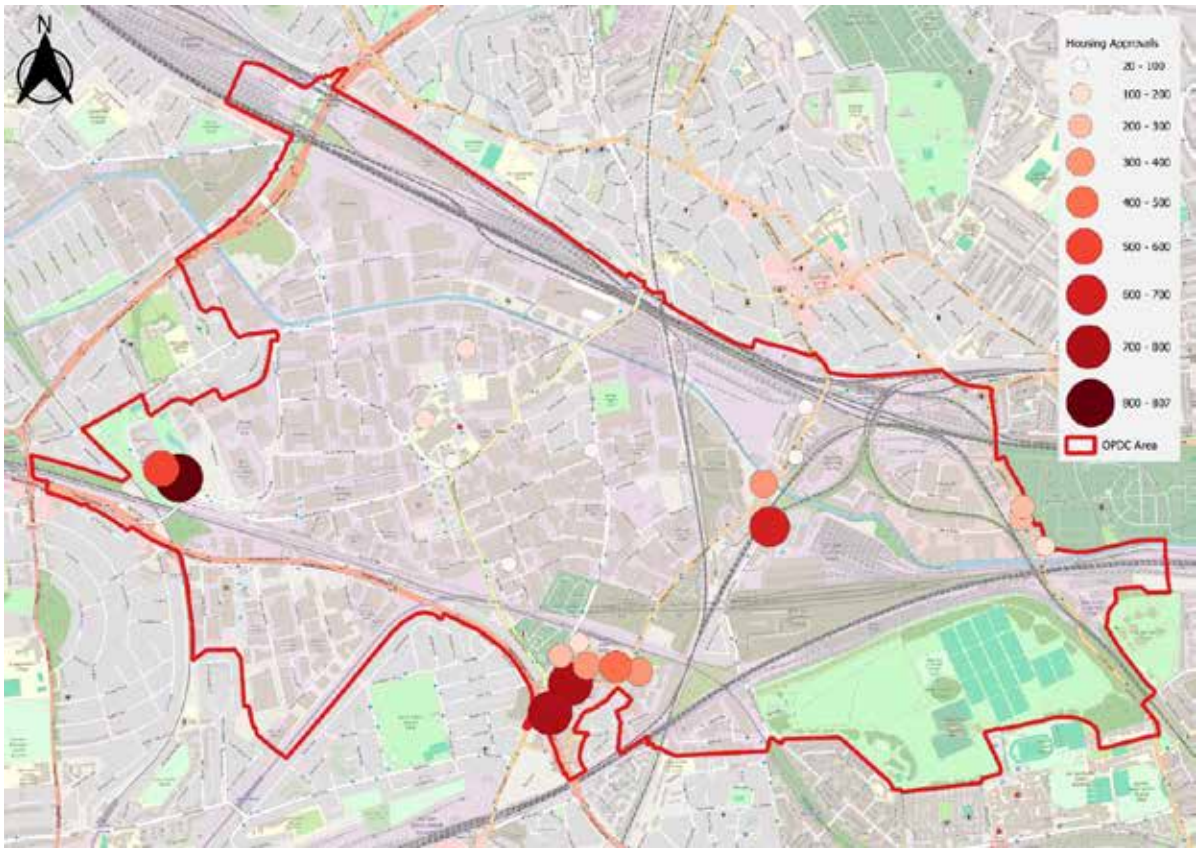
Table 4-36 below shows the number of housing approvals, starts and completions in the OPDC area between April 2015 and March 2023.

Table 4-36 – Housing Approvals, Starts and Completions in OPDC Area on 31 March 2023

	Approved and Resolved to Approve	Starts	Completions
Total	6,839	1,684	3,546

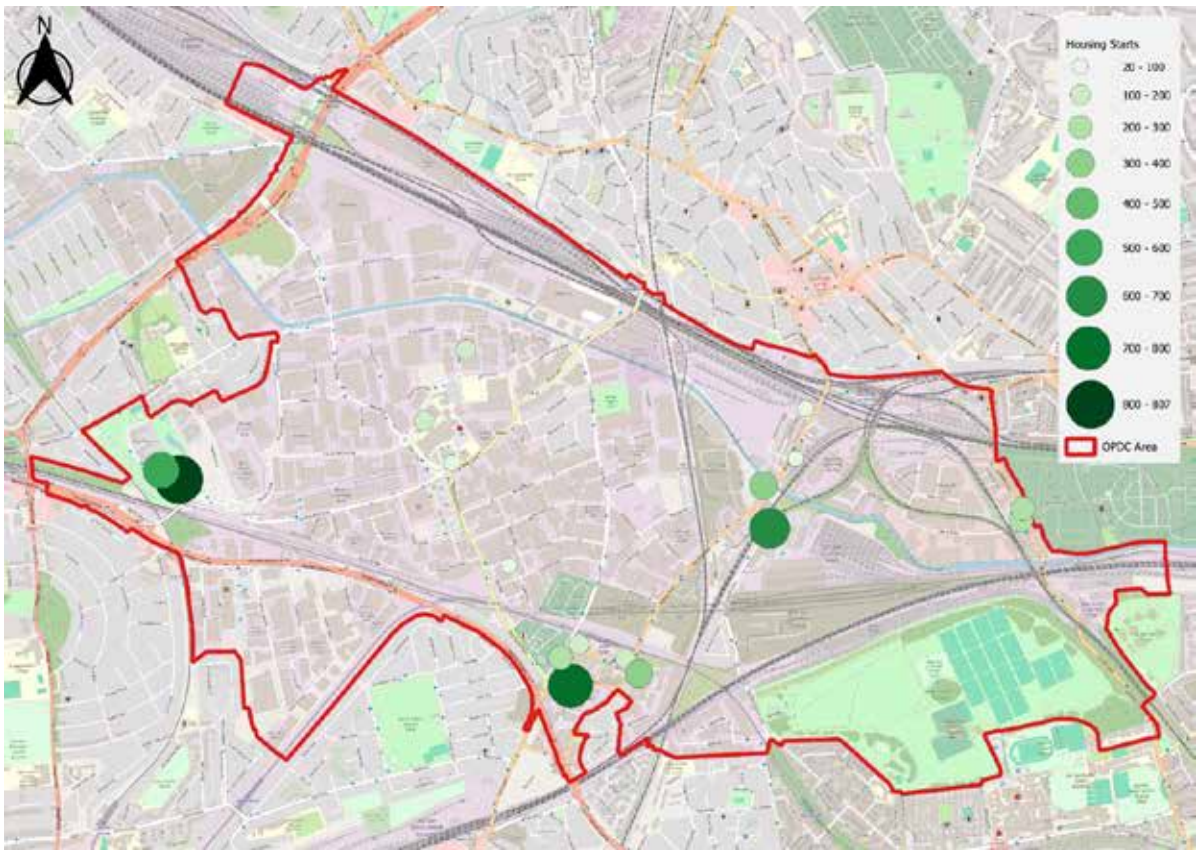
Source: OPDC Authority Monitoring Report 2022 to 2023

Map 4-17 - Housing Approvals in the OPDC Area



Source: OPDC monitoring information. Base mapping from OpenStreetMap.

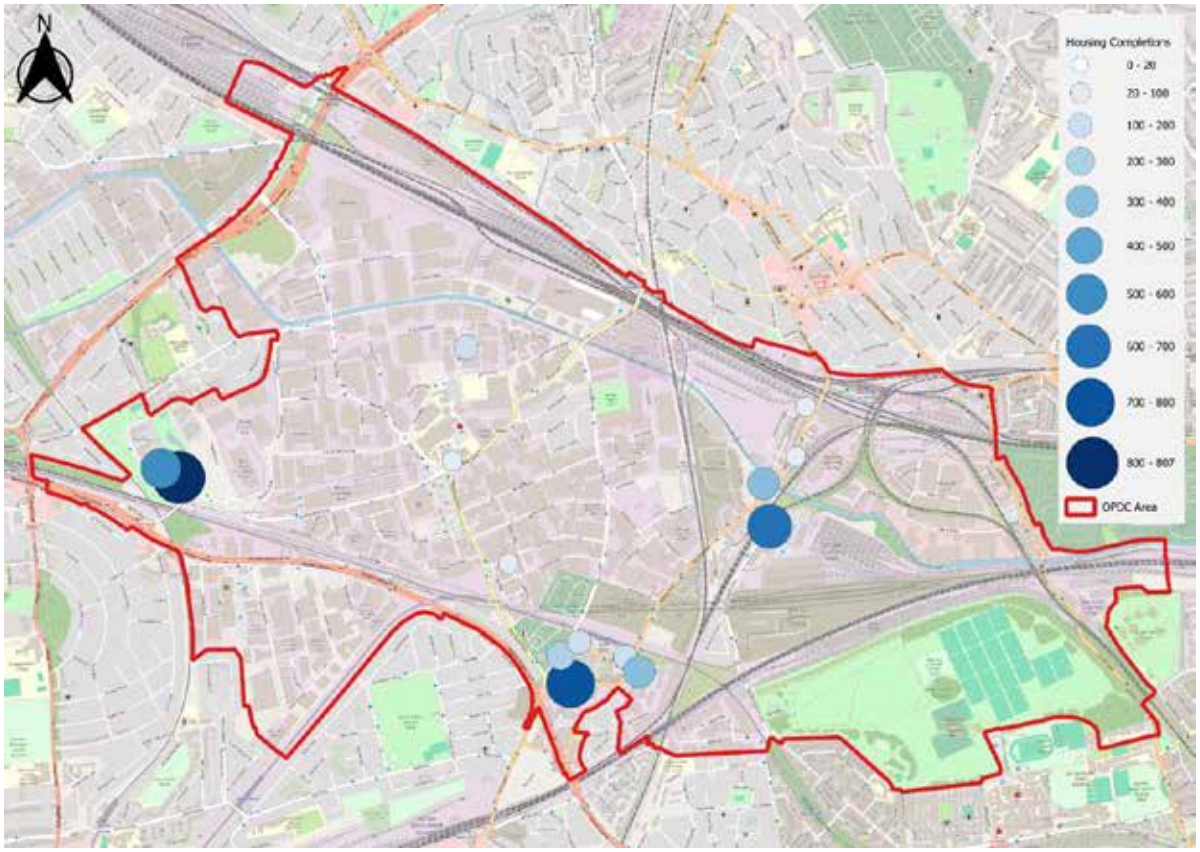
Map 4-18 - Housing Starts in the OPDC Area



Source: OPDC monitoring information. Base mapping from OpenStreetMap.

Oaklands Rise under construction

Map 4-19 - Housing Completions in the OPDC Area



Source: OPDC monitoring information. Base mapping from OpenStreetMap.

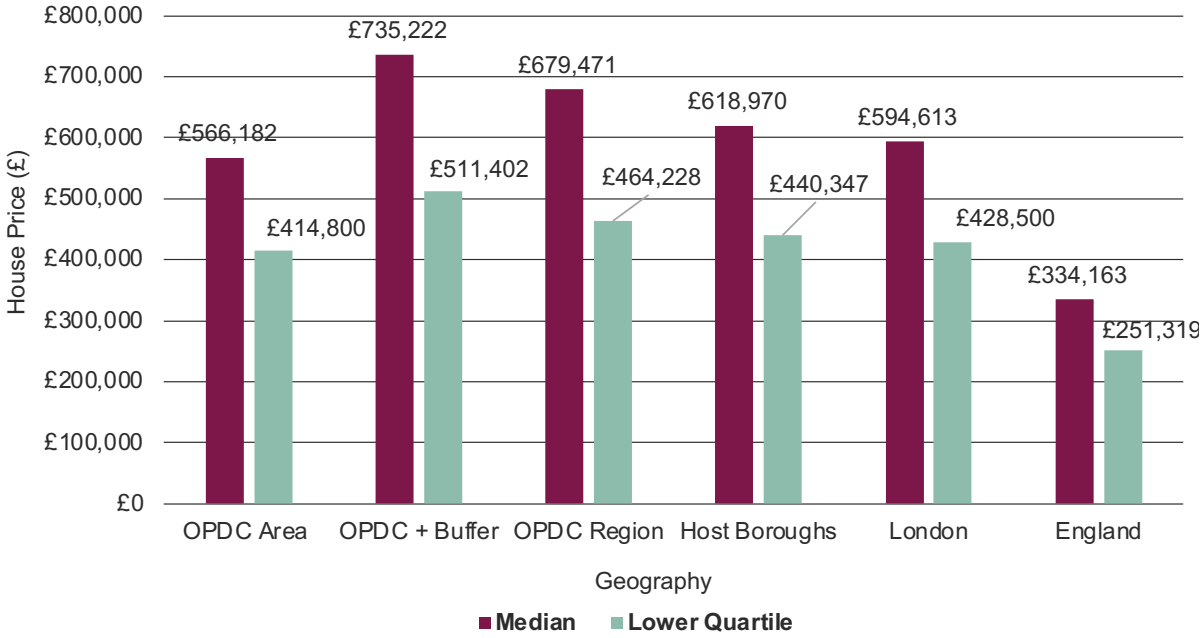
The maps above show that there is a cluster of housing completions, starts and particularly approvals in the south of the OPDC area, just south and North Action station.

4.7.4 House Prices

Figure 4-11 displays the median and lower quartile house prices across all comparator areas. Clearly London is an expensive area within England, with nearly double the median house price at £594,613 compared to £334,163. The median house price in the OPDC area is £566,182 which is lower than the average for London. However, all other surrounding areas are higher in relation to London, especially the buffer with a median house price of £735,222. The region is also a lot more expensive than the OPDC area and the host boroughs, Brent, Ealing and Hammersmith and Fulham.

The lower quartile measurements have less variation than the median values, indicating that a small number of extreme positives could be distorting the data and positively skewing median values. Despite this influence, it is still evident that The OPDC area is significantly more expensive to buy a house in than in the rest of England. The lower quartile price is very close to London's but is still cheaper than the other comparators and the buffer still stands out as being higher.

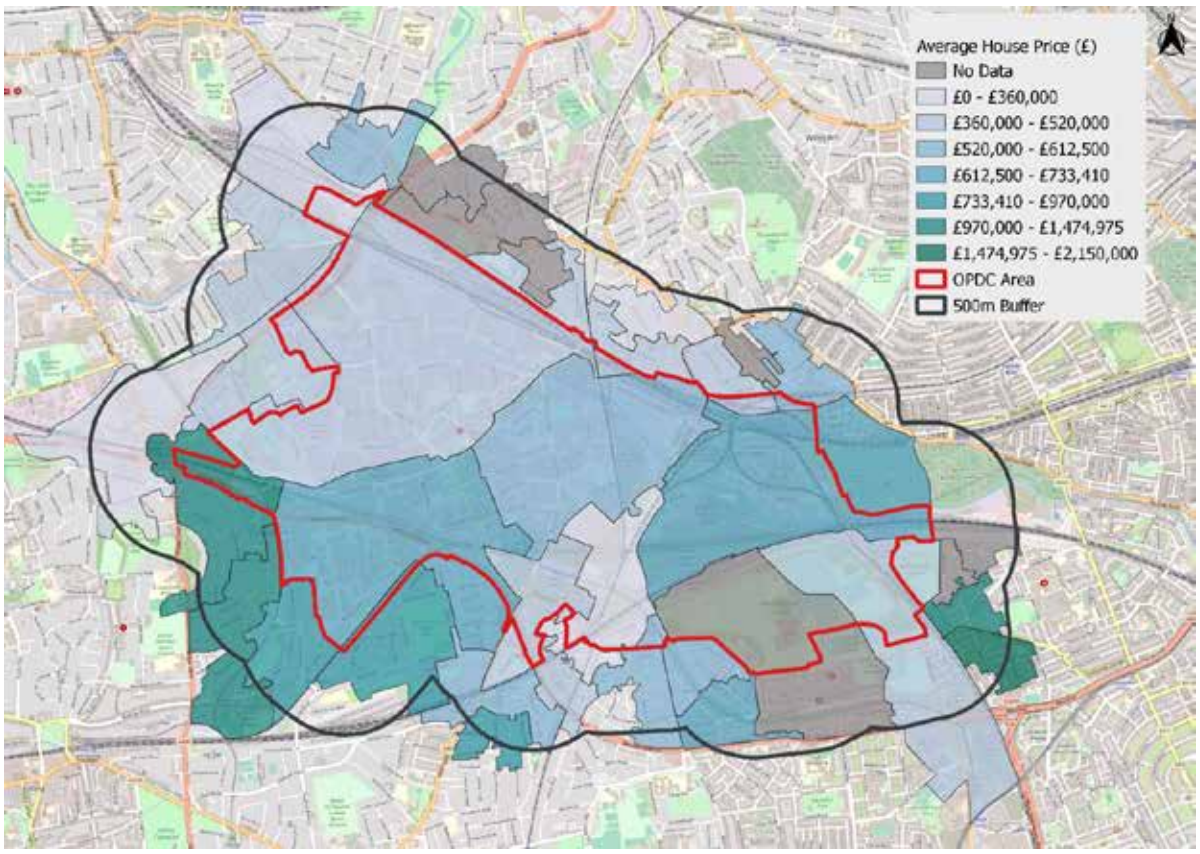
Figure 4-11 - Median and Lower Quartile House Prices



Source: ONS for year ending Dec 2022 - Lower quartile price paid for residential properties by LSOA, England and Wales, and Median price paid for residential properties by LSOA, England and Wales

Map 4-20 shows the geographical distribution and variation of median house prices in the OPDC area and the 500m buffer. The more affluent areas in the southeast of OPDC demonstrate very high house prices, upwards of £1.4 million, far higher than the area average for the area, £705,036. The majority of LSOAs have a lower median house price than the average, with the lowest median house prices being located in the north and northwest of the area.

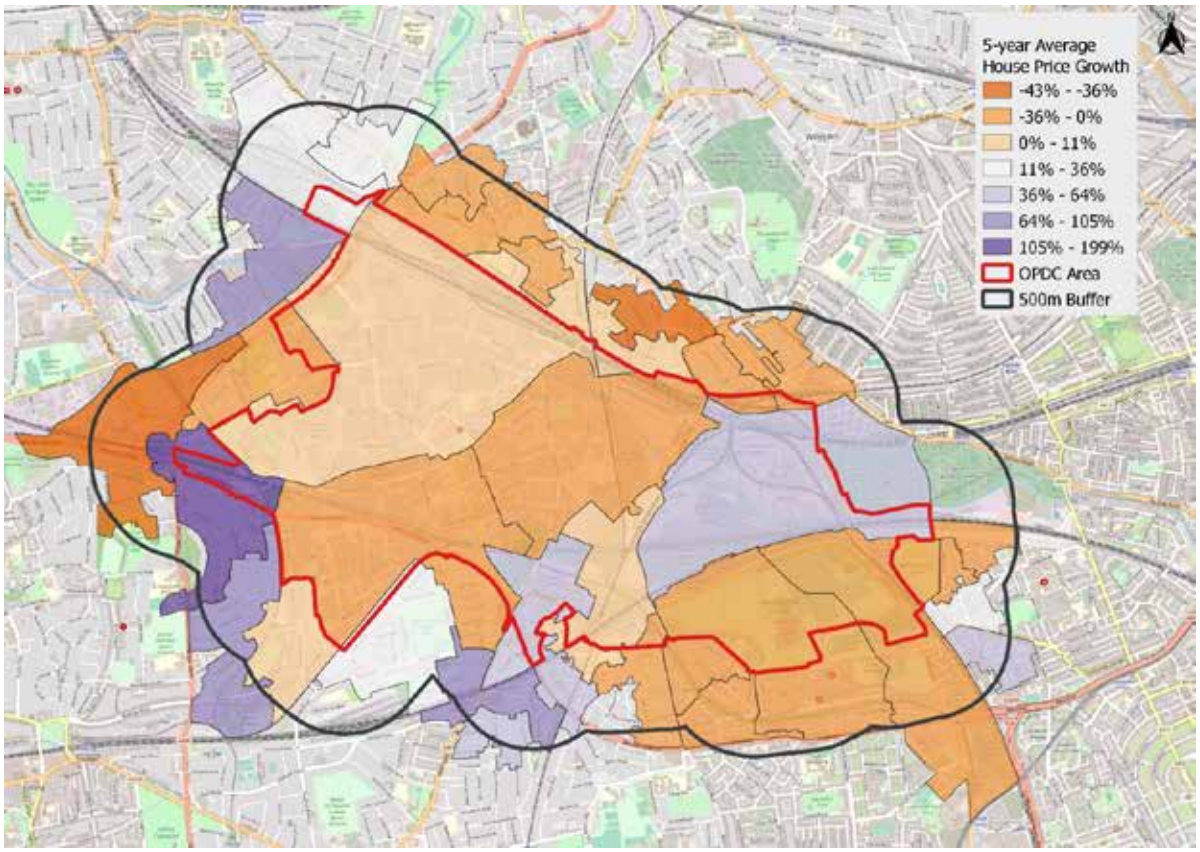
Map 4-20 - Median House Price 2022



Source: ONS for year ending Dec 2022 - Median price paid for residential properties by LSOA, England and Wales. Base mapping from OpenStreetMap.

Map 4-21 shows the variation in 5-year-aveage house price growth. Only four of the 27 LSOAs experienced a decrease in house prices over the last 5 years, with the rest experiencing moderate to high rates of growth. The overall average growth rate was 32%. Areas in the north and west of OPDC experienced negative house price growth, with one LSOA experiencing a fall in house prices as low as -43%. However, the average is inflated by the extremely high house price growth seen by areas in the southwest of ODPC where one area saw a increase of 199% over the 5-year period. There are a few LSOAs that saw massive increases and decreases in house prices, the majority of the LSOAs saw moderate to strong house price growth of around 30%-90%.

Map 4-21 - Five-year Average Median House Price Growth



Source: ONS for year ending Dec 2022 – Lower quartile price paid for residential properties by LSOA, England and Wales. Base mapping from OpenStreetMap.

Table 4-37 shows the mean average house price in 2020 compared to the mean household income before housing costs over the same year. Mean measurements can cause data to be positively skewed, so this is why this average value is higher than the median average value used previously. The trend differs slightly, as the OPDC area now appears more expensive than the buffer (which had the highest median value of all comparators). The OPDC region now is the most expensive area of all comparators to buy a house. All OPDC study areas have a similar mean house price to the rest of London, and are around double England's mean price (£333,414)

However, the income difference does not reflect the house price difference, as seen in the ratios. The national average house price is 10.24 times more than household income. In London and all OPDC study areas this is nearly double or more. The OPDC area's house price to income ratio (19.70:1) is similar to that of the host boroughs whilst the OPDC region has the highest ratio (21.98:1).

Table 4-37 - Mean House Price to Mean Income Ratios

Geography	Mean House Price	Mean Household Income (Before Housing Costs)	Mean House Price to Mean Household Income Ratio
OPDC Area	£640,976	£32,533	19.70:1
OPDC + Buffer	£615,598	£35,250	17.46:1
OPDC Region	£796,381	£36,229	21.98:1
Host Boroughs	£734,453	£38,246	19.20:1
London	£666,356	£38,233	17.43:1
England	£333,414	£32,550	10.24:1

Source: ONS – Mean price paid by MSOA, England and Wales – 2020 and ONS - Income estimates for small areas, England and Wales - 2020

The housing landscape in the OPDC area exhibits distinct patterns in comparison to surrounding regions. While London remains an expensive area within England, with a median house price nearly double the national average at £594,613, the OPDC area's median house price is £566,182, lower than the London average. However, the surrounding areas, especially the buffer, present higher median prices, with a notable median of £735,222.

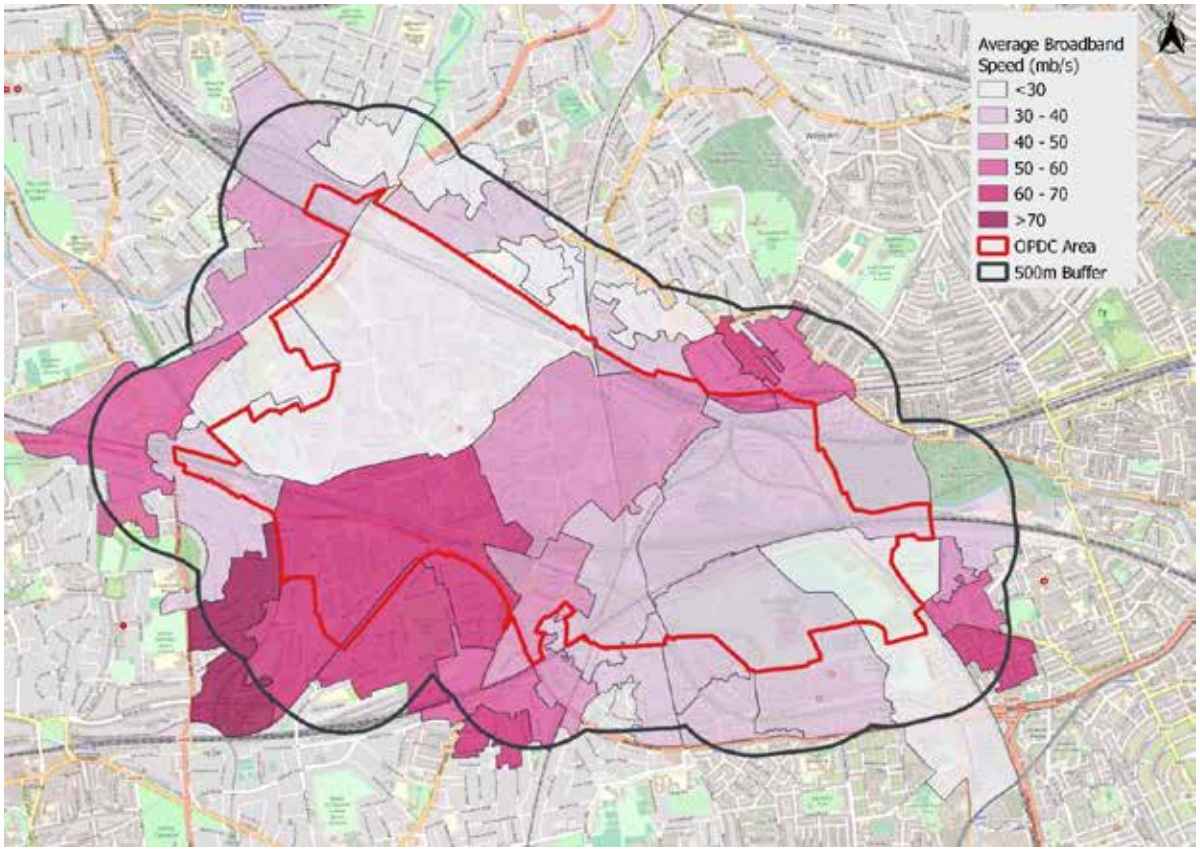
The distribution of median house prices in the OPDC area and the 500m buffer reveals substantial variation, with affluent southwest areas exceeding £1.4 million, contrasting with lower prices in the north and northwest. House price growth over the last five years is generally positive, with a 32% average growth rate, although some areas in the north and west experienced negative growth. The OPDC area emerges as the most expensive among comparators in mean average house prices, surpassing even the buffer.

Despite income differences, reflected in ratios, London and OPDC areas have house prices nearly double or more than household income.

4.7.5 Broadband

Map 4-22 shows the average broadband speed for each LSOA within the OPDC area. This data was sourced from The Office of Communications (Ofcom). The categories for this data range from as low as 20-30 megabits per second (mb/s) to higher than 70mb/s. There is a large area of fast broadband speeds located in the Southwest of the OPDC area, as well as other smaller pockets in the north, east and west. There are also large areas in the northwest and southeast with comparatively lower broadband speeds. However, the average broadband speed in the UK for 2023 was 69.4 mb/s[13]. Only one LSOA in the area had broadband speeds greater than 70mb/s. This reveals the OPDC area has comparatively slower broadband speeds than the rest of the UK.

Map 4-22 - Domestic Broadband Speeds



Source: Ofcom. Base mapping from OpenStreetMap.

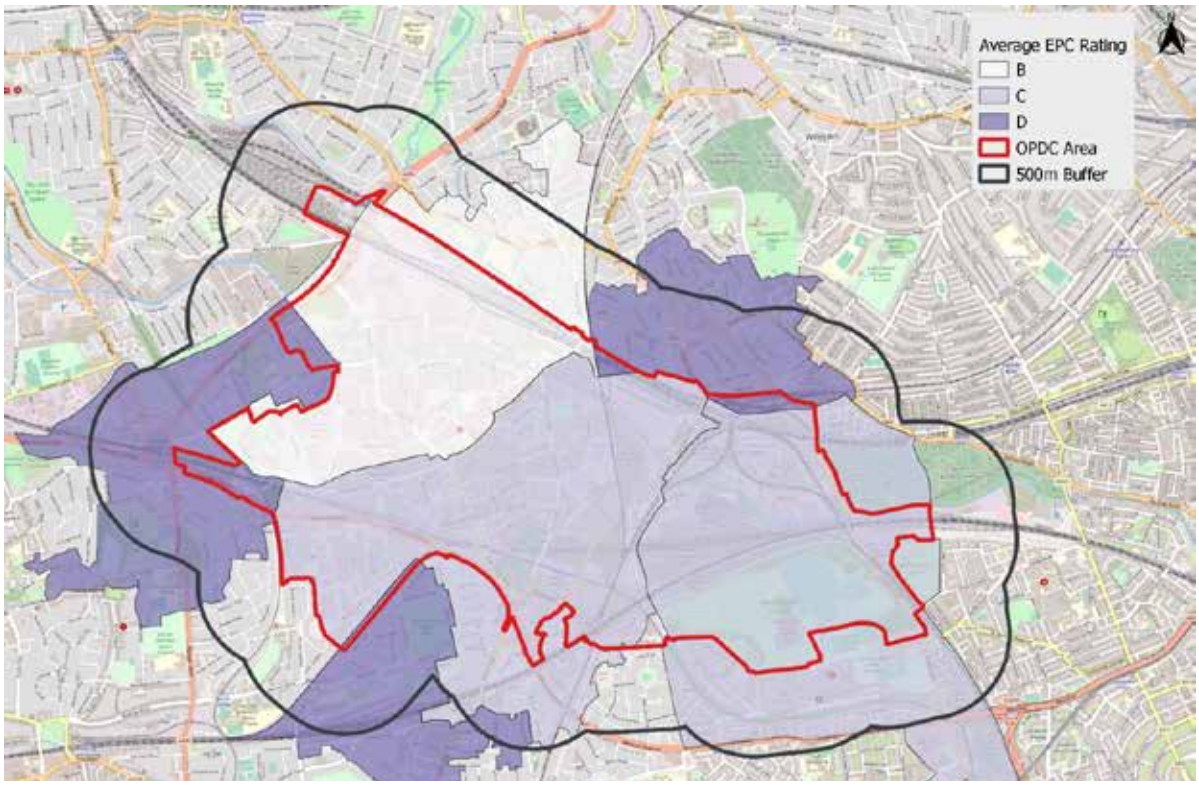
[13]Virgin Media – Average broadband speed - https://www.virginmedia.com/blog/broadband/average-broadband-speed

4.7.6 Energy Performance

Map 4-23 shows data regarding the average EPC rating for homes within out study area by MSOA. An EPC rating, or Energy Performance Certificate (EPC), is a rating scheme used to summarise the energy efficiency for buildings in the UK, it covers both homes and businesses and is required whenever properties are built, sold or rented[14].

An EPC gives a property an energy efficiency rating from A (most efficient) to G (least efficient) and is valid for 10 years. An EPC rating of C or higher is considered above average for energy efficiency in the UK[15]. The MSOAs in the OPDC Area only have EPC ratings ranging from D-B. There is one MSOA in the Northwest has a rating of B meaning the average home has a very good level of energy efficiency. There are two MSOAs in the centre and to the East of the OPDC Area which have an average rating of C, meaning they have a reasonably good level of energy efficiency. There are three MSOAs in the OPDC buffer, each with an EPC rating of D meaning they have an average to slightly below average level of energy efficiency. Overall, this map shows that there is a decent level of energy performance across the OPDC area.

Map 4-23 Average Residential EPC Rating by MSOA



Source: ONS - Energy efficiency of housing in England and Wales. Base mapping from OpenStreetMap.

[14]GOV.UK – Energy Performance Certificates - https://www.gov.uk/buy-sell-your-home/energy-performance-certificates (retrieved November 2023)
[15]EPC.CO.UK – EPC Ultimate guide - https://energyperformancecertificates.co.uk/epcs-the-ultimate-guide#:~:text=If%20your%20property%20has%20an,in%20terms%20of%20energy%20efficiency. (retrieved November 2023)

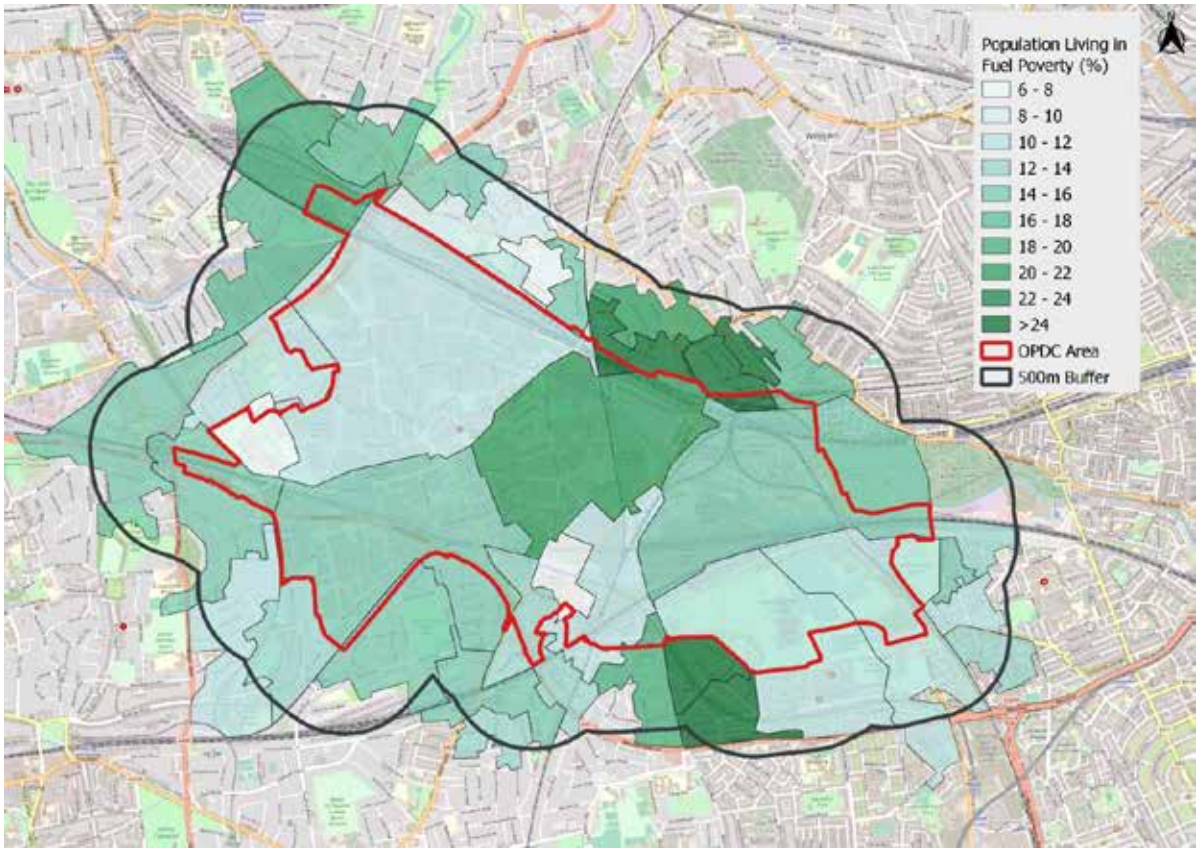
4.7.7 Fuel Poverty

Fuel poverty in England is measured using the Low Income Low Energy Efficiency (LILEE) indicator. Under this indicator, a household is considered to be fuel poor if they are living in a property with a fuel poverty energy efficiency rating of band D or below and when they spend the required amount to heat their home, they are left with a residual income below the official poverty line.

The proportion of households living in fuel poverty per LSOA range from 6% to greater than 24% of the households living in fuel poverty. The modal observation for each LSOA is 14-16% of the households experiencing fuel poverty. With 8 of the 37 LSOA's experiencing having this proportion of fuel poverty. This is followed by 7 LSOAs having 10-12% of their population living in fuel poverty.

Map 4-24 shows that the geographical distribution of those experiencing fuel poverty is varied across the OPDC area with few obvious trends in the data. There are small areas of high fuel poverty north and south of the OPDC Area in Harlesden and East Acton where more than 20% of the population live in fuel poverty. This is likely in part due to the older housing stock.

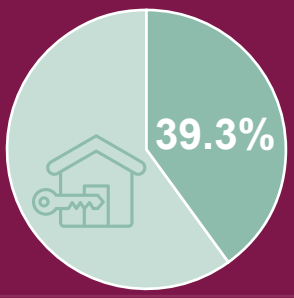
Map 4-24 Fuel Poverty by LSOA



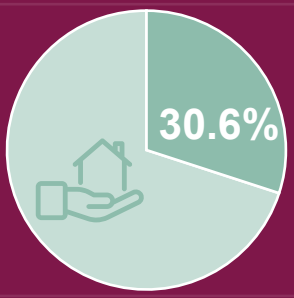
Source: Department for Energy and NetZero - Sub-regional fuel poverty in England, 2023 (2021 data). Base mapping from OpenStreetMap.

4.7.8 Summary and Insights

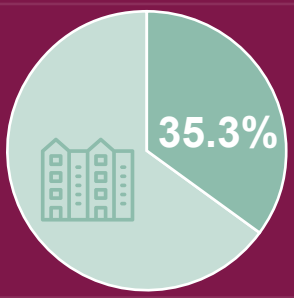
To understand the housing situation in the OPDC area, we have considered housing tenure, household characteristics, house prices, broadband and fuel poverty. Headline statistics are outline below:



Private rented housing is the dominant tenure in the OPDC area, constituting **39.3%** of housing, 9 percentage points higher than for London as a whole.



Socially rented homes are also prevalent and make up 30.6% of housing compared to 23.1% across London as a whole.



Overall, 35.3% of housing in the OPDC area is affordable housing compared to just 24.6% across London. Recently affordable housing has been a significant focus for OPDC with 40% of new homes built in 2022/23 being in the affordable category. The provision of affordable housing should continue to be a key focus given high housing costs in the area.

Average household size is **2.36 people per household**, aligning with the national average but overcrowding is less prevalent, with 54% of households having an ideal number of bedrooms.

The majority of dwellings in the OPDC area are **one and two bedroom** (34.6% and 31.1% respectively).

£566,182
median house price

The OPDC area has a **median house price of £566,182** - lower than London average.

The mean house price in the OPDC area is £640,000 which is lower when compared to £734,400 for the host boroughs and £666,000 for London. However, reflecting local income levels the mean house price to mean household income ratio is higher.

Broadband speeds in the OPDC area are comparatively slower than the UK average.

Energy performance, measured by EPC ratings, range from an **average of D-B** across MSOAs compared to a national average of C.

The proportion of households in fuel poverty ranges from 6% to over 24% across LSOAs. Concentrations of fuel poverty are observed in the north and south of the OPDC area.

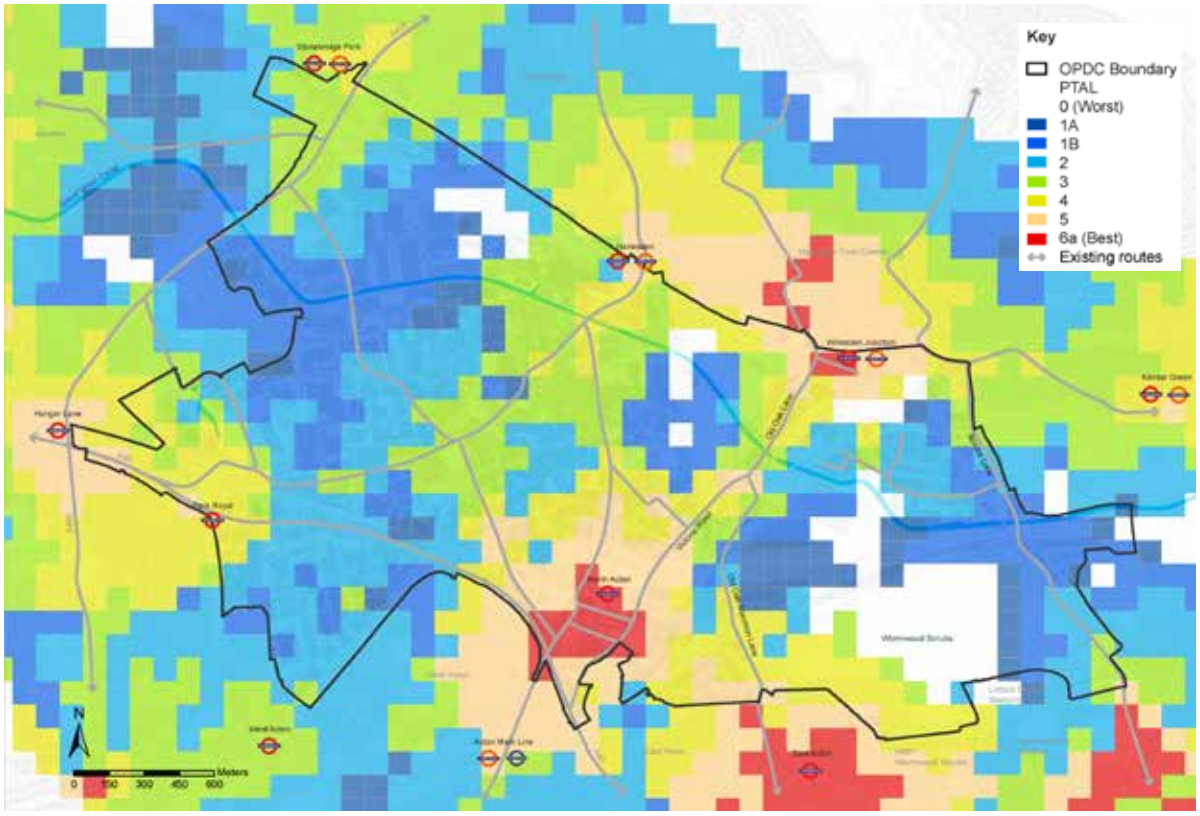
4.8 Transport

4.8.1 Access to Public Transport

Public Transport Accessibility Levels (PTAL) are a measure of the accessibility of a point to the public transport network, taking into account walk access time and service availability. The method is essentially a way of measuring the density of the public transport network at any location within Greater London. TfL's Time Mapping (TIM) tool offers a location specific approach to measure accessibility in addition to PTAL. The grading system for each area ranges from 0 to 6b, with 0 being limited access and 6b being outstanding access to public transport.

PTAL across the OPDC area varies greatly from a very poor score (1b) up to a very good score (6). Areas with access to a tube station tend to have a higher PTAL score. Areas such as Acton in the south of the OPDC area with access to stations like East Acton, North Acton, Acton Mainline and West Acton have high PTAL scores. Other areas such as in Park Royal have considerably lower PTAL scores because of the relative lack of public transport in the form of little to no tube, train or bus stations.

Map 4-25 Current (2020) Public Transport Accessibility Level (PTAL)



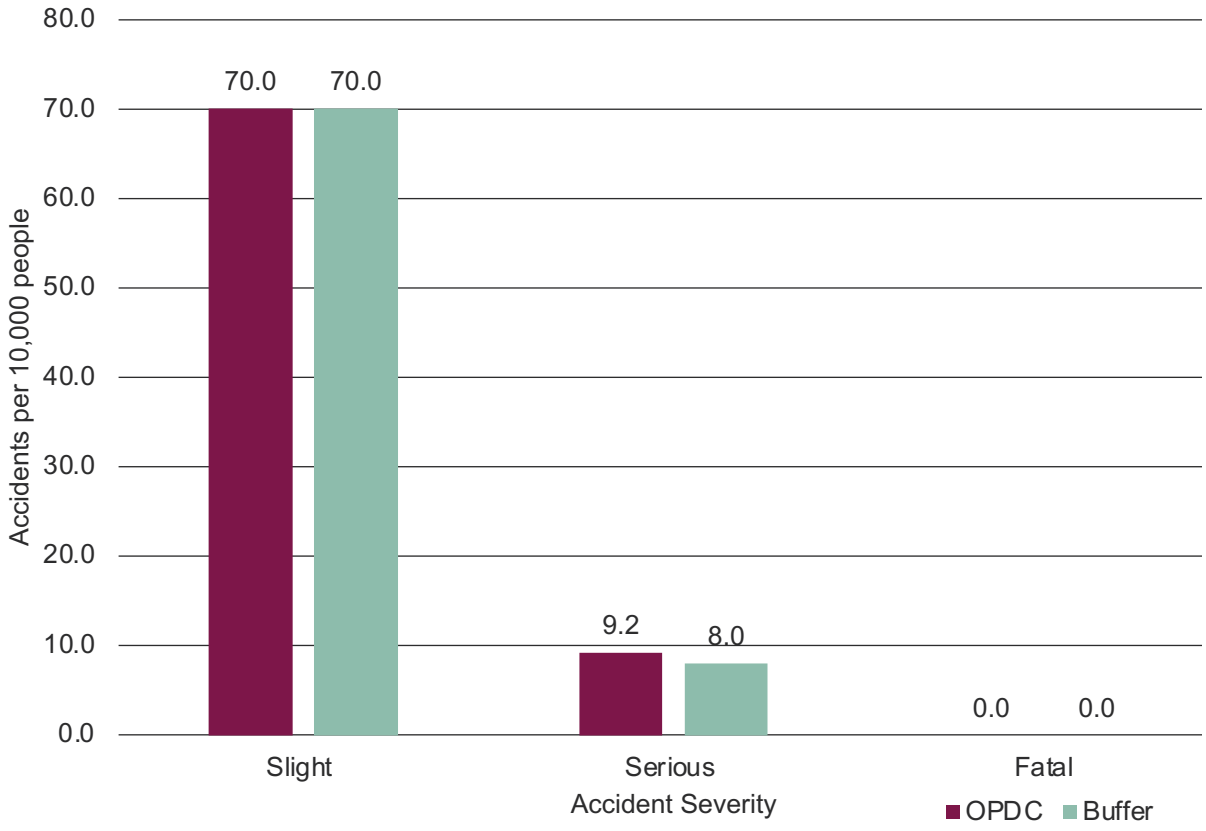
Source: TfL Public Transport Accessibility Levels 2020

4.8.2 Fatalities and Serious Injuries on Roads

Figure 4-12 shows the number of road accidents per 10,000 residents by severity. Accidents are categorised into three categories of severity which are, slight, serious, and fatal. There were 215 total accidents across the OPDC area and 500m buffer with a further 175 in the buffer region. Totalling 390 total accidents across both the OPDC area and the buffer. According to the most recent available accidents data, in 2018 both the OPDC area and its 500m buffer experienced 70 'slight' accidents per 10,000 residents.

The OPDC area, experienced slightly more serious accidents at 9.2 serious accidents per 10,000 residents, compared to the buffer area's 8.2 accidents per 10,000 residents. Neither area experienced any fatal accidents in 2018.

Figure 4-12 - Number of Road Accidents per 10,000 Residents by Severity



Source: London Data Store - Road Casualties by Severity (DfT)

4.8.3 Access to a Vehicle

The majority of households in the OPDC area do not have access to a car or van (57%), as displayed in **Table 4-38**. The next largest proportion is 35.3% of households having access to 1 car or van. A far smaller proportion of the local population have access to 2 or 3+ vehicles. The trends we see in the OPDC area, mimic the trends for all London based areas in the data where the largest group of households do not have access to any vehicles, followed by having 1 vehicle, then 2 and 3+ being the smallest proportion. The number of households with no cars whatsoever decreases the wider the focus is shifted from central London. For example, for host boroughs the average is 44.4%, London is 42.1% and England is only 23.5%. Suggesting central areas of London are much less car dependent than outer London and the wider country.

Table 4-38 - Car or Van Availability for Households as a Proportion of all Households

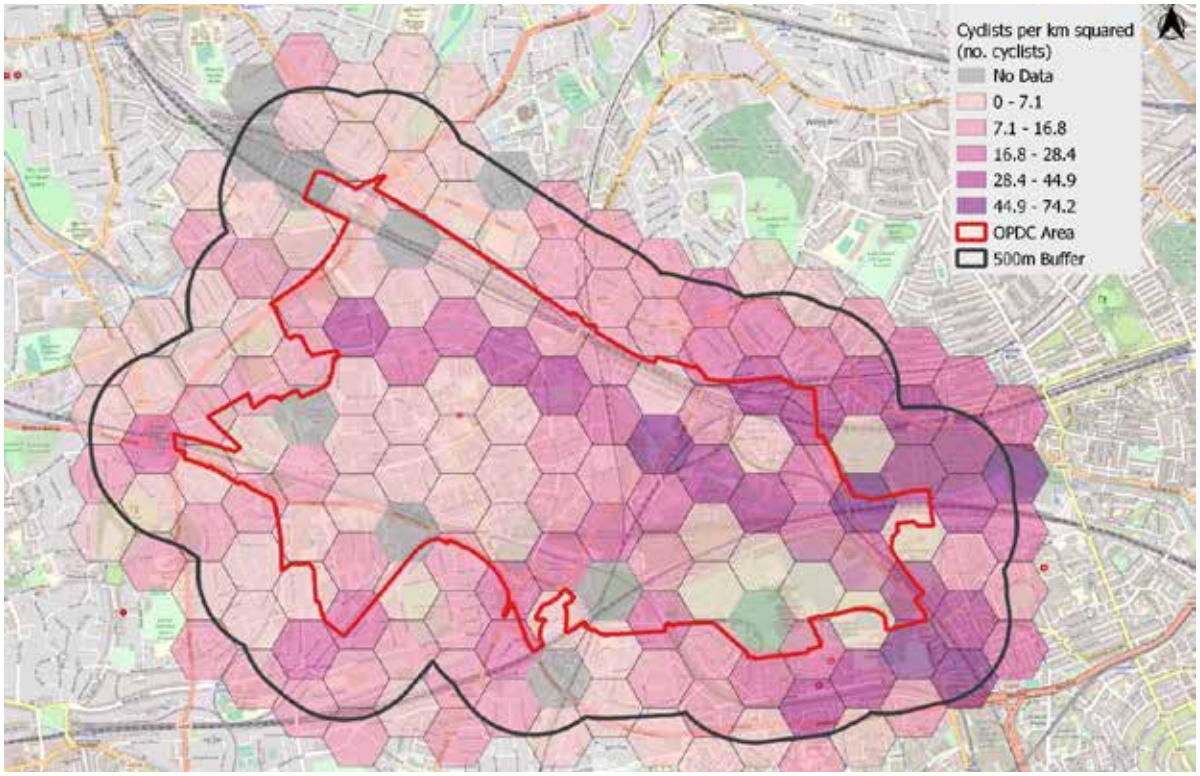
Geography	No Cars or Vans in Household	1 Car or Van in Household	2 Cars or Vans in Household	3 or More Cars or Vans in Household
OPDC	57.0%	35.3%	6.4%	1.3%
OPDC + Buffer	49.9%	38.3%	9.6%	2.2%
OPDC Region	53.0%	36.6%	8.5%	1.9%
Host Boroughs	44.4%	40.1%	12.1%	3.4%
London	42.1%	40.3%	13.6%	4.0%
England	23.5%	41.3%	26.1%	9.1%

Source: ONS – Census 2021

4.8.4 Cycling

Cycling is an important mode of transport for many people living in London, including the OPDC area. However, according to the GLA's Green Infrastructure Focus map for cycling flows, the majority of the OPDC area is in need of more cyclists and improved cycle flow[16]. **Map 4-26** shows the total number of cyclist per km for each hex area. It clearly demonstrates that there is a higher concentration of cyclists in the east of the OPDC Area which have higher than the London average for cycle flows. Popular cycling routes can be seen following established routes such as along Victoria Road, running north to south through OPDC, and along the Grand Union Canal, running west to east. However, outside of these locations the majority of the OPDC area shows levels lower than the London average (23.98 people km cycled per hex).

Map 4-26 - Cycling Flows



Source: London Data Store – GLA cycling flows data. Base mapping from Open Street Map.

Currently there are 4 TfL Cycleways running through the OPDC area, these are; C, C27, C34 and C49[17]. The Grand Union Canal towpath also forms part of the National Cycle Network. There are other local cycle lanes within the OPDC. Improved cycling routes are essential to encouraging a greater number of cyclists to meet the GLA's target for cycling flow of 23.98 people per km cycled[18].

[16]L GLA – Cycling Flows - https://apps.london.gov.uk/green-infrastructure/ (retrieved November 2023)
[17]TfL – Cycle - https://tfl.gov.uk/maps/cycle?intcmp=40402&intcmp=58492&intcmp=60683 (retrieved November 2023)
[18]GLA – Green infrastructure focus map - https://airdrive-secure.s3-eu-west-1.amazonaws.com/london/dataset/green-infrastructure-focus-map/2019-01-18T13%3A32%3A35/green_infrastructure_focus_map_report_and_metadata_GLA_2018_vJan19.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAJJDIMAIVZJDICKHA%2F20231114%2Feu-west-1%2Fs3%2Faws4_request&X-Amz-Date=20231114T142634Z&X-Amz-Expires=300&X-Amz-Signature=67baafa5a2f7d04c2289735f5f5017891ef7b01c9783cd494bb69aaabc31d898&X-Amz-SignedHeaders=host (retrieved November 2023)

4.8.5 Summary and Insights

This section sets of levels of access to and safety of transport in the OPDC area. Headline statistics regarding the findings are outlined below:

Public transport accessibility scores in the OPDC area vary from 1b to 6 with higher scores near tube stations, such as North Acton in the south and Willesden Junction in the north.

57% of OPDC households don't own a car or van, compared to 44% across London, whilst 35.3% have access to one vehicle, compared to 40% for London. There is significantly less access to cars in OPDC than the average for the host boroughs.

The OPDC area has **higher cycling concentrations** along the Grand Union Canal and in the east, which are higher than the London averages for cycle flows. Outside of these areas, locations are lower than the London average.

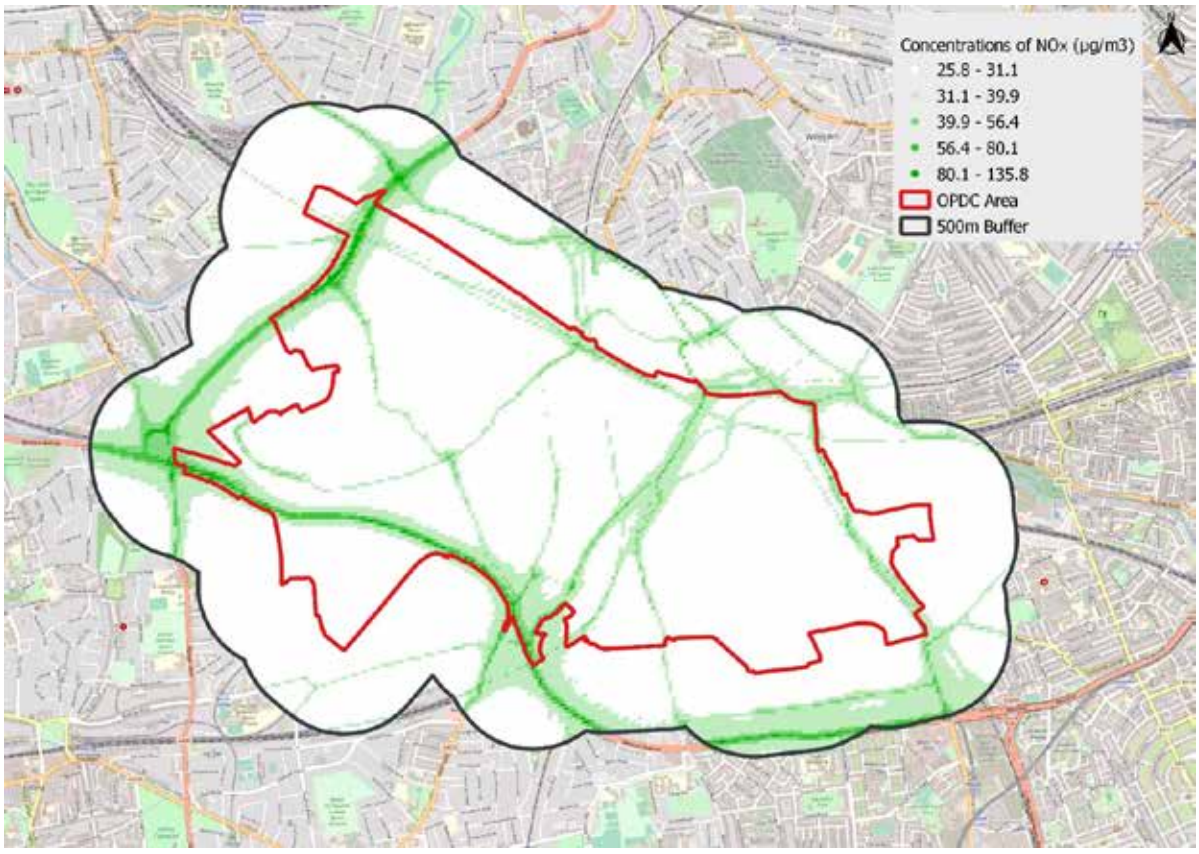
4.9 Environment

4.9.1 Air Quality

The London Atmospheric Emissions Inventory (LAEI) recognises four key pollutants, Nitrogen oxides (NOx), nitrogen dioxide (NO2) and two types of particulate matter (PM10 and PM2.5). Concentrations of emissions have been estimated at ground level. The Department for Environment, Food and Rural Affairs (DEFRA) has set out air quality guidance stating that an annual mean of 40 µg/m^3 of PM10 and 20 µg/m^3 of PM2.5 should not be exceeded as an average over a year. Nitrogen oxides also have targets to meet. NO_2 should not exceed 40 µg/m^3 and NOx should not exceed 30 µg/m^3.

An obvious trend can be seen in **Map 4-27** where the highest concentrations of NOx are located on or near major road running through OPDC. The more major the road the higher the concentration of NOx. This is unsurprising as cars and other combustion engine vehicles produce NOx. Some of OPDC most major roads, such as North Circular Road and Western Avenue have concentrations of NOx upwards of 80 µg/m^3 which exceeds the governments targets of an annual mean of 30 µg/m^3.

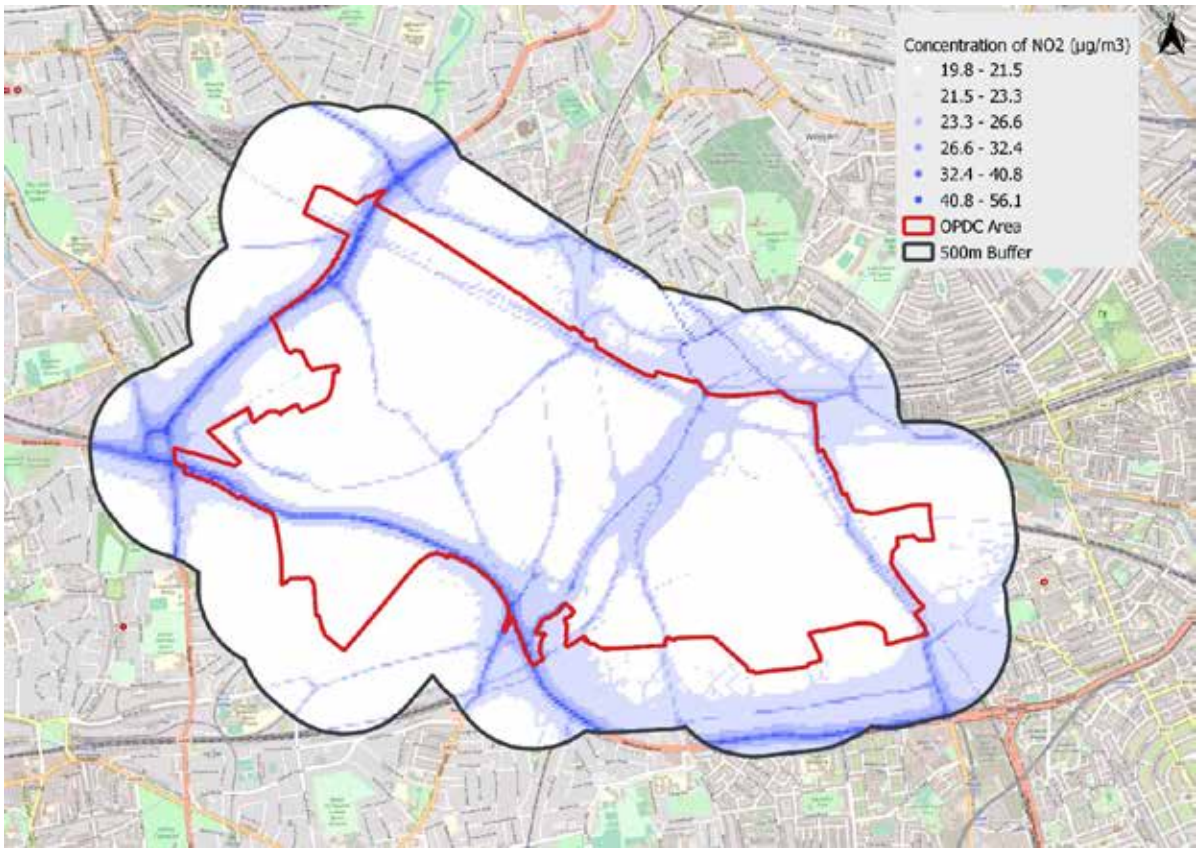
Map 4-27 - NOx concentrations (µg/m3)



Source: London Data Store - Air Quality Data. Base mapping by OpenStreetMap.

Concentration of NO_2 follows a similar pattern to that of the other pollutants, as seen in **Map 4-28**. The highest concentrations of NO2 are found on and around OPDC's roads. Major roads like North Circular Road and Western Avenue tested for concentrations as much as 56.1 µg/m^3. Low levels of NO_2 can still be found further away from the roads, with areas testing over 21 µg/m3 further away from the road than for NOx. This demonstrates NO_2 has a greater distribution compared to other nitrous oxides.

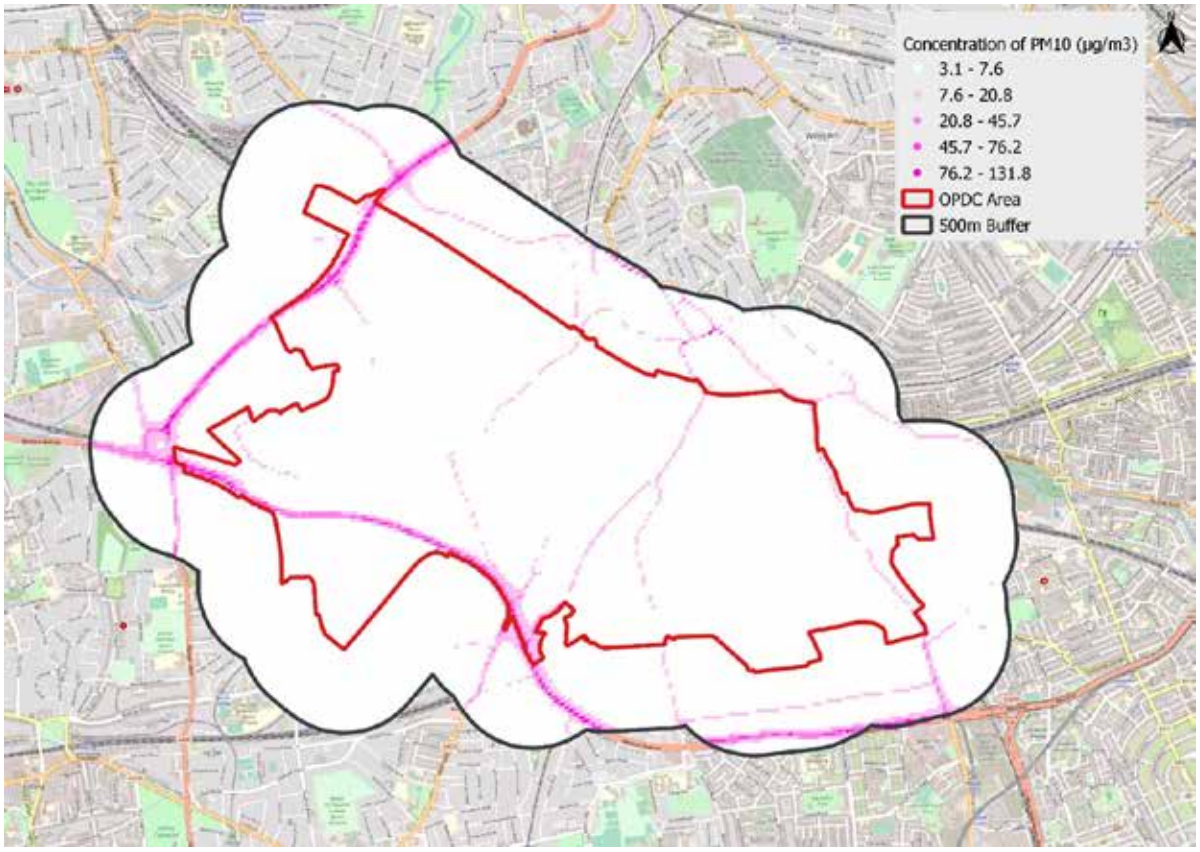
Map 4-28 - NO2 concentrations (µg/m3)



Source: London Data Store - Air Quality Data. Base mapping by OpenStreetMap.

Particulate matter with a diameter of 10 micrometres or less (PM10) are also found in highest concentrations situated around OPDC's road network. PM10 has considerably less of a spread than other pollutants, this can be seen in **Map 4-29** where the pollutant is highly focused around the roads, only exceeding 74.3µg/m^3 at the most major roads. The vast majority of the OPDC area, away from major roads, experiences less than 8.2 µg/m^3 of PM10.

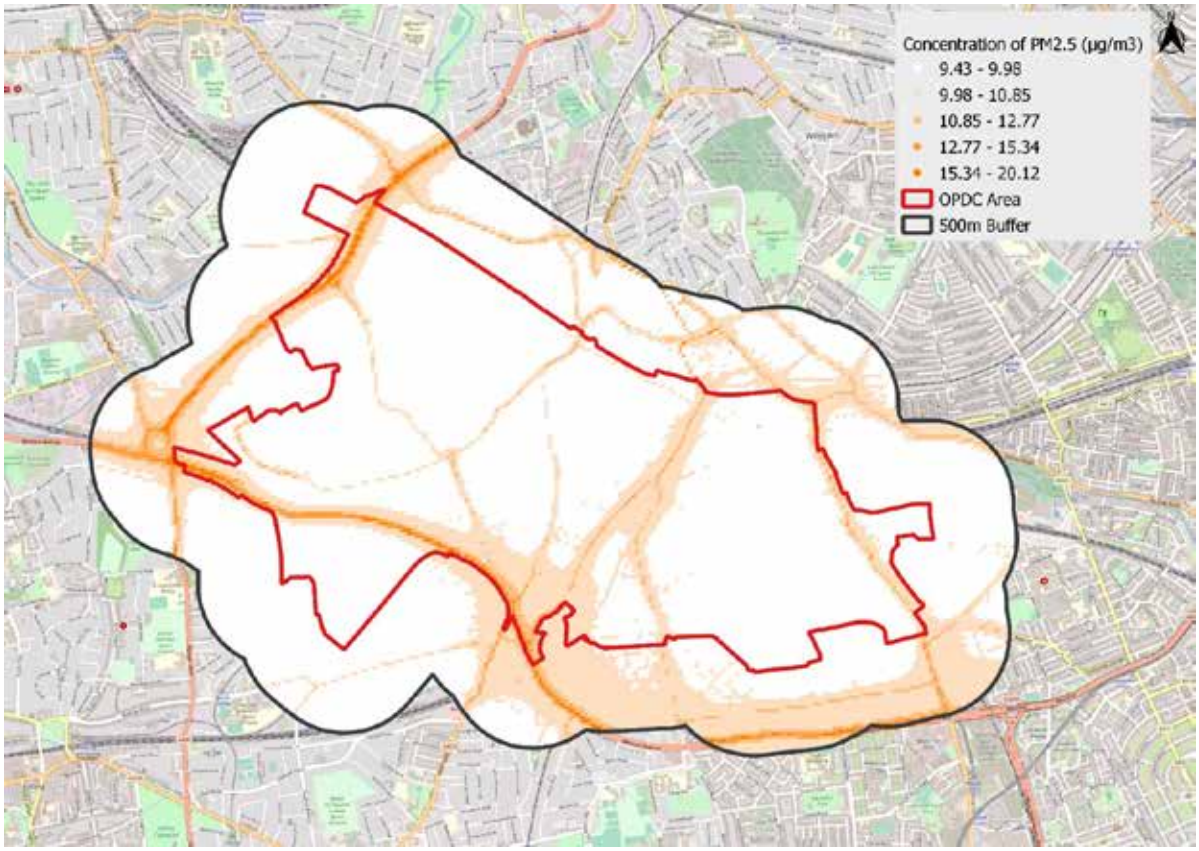
Map 4-29 - PM10 Concentrations (µg/m3)



Source: London Data Store - Air Quality Data. Base mapping by OpenStreetMap.

PM2.5 is finer particulate matter than PM10, with a diameter of less than 2.5 micrometres. Overall concentrations of PM2.5 are lower than that of PM10. With the highest concentrations, near the area's major roads, being no more than 19.973µg/m3. However, Map 4 30 shows a greater distribution of PM 2.5 around the study area. Concentrations of PM2.5 above 9.98 µg/m^3 can still be observed at distances over 400m away.

Map 4-30 - PM2.5 Concentrations (µg/m3)



Source: London Data Store - Air Quality Data. Base mapping by OpenStreetMap.

Data on population exposure to NO_2 is only available at the borough level. The average concentration of NO_2 in micrograms per meter cubed of air, is weighted by the population for each borough. The average exposure to NO_2 across all London boroughs is 28.8 ug/m^3.

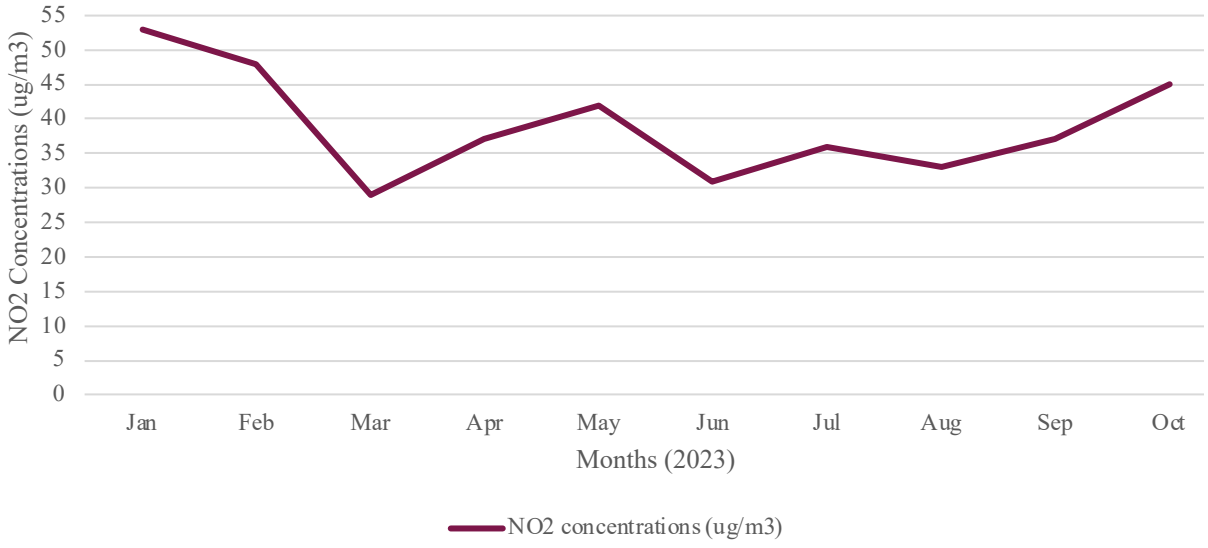
Of the host boroughs, only Ealing had a concentration lower than the London average with 28.5 µg/m^3, a 22% decrease since 2016. Brent has the next lowest concentration of the three host boroughs with 29.2 µg/m^3 in 2019. This also represents a 22% reduction in population exposure to NO_2 since the 2016. Hammersmith and Fulham had the highest population exposure to NO_2 with 31.9 µg/m^3. Similar to the others this was a 22% reduction compared to 2016. On average, all London broughs saw a 22% decrease in concentration of NO_2.

The Island Triangle Railway Workers Cottages

4.9.2 HS2 Related Air Quality

Figure 4-13 shows NO_2 emissions data collected by the DfT at their Old Oak Common Lane emissions monitoring site. The data shows average concentrations of NO_2 in ug/m^3 for each month of 2023 from January to October. Concentrations of NO_2 are fairly consistent across the time period but do show a slight fall over the 10 months. The highest concentrations are in January at 53 ug/m^3 which gradually rise and fall until reaching 45 ug/m^3 in October. The lowest measured concentrations were 29 ug/m^3 in March.

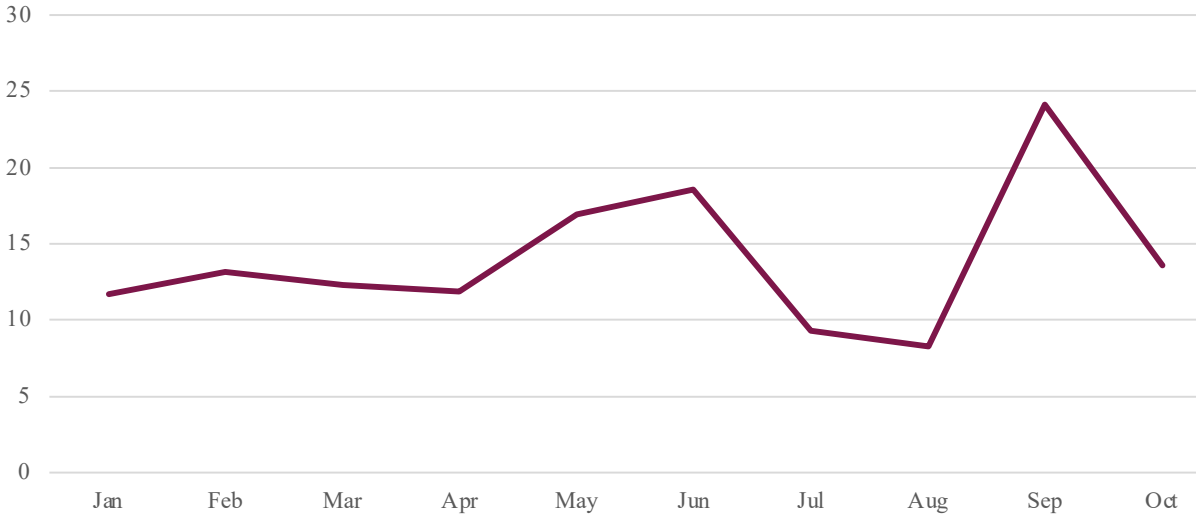
Figure 4-13 - NO_2 Concentrations at HS2 Old Oak Common Site



Source GOV.UK - Monitoring air quality and dust on the HS2 Phase One and 2a route. (site ID: HS2-000020BQG)

The DfT have collected data on particulate matter for key sites around works for HS2. **Figure 4-14** shows the data for their PM10 monitoring site at Old Oak Lane. The data shows an overall increase in concentration of PM10 over the 10-month period from January to October 2023, with a dip from June to August but rising again in September. The average concentration for these 10 months is 14 µg/m^3 which is lower than with figures seen on busy roads in the OPDC area in **Map 4-29**.

Figure 4-14 - 1-hour PM10 concentration (ug/m3) at HS2 Old Oak Site 2023



Source GOV.UK - Monitoring air quality and dust on the HS2 Phase One and 2a route. (site ID: AQ026)

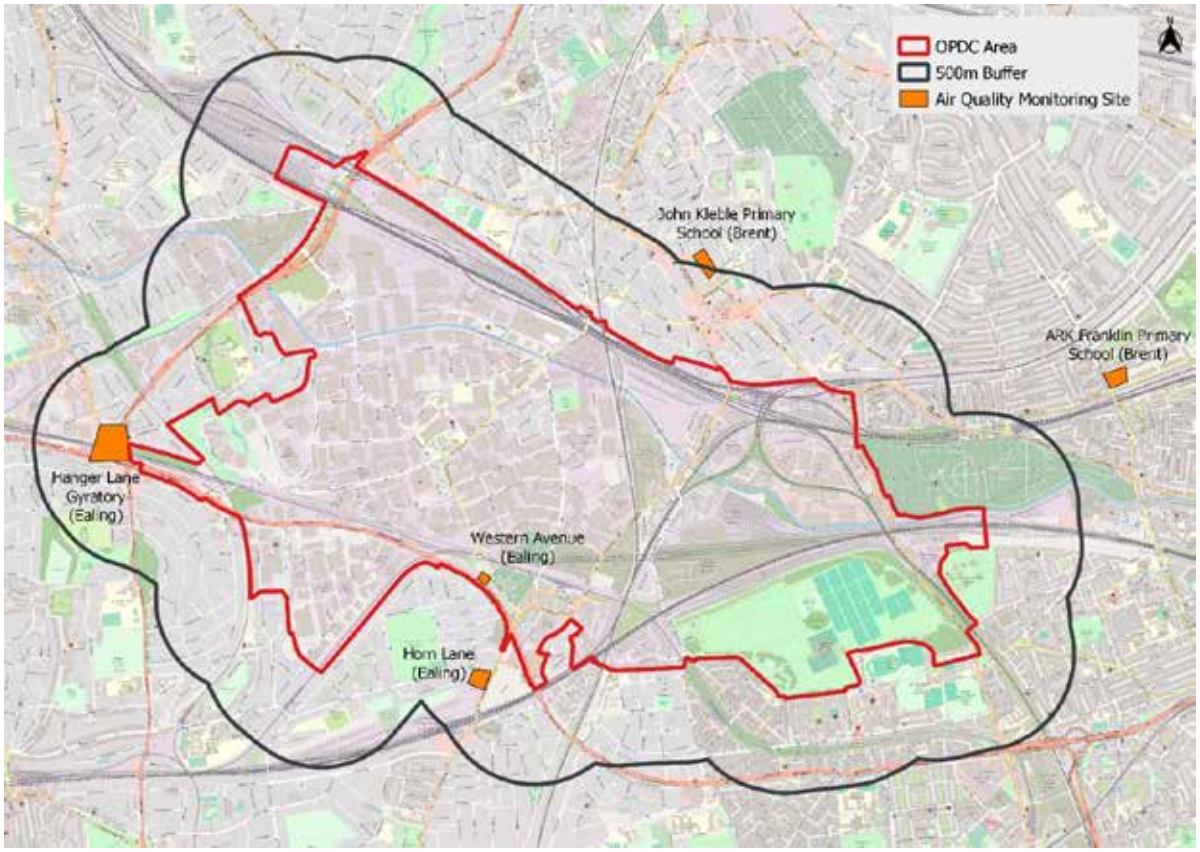
4.9.3 Trends in Historic Air Quality

Historic air quality data is collected by Imperial College London on an annual basis. Data on the four most significant pollutants (NOx, NO2, PM10 and PM2.5) is collected at several continuous monitoring sites. There are 5 continuous monitoring sites located in the OPDC area and within its 500m boundary. These sites are:

- Ark Frankin Primary Academy (Brent)
- John Kleble Primary School (Brent)
- Hanger Lane Gyratory (Ealing)
- Horn Lane (Ealing)
- Western Avenue (Ealing)

Map 4-31 shows the locations of each of these monitoring sites in relation to the OPDC Area.

Map 4-31 - Air Quality Monitoring Sites

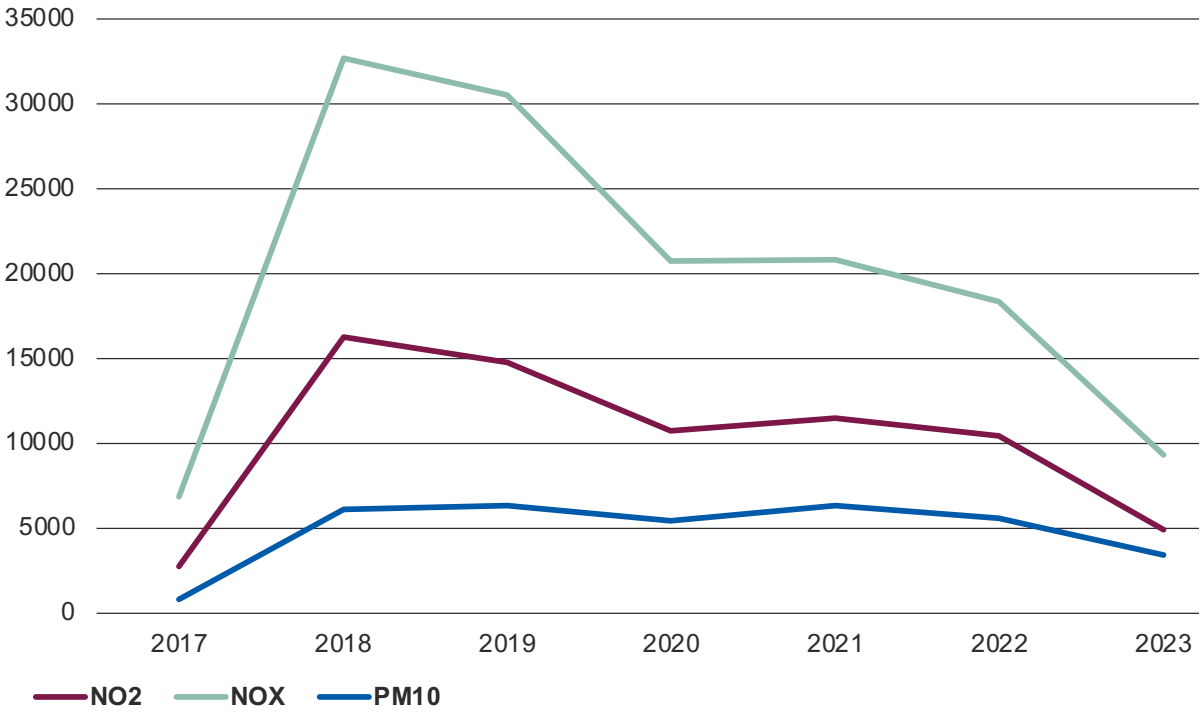


Source: London Air Quality Network. Base mapping by OpenStreetMap.

Each site has been collecting data on pollutants since 2017. **Figure 4-15**, **Figure 4-16**, **Figure 4-17**, **Figure 4-18** and **Figure 4-19** show these historic trends in the data.

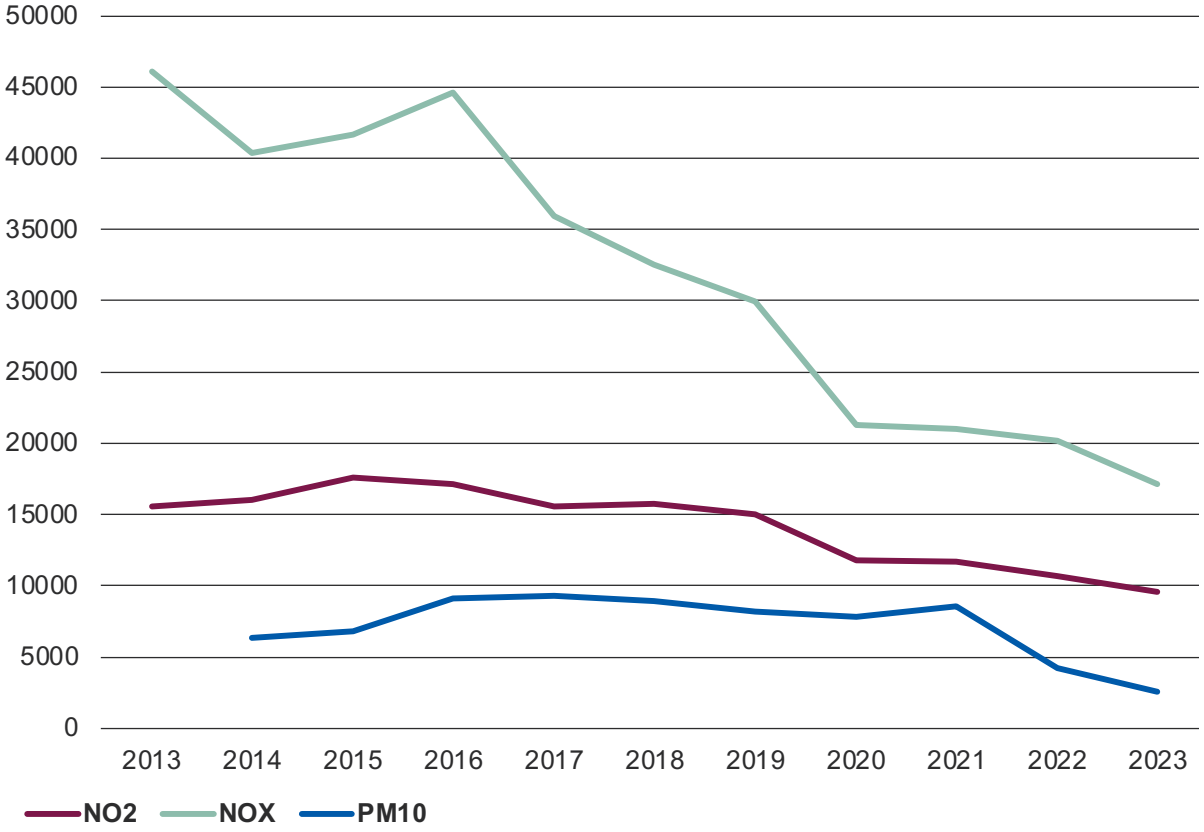
Traffic along Old Oak Lane

Figure 4-15 - Historic Air Quality Data 2017-2023 (Ark Franklin Primary School)



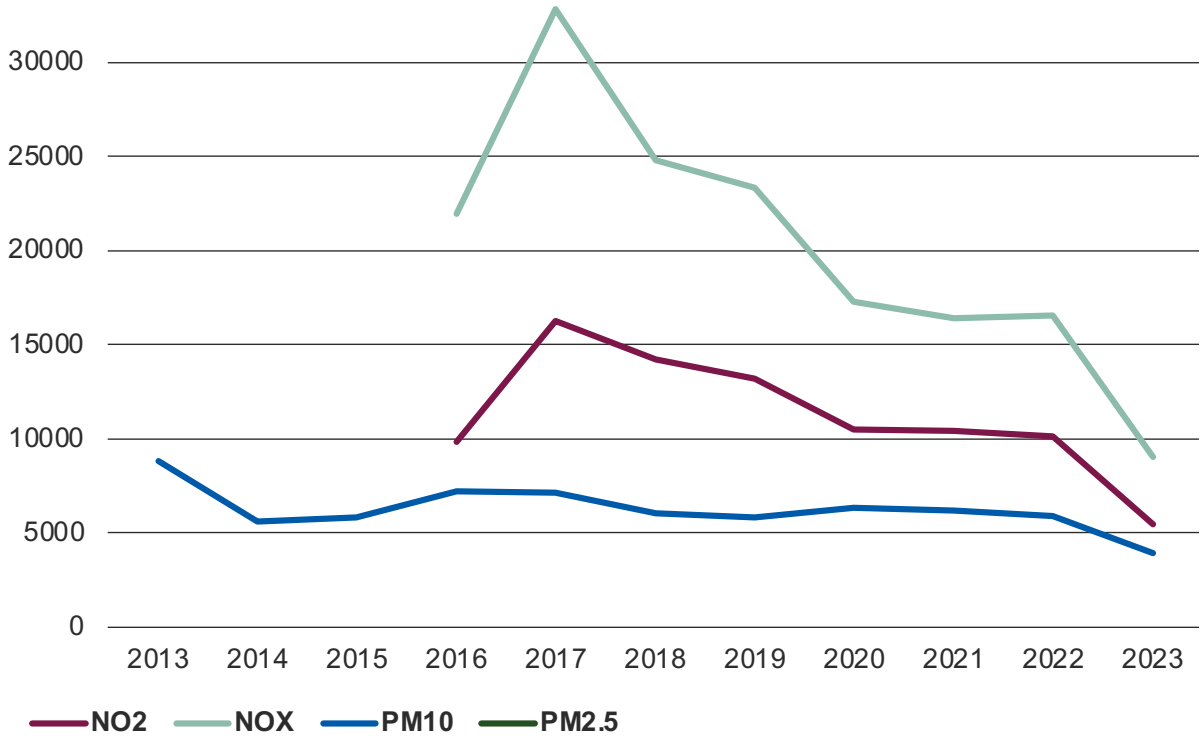
Source: London Air Quality Network.

Figure 4-16 – Historic Air Quality Data 2013-2023 (Horn Lane)



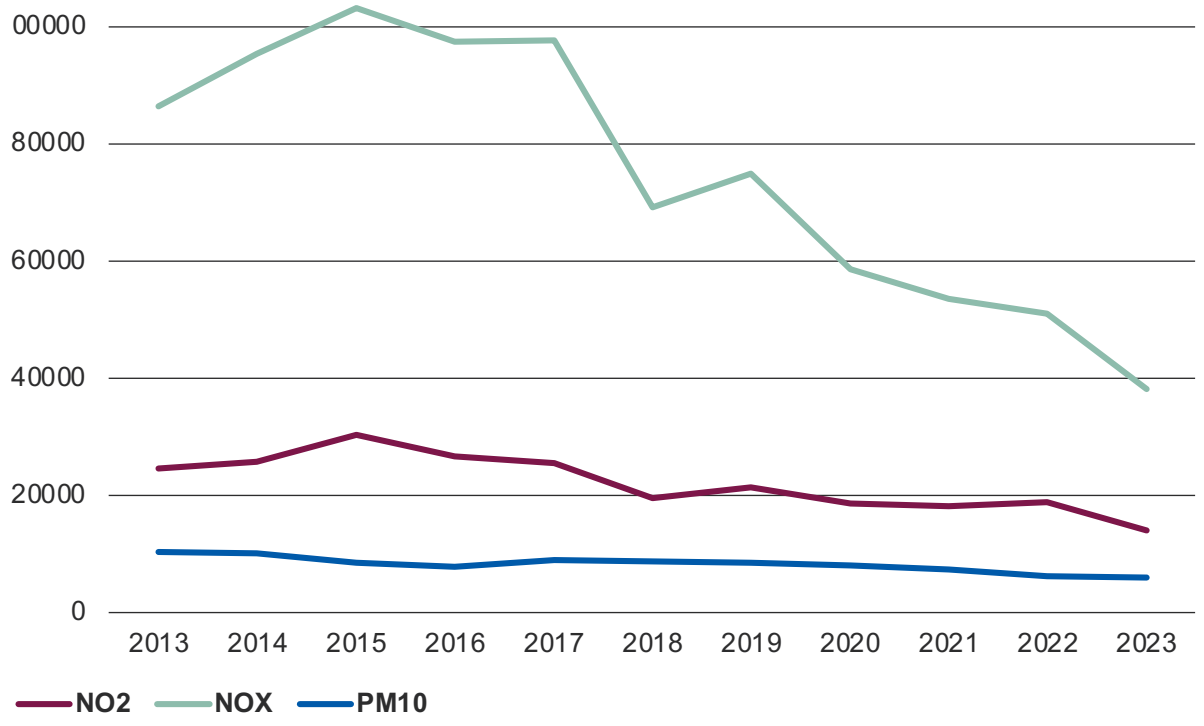
Source: London Air Quality Network.

Figure 4-17 - Historic Air Quality Data 2013-2023 (John Klebe Primary School)



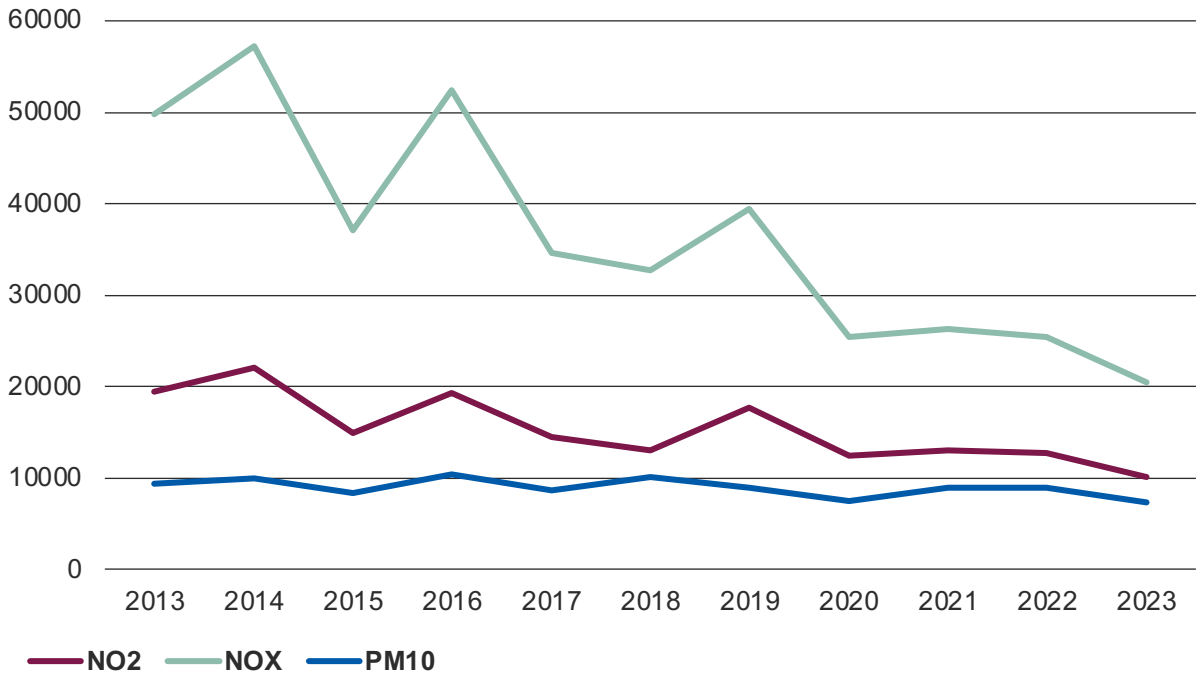
Source: London Air Quality Network.

Figure 4-18 - Historic Air Quality Data 2013-2023 (Hanger Lane Gyratory)



Source: London Air Quality Network.

Figure 4-19 - Historic Air Quality Data 2013-2023 (Western Avenue)



Source: London Air Quality Network.

All five figures show similar trends across each site. Every pollutant has consistently fallen since the beginning of each sites recording with a significant drop in each since the initial Ultra Low Emission Zone (ULEZ) was implemented in 2019. For each site NOx has been the most common pollutant but has also seen the most significant falls in concentration. PM10 is the least prevalent pollutant that has been observed and has also seen the smallest fall in concentrations over the observed time period. Construction of the HS2 site in and around Old Oak began in June 2021. Looking at each of the figures we see a small decline in each of the pollutants after this time. However, it is not anticipated that the construction of the HS2 site has had any effect on falling pollutants, as the concentration of pollutants has been consistently falling since recording began. These studies are recent. For more in-depth analysis of further studies including more historic data from a greater number of sites should be carried out.

4.9.4 Noise

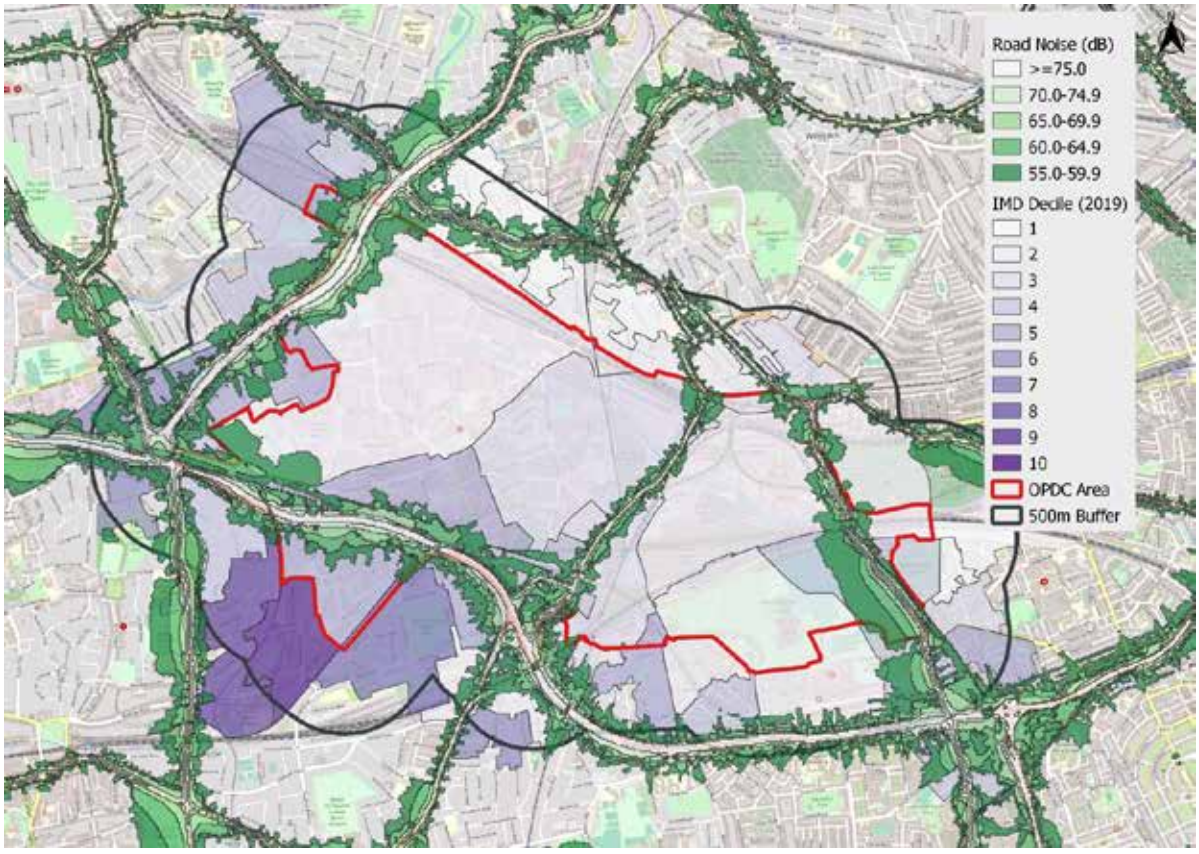
Roads are one of the most major sources of noise pollution in urban areas. While there is no legal limit to road noise, noise levels might be taken into account when new roads, houses and offices are planned near roads[19]. Noise is measured in Decibels (dB), with 60dB being the volume of a normal conversation and 80dB being roughly equivalent to the volume of a busy street.

[19]Gov.uk – Noise from roads, trains or planes - https://www.gov.uk/noise-pollution-road-train-plane/noise-from-roads (retrieved November 2023)

Map 4-32 displays the 24-hour annual average noise level with separate weightings for the evening and night periods, overlain on a map of IMD deciles for the OPDC Area. The map shows us that on the main roads that run through the OPDC area noise levels can get in excess of 75dB, with more minor roads in the area producing noise levels of around 70.0-74.9dB. Road noise reduces further away from major roads.

However, at some of the busiest roads and interchanges, sound levels are still recorded to be higher than 55dbs over 300m away from the main road. Many of the worst areas for road noise are in the highest-ranking areas for IMD. The more deprived north of OPDC experiences far less road noise than the far less deprived southwest. Those living near major roads may have access to a vehicle or a more desirable/expensive home which means they experience less forms of deprivation like transport and housing-based deprivation.

Map 4-32 Road Noise Pollution in Study Area (Lden – 24 hour Annual Average Weighted between Day and Night)

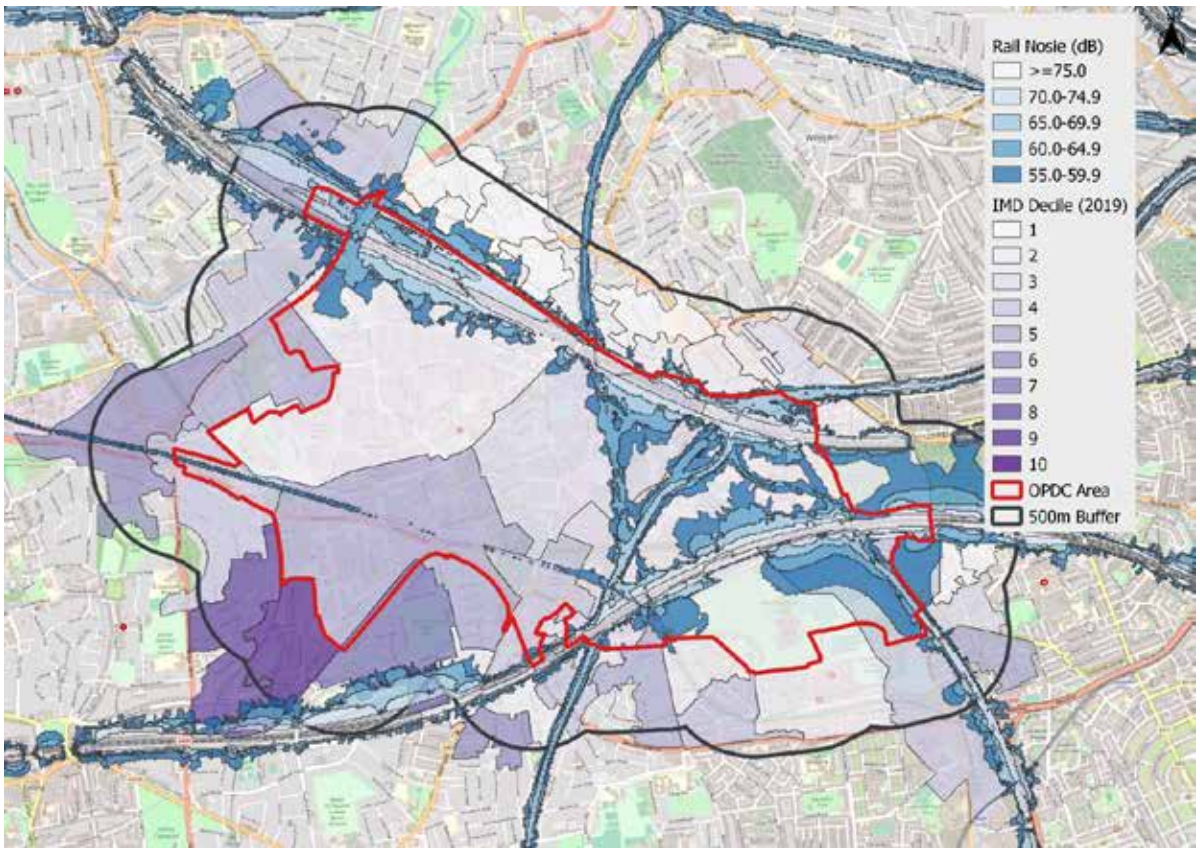


Source: London Datastore – Noise Pollution in London. Base mapping by OpenStreetMap

Railway networks are also a large contributor to noise pollution in urban areas. Rail noise patterns are similar to those for road noise. Measurements taken right next to busy rail lines produce over 75dB of noise, with the level of noise reducing further away from the railway line. Noises of over 55dB can still be recorded over 300m away from some of the busiest sections and interchanges of the railway. With one section of railway near Wembley depot having noise recorded over 55dB over 480m away from the railway line.

The relationship between deprivation and railway noise differs from that of deprivation and road noise. More deprived areas experience more rail noise than less deprived areas. The more deprived areas north and east of OPDC experience more rail noise than the less deprived areas in the west and southwest.

Map 4-33 Rail Noise Pollution in Study Area (Lden – 24 hour Annual Average Weighted between Day and Night)

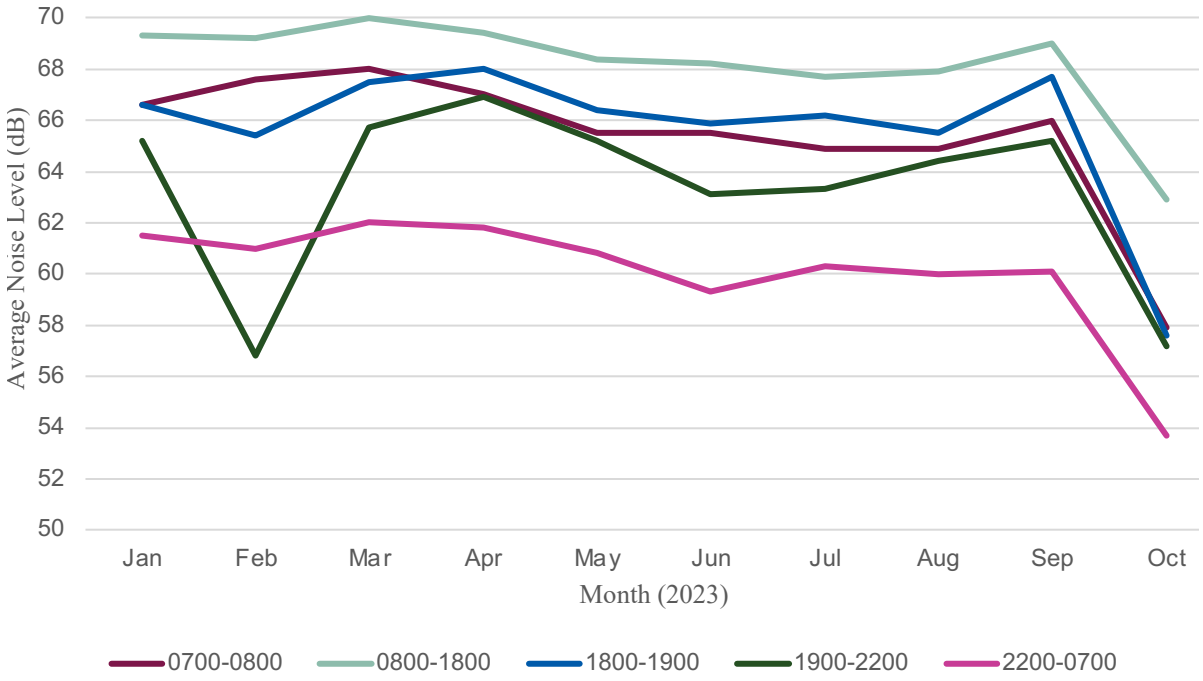


Source: London Datastore – Noise Pollution in London. Base mapping by OpenStreetMap.

4.9.5 HS2 Related Noise and Vibration

Figure 4-20 shows monthly average observed noise levels at different times of day across 10 months from January to October 2023 at the HS2 Old Oak Common site. Trends for all times of day are very similar with noise levels staying fairly consistent across the first 9 months, then seeing a noticeable decline in the month of October. For every month the time of day with the highest average dB was 08:00-18:00. The data shows expected trends with the daytime and morning and afternoon commute time being consistently the loudest and the evening and night time being quitter. With the exclusion of the month of October, average dB over each time periods saw little to no change, if not a small decrease over the observed period.

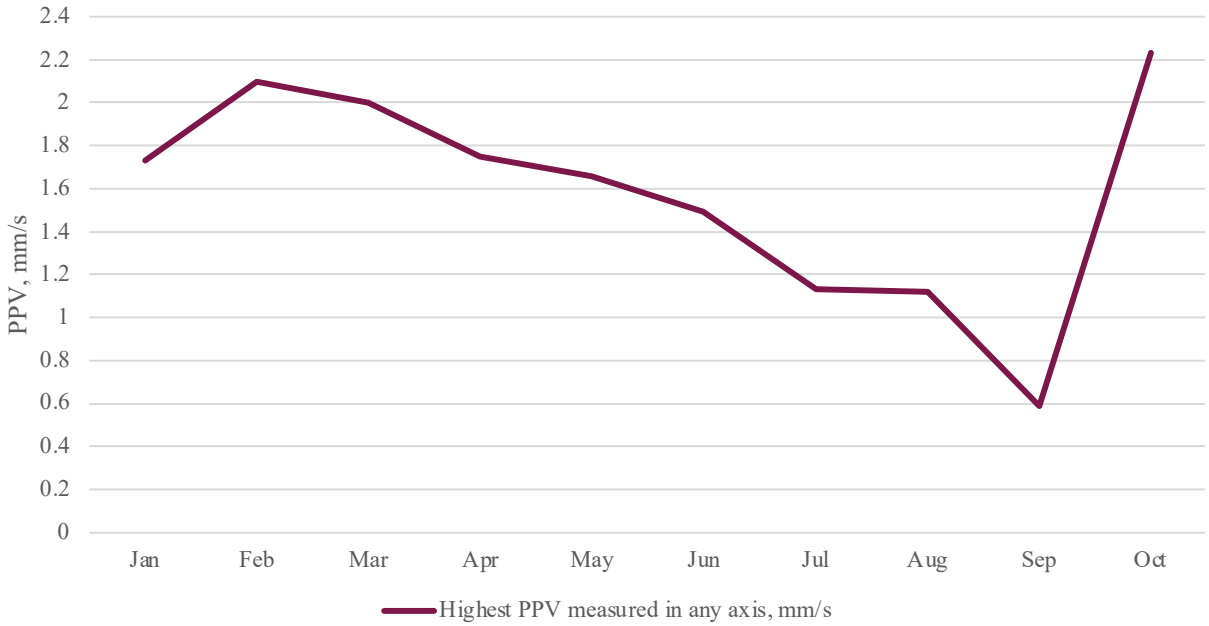
Figure 4-20 - Noise levels at HS2 Old Oak Common site



Source: GOV.UK - Monitoring Noise and Vibration on the HS2 Phase One and 2a route (Jan-Oct) (measurement reference: OOC-NO1)

Figure 4-21 shows the highest level of observed vibration (measured as Peak Particle Velocity (PPV)). This data was collected at the HS2 Old Oak Common Site and shows a consistent fall in observed vibration levels from February to September with a considerable rise again from September-October.

Figure 4-21 - Measured Vibration at HS2 Old Oak Common Site



Source: GOV.UK - Monitoring Noise and Vibration on the HS2 Phase One and 2a route (Jan-Oct) (measurement reference: OOC-VO2)

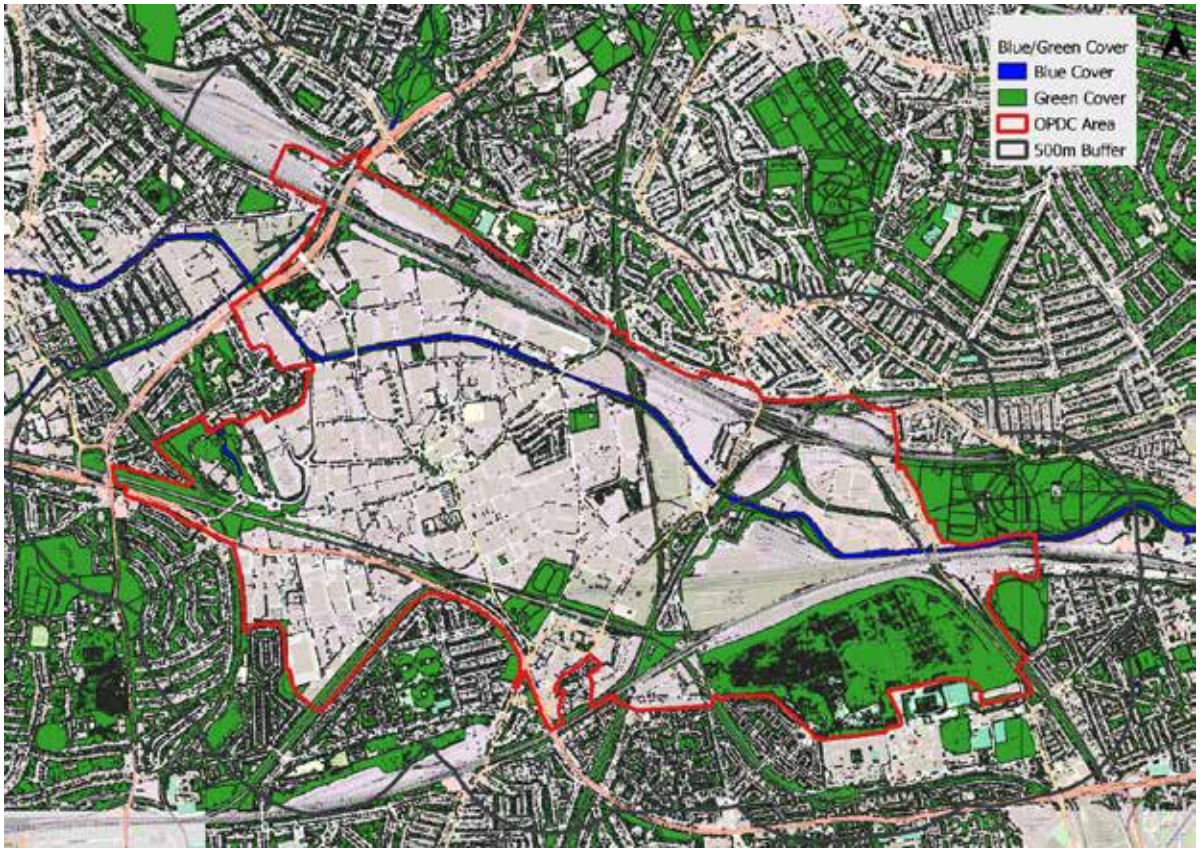
4.9.6 Green/Blue and Tree Cover

Map 4-34 shows the presence of both green and blue space in the OPDC area. Green space is represented by parks, gardens, playing fields and other large natural environments. Blue space is characterised by water features such as the Grand Union Canal and ponds.

There is a variety of green space across the OPDC area and its 500m buffer. The greatest concentration of green space is in the east of the OPDC area, consisting of Wormwood Scrubs Park, St Mary's Cemetery and Kensal Green Cemetery. There are other smaller green spaces across the rest of the OPDC area.

There is far less blue cover in the area. Much of the blue cover comes from the Grand Union Canal (Paddington branch) that runs from east to west through the OPDC Area. Other small water features can also be seen such as the pond at Royal Waterside in the West of the OPDC area.

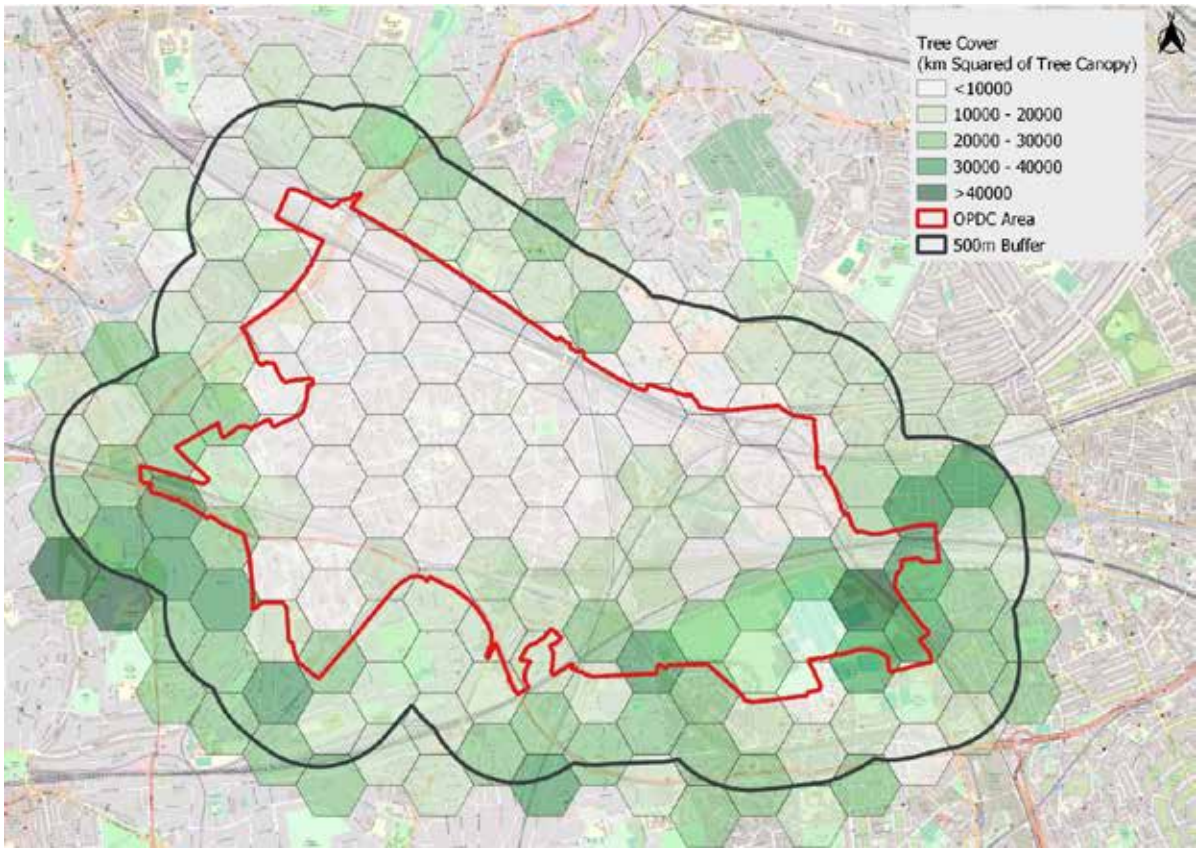
Map 4-34 Green/Blue Cover



Source: London Datastore – London Green and Blue Cover. Base mapping by OpenStreetMap.

The level of tree cover in the OPDC area is indicated in **Map 4-35** where the shade of each hexagon represents the number of kilometres squared of tree canopy cover. The areas of darkest green have the most tree cover and the paler areas have less. Much of the natural tree cover is located in the area's parks and green spaces, with others having been planted along residential streets. The south-east of the OPDC area has the highest concentration of tree cover. Due to the large amount of industrial and commercial space across most of the ODPC area there is a distinct lack of tree coverage compared to the buffer area which is more residential.

Map 4-35 Tree Cover



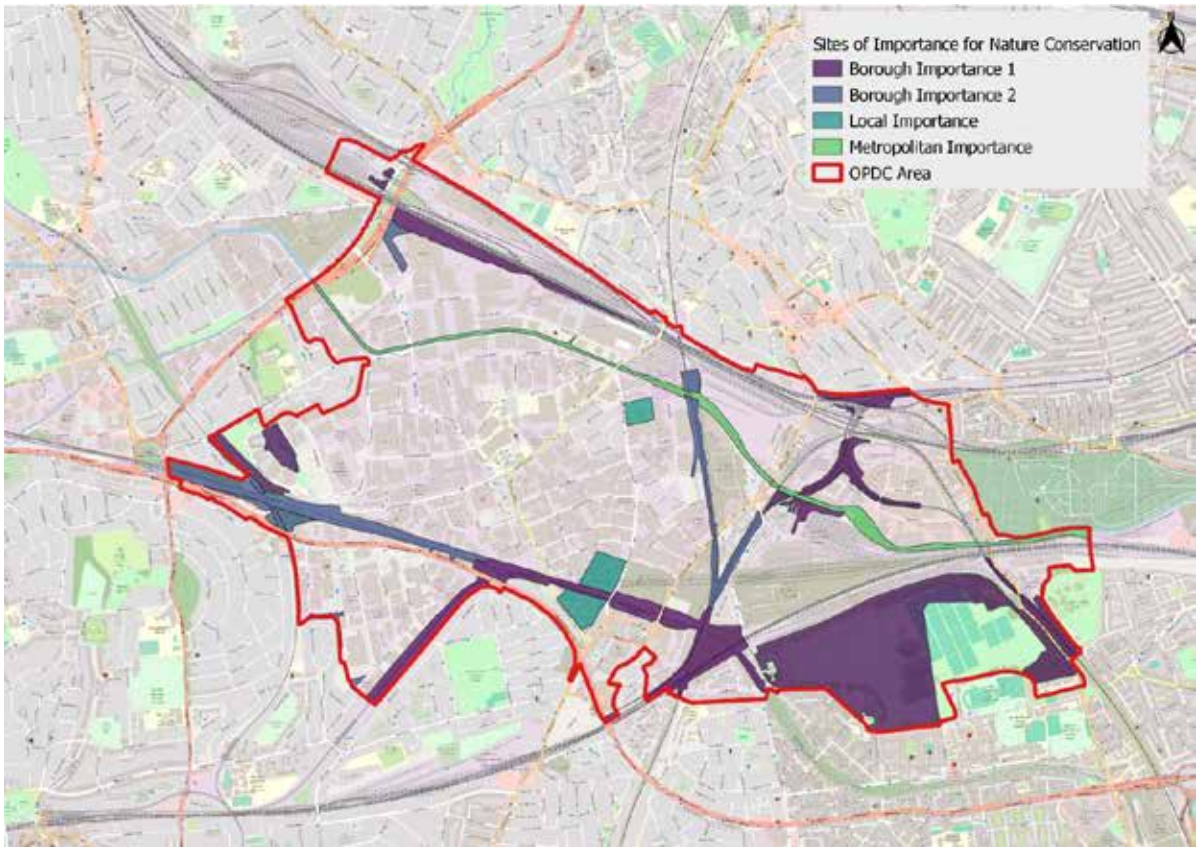
Source: London Datastore – London Tree Canopy Cover. Base mapping by OpenStreetMap.

4.9.7 Nature Conservation and Biodiversity

Map 4-36 shows that there are a series of Sites of Importance for Nature Conservation which include the Grand Union Canal, railway sidings and portions of Wormwood Scrubs. OPDC's Biodiversity Net Gain Baseline Map (**Map 4-37**) supports OPDC's Biodiversity and Urban Greening Strategy (2020). The Baseline Map shows a variety of different nature habitats that include aquatic, managed and unmanaged areas. This acts as a Baseline for enhancements that OPDC is required to help achieve through its planning and delivery work programmes.

Acton Cemetery looking to North Acton

Map 4-36 - Sites of Importance for Nature Conservation



Source: OPDC Local Plan Policies Map

Map 4-37 - Biodiversity Net Gain Baseline

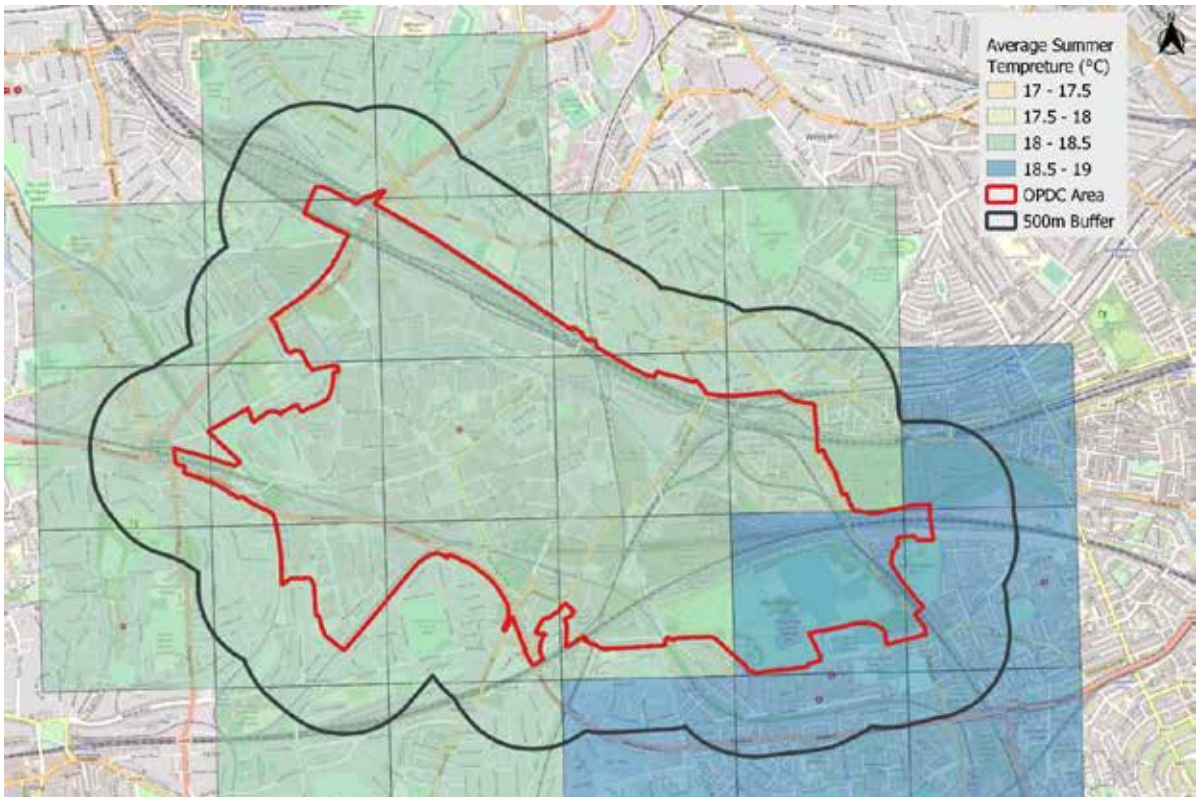
Source: OPDC Biodiversity and Urban Greening Strategy

4.9.8 Urban Heat Island Effect

The urban heat island (UHI) is where temperatures are relatively higher in cities compared to surrounding rural areas due to, for example, the urban surfaces and anthropogenic heat sources[20]. The data in **Map 4-38** shows the average surface temperatures over the summer period of 2006 at a 1km-by-1km resolution. As expected, the temperatures across the OPDC area are quite consistent. The majority of the area experienced an average temperature of between 18°C and 18.5°C over the summer period. However, a small section in the southeast of the OPDC area experienced a slightly higher average temperature between 18.5°C and 19°C. The average temperature of London during this period was 18°C, meaning temperatures in OPDC are in line with or slightly above average, not demonstrating a strong urban heat island compared to its adjacent areas given their built up nature.

The UHI effect can be mitigated through greening including tree planting, as well as a range of other measures. It may therefore be expected that Wormwood Scrubs open space should be cooler than other parts of OPDC, however, this may not be the case due to the fact that it is closer to central London.

Map 4-38 Urban Heat Islands



Source: London Data Store – Urban Heat Island

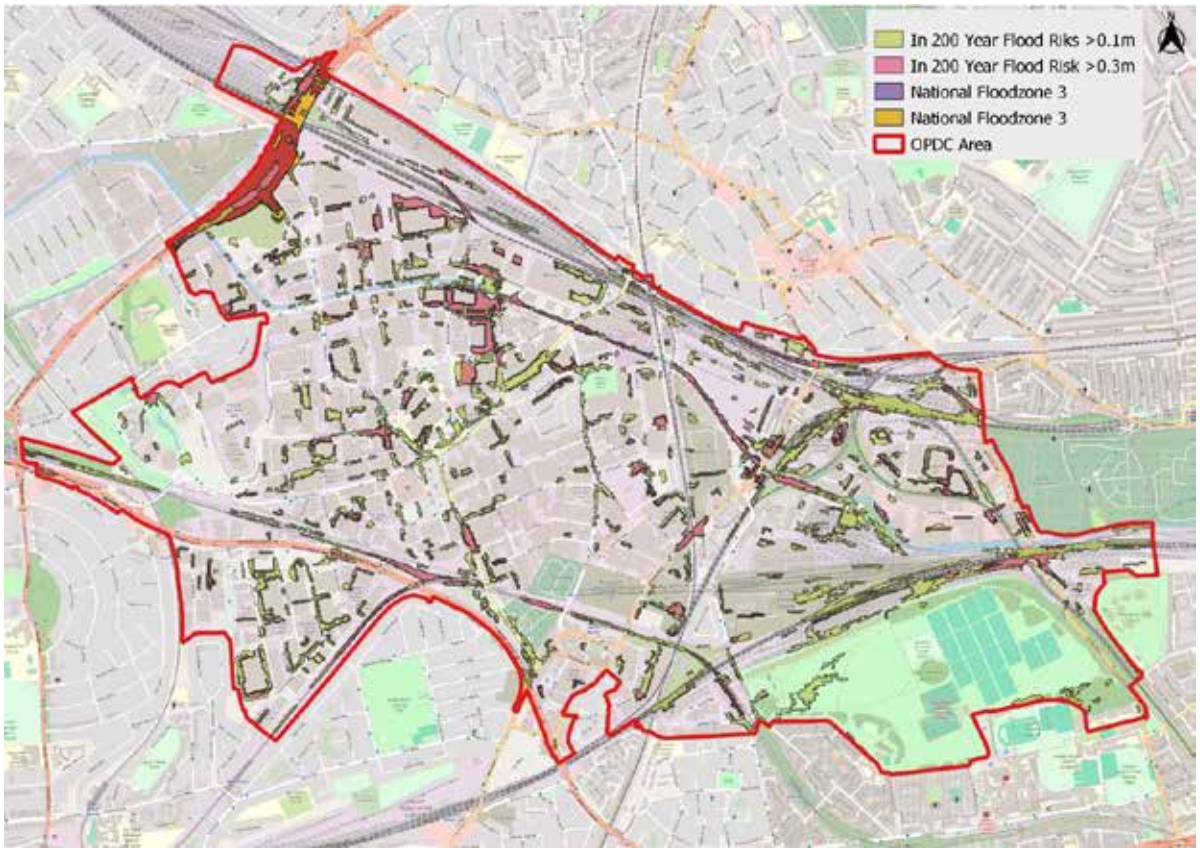
[20]GLA – London's Urban Heat Islands - https://data.london.gov.uk/dataset/london-s-urban-heat-island (retrieved November 2023)

4.9.9 Flood Risk

There is not significant fluvial flood risk in the OPDC Area. There is an area in the north west of the OPDC region that is a national flood zone category 2 and three. The sections which are flood zone 2 have a 0.1%-1% chance of flooding form the nearby rivers in a year. The flood zone 3 area has a >1% probability of flooding from local rivers. There is increased 200 year flood risk throughout the OPDC area, with concentrated areas of flood risk greater than 0.1m along the canal running east to north west. There is additional risk of flooding greater than >0.1m throughout the OPDC area, especially near trainlines that run through the north and the south of the area.

There are localised areas at risk of surface water flood risk across the OPDC area with linear stretches following the Grand Union Canal, railway lines and roads including Victoria Road and Park Royal Road. Areas of the highest flood risk can be seen in **Map 4-39**.

Map 4-39 - Flood Risk



Source: OPDC Local Plan Policies Map

4.9.10 Waste Management

The OPDC area is covered by two Waste Disposal Authorities. These are the West London Waste Authority and Western Riverside Waste Authority. In the OPDC area there are 12 waste sites. Three of these have been developed for mixed-use developments with compensatory provision secured on other sites. Two are being utilised for HS2 construction purposes.

4.9.11 Summary and Insights

This summary highlights key statistics on air quality, noise, green infrastructure, transportation, road accidents, vehicle access, cycling, broadband, and energy performance in the OPDC area. Headline statistics for this section are summarised below:

Air Quality:

- Pollutants measured include Nitrogen oxides (NOx), nitrogen dioxide (NO_2), PM10, and PM2.5.
- NOx concentrations are highest near major roads, exceeding government targets on major roads like North Circular Road and Western Avenue.
- Similar patterns observed for NO_2, with higher concentrations around major roads.
- PM10 and PM2.5 concentrations concentrated around OPDC's road network, especially near major roads.

Population Exposure to NO_2:

- NO_2 concentration data available at the borough level.
- Ealing had the lowest concentration (28.5 µg/m^3), Brent had 29.2 µg/m^3, and Hammersmith and Fulham had the highest (31.9 µg/m^3).
- A 22% reduction in population exposure to NO_2 across host boroughs since 2016.
- London boroughs, on average, experienced a 22% decrease in NO_2 concentration.

Noise:

- Roads are significant sources of noise pollution in urban areas.
- Noise levels on main roads in OPDC can exceed 75dB, reducing further away from major roads.
- Railway noise patterns are similar to road noise, with higher levels near busy rail lines.
- Deprived areas in the north of OPDC experience less road noise than the less deprived southwest.

Green Infrastructure and flooding:

- Tree cover concentrated in parks, green spaces, and residential streets, with the south-east having the highest concentration.
- Urban Heat Island (UHI) effect not strongly evident, with consistent average temperatures across the OPDC area during the summer period.
- Surface water flooding risk is present in localised areas with specific stretches along railways and roads.

Public Transport Accessibility Levels (PTAL):

- PTAL across OPDC varies, with higher scores near tube stations, such as Acton in the south.

Road Accidents:

- In 2018, 215 total road accidents in OPDC area and buffer, with 175 in the buffer region.
- No fatal accidents reported in 2018; slight and serious accidents per 10,000 residents observed.

Vehicle Access and Cycling:

- 57% of households in OPDC area do not have access to a car or van.
- Cycling concentrations higher in the east; improvement needed, according to GLA's Green Infrastructure Focus map.

Broadband and Energy Performance:

- OPDC area has comparatively slower broadband speeds than the rest of the UK.
- Energy performance ratings generally good, with some areas achieving a very good level.

Waste:

- 9 waste sites remain in the OPDC area to help manage waste for the two Waste Disposal Authorities that cover the OPDC area.

5. Conclusion

5.1 SWOT Analysis

The table below sets out some of the OPDC area's key strengths and weaknesses based on the baseline assessment. These have been aligned to opportunities and challenges (where appropriate).

Table 5-1 – SWOT Analysis Table

Strengths	Opportunities
Large working age population tending towards younger adults	Potential to secure opportunities for local employment and training initiatives generated by development.
Diverse population.	Potential to celebrate and strengthen local identities to provide diverse and inclusive communities and neighbourhoods. Potential to create more equitable and inclusive communities by providing affordable housing, access to green spaces, and opportunities for participation in decision-making processes.
Strong Wholesale and Retail, Manufacturing, and Transport and Storage sectors.	Potential to protect, strengthen and intensify these sectors to provide local economic and training opportunities. Potential to create green jobs and training programmes in a variety of sectors, such as green building, renewable energy, and sustainable transportation, enhancing economic opportunities in the area.

Strengths	Opportunities
Centre for food manufacturing and wholesale.	Potential to build on the food manufacturing and wholesale cluster by attracting more businesses of this type to vacant units, growing agglomeration impacts.
Sufficient school places.	Potential to accommodate population growth.
Recently designated town centres.	Potential for economic diversification, job creation, strengthened local supply-chains and service provision.
Less overcrowded homes than comparator areas.	
Relatively energy efficient housing stock.	Potential to build on this momentum to deliver energy efficient development and secure local energy sources to increase resilience and minimise fuel poverty. Potential to integrate smart technologies for energy management, waste monitoring, and overall resource optimisation.
The majority of households in the OPDC area do not own a car or van	Potential to further increase public transport use and support use of active travel modes through new and enhanced routes and infrastructure.
Some areas of good public transport access	Potential to capitalise on future enhanced rail connectivity to London and the rest of the country with the arrival of HS2 and the Elizabeth Line to create a new part of London.
	Potential to implement comprehensive waste reduction and recycling programs for businesses and residents, promoting a circular economy.
	Potential to restore and enhance biodiversity by creating habitats for wildlife, reducing pollution, and improving ecological resilience.

Strengths	Opportunities
	Potential to create healthier environments and improve the quality of life by reducing noise pollution, improving air quality, and increasing access to green spaces. This can lead to improved physical and mental health outcomes for residents.
	Potential for solar panels, heat networks, or other renewable energy sources to power public spaces and buildings. Strong potential to implement sustainable heat networks from nearby industrial uses to heat residential and community uses.

Weaknesses	Challenges
Areas of deprivation in the north and east of the area.	Pressure on local services if not infrastructure is not secured in a timely manner.
Health issues including prevalence of poor mental health and childhood obesity.	Pressure on local health facilities and low usage of local open spaces.
Low household incomes both before and after housing costs and issues around housing affordability	Pressure on local services and increased need for affordable housing if infrastructure and new affordable homes aren't delivered.
Income inequality	Weaker social cohesion and community if economic and training opportunities aren't supported
High levels of unemployment, concentrated in the north of the area.	Pressure on local services if economic and training opportunities aren't supported Ensuring that regeneration doesn't solely benefit external investors but also creates opportunities for local businesses, job creation, and economic empowerment within the community

Weaknesses	Challenges
Lack of resident employment in higher skilled occupations.	-
Lack of public open space in some locations, particularly the north of the area	Negative impact on health and wellbeing if new open spaces aren't delivered. Impact on existing ecosystems and wildlife habitats. The need to integrate green spaces, preserve natural areas, and use native species.
Slower Broadband speeds compared to national average, particularly the north-west and south-east of the area.	Potential constraint to development in these areas.
Concentrations of fuel poverty in the north and south of the area.	Pressure on local health facilities.
Some areas of poor transport accessibility	Restricts mobility of residents and/or access to local destinations.
	Challenge of inadvertently enabling conditions that result in existing residents moving out of the area.
	Challenge of securing adequate funding to deliver infrastructure
	Challenge of existing land uses and infrastructure preventing and/or weakening delivery of comprehensive development

Victoria Gardens and Cerebos Gardens on Victoria Road

5.2 Key Recommendations for Further Analysis

There is potential for further analysis under certain themes to provide a wider baseline and further evidence to inform decision making. Recommendations for such wider analysis include:

- Analysis of local people's perceptions of the area.
- Analysis of specific housing needs in terms of affordability in relation to incomes.
- Analysis of the specific drivers of deprivation in certain areas of OPDC.
- Analysis of the specific drivers of unemployment in certain areas of OPDC.
- Analysis to understand the correlation and potentially causation between environmental and social indicators. For example, to understand the relationship between open space/greening/active travel and indicators of deprivation such as health levels.
- Analysis of card payments data to provide an understanding of spending and hence the flows of goods and services in the area.
- Analysis which determines the impact of regeneration within the OPDC area (i.e., robust evaluation).

6. Glossary

6.1 Geographical Terms

LSOAs: LSOA stands for lower super output area. This is a geographical level used by the ONS for small area statistics. The area an LSOA covers is based on the population and number of households in an area. Thresholds require that a LSOA must have a population between 1,000 and 3,000 people, and between 400 and 1,200 households.

MSOAs: MSOA stands for middle super output area. This is a geographical level used by the ONS for small area statistics. The area an MSOA covers is based on the population and number of households in an area. Thresholds require that a MSOA must have a population between 5,000 and 15,000 people, and between 2,000 and 6,000 households.

6.2 Indicator Terms

Bedroom standard: Is defined in the Housing (Overcrowding) Bill of 2003 which states that "a separate bedroom shall be allocated to the following persons:

- A person living together with another as husband and wife (whether that other person is of the same sex or the opposite sex)
- A person aged 21 years or more
- Two persons of the same sex aged 10 years to 20 years
- Two persons (whether of the same sex or not) aged less than 10 years
- Two persons of the same sex where one person is aged between 10 years and 20 years and the other is aged less than 10 years
- Any person aged under 21 years in any case where he or she cannot be paired with another occupier of the dwelling so as to fall within (c), (d) or (e) above."

Elementary occupations: This major group covers occupations which require the knowledge and experience necessary to perform mostly routine tasks, often involving the use of simple hand-held tools and, in some cases, requiring a degree of physical effort. Most occupations in this major group do not require formal educational qualifications but will usually have an associated short period of formal experience-related training.

EPC rating: An EPC rating, or Energy Performance Certificate (EPC), is a rating scheme used to summarise the energy efficiency for buildings in the UK, it covers both homes and businesses and is required whenever properties are built, sold or rented

Low Income Low Energy Efficiency (LILEE) indicator: Under this indicator, a household is considered to be fuel poor if they are living in a property with a fuel poverty energy efficiency rating of band D or below and when they spend the required amount to heat their home, they are left with a residual income below the official poverty line.

Mixed/multiple ethnic groups: The ONS categorises mixed/multiple ethnic groups to include people of mixed ethnic groups. Sub-categories of this group include:

- White and Black Caribbean
- White and Black African
- White and Asian
- Another other Mixed/Multiple ethnic background.

National Vocational Qualification (NVQ) Levels: Each NVQ level is equivalent to a certain educational standard. For instance, a level 1 NVQ can be compared to 3/4 GCSE grades 1-3 or D-G. Level 2 NVQ is comparable to achieving 4-5 GCSE grades 4-9 or A*-C. NVQ Level 3 is seen as equivalent to 2 A Levels. The NVQ Level 4 is on par with a Higher Education Certificate, or BTEC.

Other ethnic groups: The ONS categorises other ethnic groups to include people that are from the following ethnic groups:

- Arab
- Any other ethnic group

Obese: In terms of childhood obesity, a child is considered to be obese if their BMI is equal to or greater than 30.

Overweight: In terms of childhood obesity, a child is considered to be obese if their BMI is equal to or greater than 25.

Occupancy rating: Considering the bedroom standard above, an occupancy rating of:

- -1 or less implies that a household's accommodation has fewer bedrooms than required (overcrowded)
- +1 or more implies that a household's accommodation has more bedrooms than required (under-occupied)
- 0 suggests that a household's accommodation has an ideal number of bedrooms.

Public Transport Accessibility Levels (PTAL): A measure of the accessibility of a point to the public transport network, taking into account walk access time and service availability. The method is essentially a way of measuring the density of the public transport network at any location within Greater London. The grading system for each area ranges from 0 to 6b, with 0 being limited access and 6b being outstanding access to public transport.

Unemployed: A person aged 16 and over is classified as unemployed if they are not in employment, are available to start work in the next two weeks, and either looked for work in the last four weeks or is waiting to start a new job.

Urban heat island (UHI): Where temperatures are relatively higher in cities compared to surrounding rural areas due to, for example, the urban surfaces and anthropogenic heat sources.

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