

- Low Scoring Sites
- High Scoring Sites
- Ward Groups
- Borough Boundary

-	08-09-2009	XX	XX	XX
Issue	Date	By	Chkd	Appd

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Client
 London Borough of Barnet

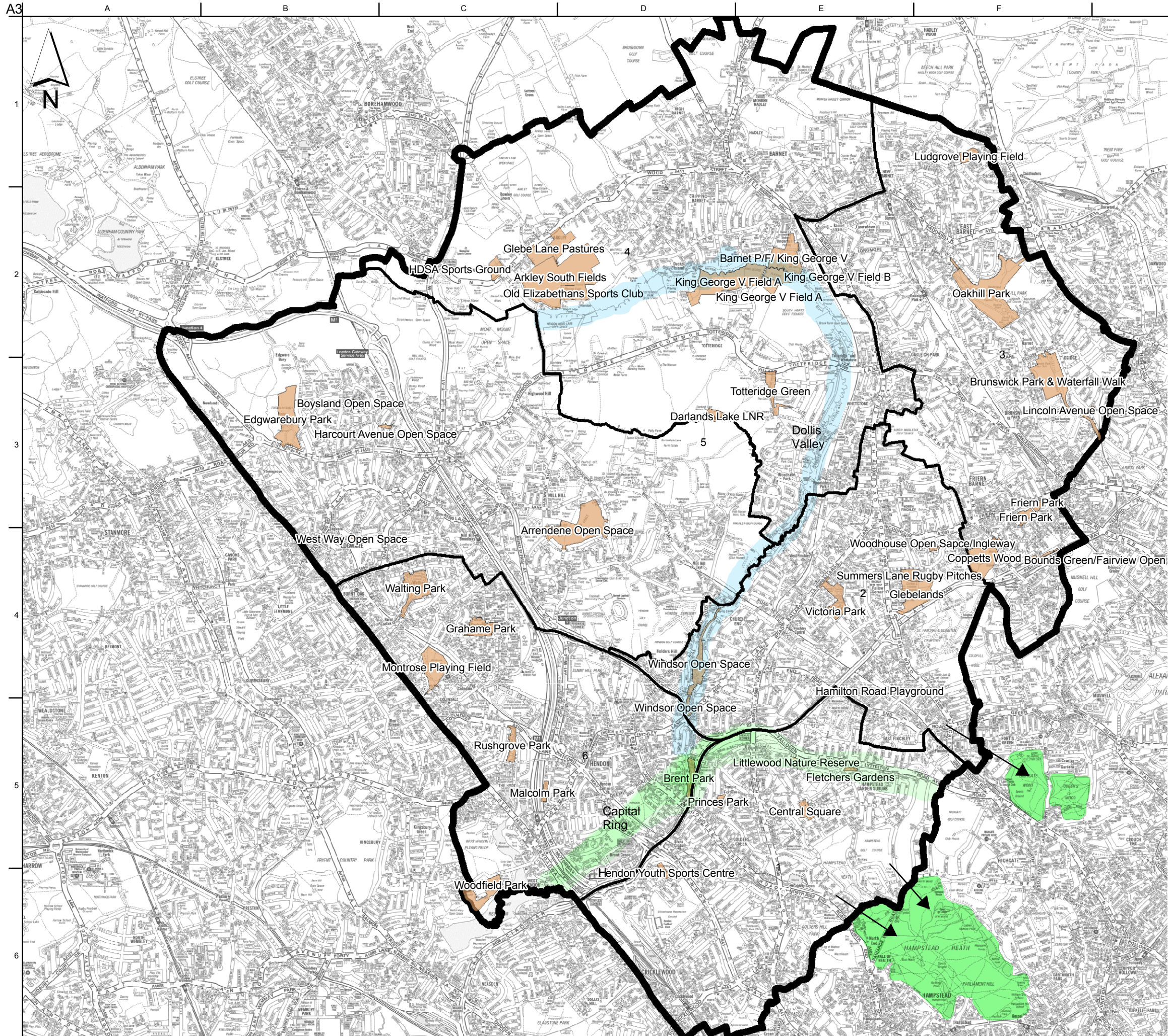
Job Title
 Open Space Audit

Drawing Title
 Figure 29
 High and Low Value Natural and
 Semi Natural Green Spaces

Scale at A3
 1:47,651
 Discipline
 Civil - Planning

Drawing Status
 Issued

Job No 208654	Drawing No 208654-000	Issue 00
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- Priority for Improvement
- Ward Groups
- Borough Boundary
- Connections to major open spaces outside the Borough
- Dollis Valley
- Capital Ring

-	07-10-2009	XX	XX	XX
Issue	Date	By	Chkd	Appd

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Job Title
Open Space Audit

Drawing Title
**Figure 30
 Sites Recommended for Improvement**

Scale at A3
1:47,651

Discipline
Civil - Planning

Drawing Status
Issued

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Socio Economic Profile

11 Local open space needs and priorities

11.1 Assessment of local open space needs

There are a number of key demographic social and economic indicators which influence the open space needs of individual parts of the borough. The demographic profile of a borough has a direct influence on sport participation levels and open space usage, as people’s involvement in sport generally varies according to age, gender, socio-economic factors and ethnicity. Actual participation rates in sport and exercise have therefore been considered within this section of the assessment, as they are wholly influenced by socio-economic factors such as age, gender and ethnicity and provide a crucial insight into local usage trends in Barnet. The following indicators have been considered as part of the demographic profile:

- Population
- Age profile and participation rates
- Gender and participation rates
- Ethnicity and participation rates
- Household composition
- Working hours and employment
- Population density
- Child population density
- Community turnover
- Residential dwelling type
- Residential dwelling density
- Indices of deprivation
- Crime rates
- Car ownership and public transport
- Health profile of residents
- Satisfaction with leisure facilities and open spaces

11.2 Population

Barnet’s population has been increasing steadily over the past decade. During the period 1991 to 2001, Census data shows that Barnet was the fastest growing Outer London Borough. Around 326,000 people currently live in Barnet.^{1[1]} ONS and GLA estimates are that the population will increase by approximately 11% to 364,000 by 2016. This projected population growth is highest in Colindale, Edgware, Golders Green, Mill Hill, Underhill and West Hendon wards.

Barnet’s housing trajectory, as published in the Annual Monitoring Report sets out how many new housing units the council expects will be built in Barnet before 2017 and provides further indication of the likely scale of population growth. On the basis of this trajectory, the council expects to deliver up to a total of 26,000 housing units between 2001 and 2017. Over the next 20 years major schemes will be delivered in Barnet, with nearly 10,000 new homes developed in Colindale, 7,500 in Cricklewood and over 2,000 in Mill Hill East. Barnet has also embarked on a major programme to regenerate its four largest estates (Grahame Park, Stonegrove and Spur Road, West Hendon and Dollis Valley) and transform them into thriving mixed tenure neighbourhoods. The regeneration programme will replace 3,500 council homes with 8,000 new homes. Most of the opportunities for major regeneration are focused in the west of the borough. The increase in population will result in an increased demand for

infrastructure, facilities and services including transport, schooling, health facilities and access to open spaces.

11.3 Age profile and Participation Rates

The age profile of residents influences the range and type of recreation provision needed, especially in relation to children’s play and the balance between dedicated and informal recreational activities.

Table 1 illustrates the age profile of the London Borough of Barnet compared to the London and England average, breaking down the age categories into 5 year intervals. Barnet has a higher proportion of children and teenagers (aged 19 and under) compared to the national and regional average – 24.9%, compared with 24.3%, at national level and 24.0% at a regional level. There is a marginally higher proportion of 5 to 9 year olds in Barnet than the regional and national average. In fact, Barnet has the second largest population of children and young people in London. Younger people are more likely to participate in sport. The recent Barnet Residents Survey highlights that 1 in 3 children between the ages of 11 to 17 have participated in some type of organised sport in the last 6 months. Research undertaken by RSGB (2003)^{2[2]} and Hayslip and Panek (1989)^{3[3]} has investigated the use of public parks in England with regards to social inclusion and found that younger age groups are more likely to use parks than older groups:

“The extent and nature of participation in leisure and recreation change with a person’s age. Generally speaking, participation in leisure activities declines with age, although there are variations according to one’s income level, personality, interest, health condition, ability level, transportation, education level and a number of social characteristics.”^{4[4]}

Table 3. 1 – Age Profile

Age	England %	London %	Barnet %
under 1 year	1.2	1.5	1.5
1 - 4 years	4.6	5.3	5.3
5 - 9 years	5.8	5.7	6.1
10 - 14 years	6.2	5.6	6.2
15 - 19 years	6.6	5.9	5.8
20 - 24 years	6.6	7.2	6.1
25 - 29 years	6.4	9.7	8.3
30 - 34 years	6.8	9.9	8.5
35 - 39 years	7.6	9.0	8.3
40 - 44 years	7.7	8.0	7.8
45 - 49 years	6.8	6.5	6.6
50 - 54 years	6.0	5.2	5.6
55 - 59 years	6.4	5.0	5.6
60 - 64 years	5.3	3.8	4.4
65 - 69 years	4.4	3.2	3.5
70 - 74 years	3.8	2.8	3.2
75 - 79 years	3.2	2.4	2.9
80 - 84 years	2.4	1.8	2.1
85 and over	2.1	1.6	2.1

Source: ONS mid-year estimates (2006)

In terms of Barnet’s older population, there is a higher proportion of the population aged over 65, compared to London as a whole (13.8% compared to 11.8%), though this proportion is lower than the national average (15.9%). The number of people living beyond 85 years of age in Barnet is set to increase in the next 10 years by approximately 1,100 people^{5[5]}. Analysis based on the GLA’s RLP ward projections shows that there are pockets of older people living in certain areas in the borough.

Garden Suburb had the highest estimated percentage of people aged 85+ in 2006 (3.4%), whereas Colindale had the lowest (1.0%). The Barnet average was 2.1%.^{6[6]}

Results from the Active People survey (2006) demonstrates that regular participation in sports rates amongst different age groups in Barnet vary, but are generally higher than neighboring boroughs in north London (see Table 2). Participation rates are comparatively high amongst 35 to 54 year olds in Barnet and are noticeably higher than Enfield and Waltham Forest in the 16 to 34 year old age group.

Table 3.2 – Age profile - Participation at least 3 days a week x 30 minutes in sport^{7[7]}

Borough	16-34 %	35 – 54 %	55 and over %
Barnet	29.0	22.3	12.1
Enfield	26.3	18.8	13.5
Haringey	31.2	20.2	11.1
Waltham Forest	24.7	20.2	8.3

Source: Active People Survey (2006)

11.4 Gender and Participation Rates

Barnet has a higher proportion of females within its population – 0.9% higher than the regional average. The borough has a lower proportion of males than both the regional and national averages.

Table 3.3 – Gender Profile

	England %	London %	Barnet %
Male	49.1	49.4	48.5
Female	50.9	50.6	51.5

Source: ONS mid-year estimates (2006)

The gender profile of residents influences the range and type of recreation provision needed in an area. The Active People Survey (2006) conducted by Sport England provides useful information on participation levels in sport and physical activity levels. This survey shows that in terms of participation, on a national scale, a greater proportion of females than males have ‘zero days’ participation rates^{8[8]}. In London, as a whole, the rate is 54% for females, and 45% for males and in Barnet, the rate is 52% for females and 46% for males. Thus, females in Barnet are slightly more active than the regional average, and males, slightly more inactive than the regional average.

Table 4 outlines the ‘zero participation’ rates for each age category across the four neighboring north London boroughs and provides some indication of the gaps in provision and/ or facilities for particular ages or gender groups. In Barnet, the older age group of 55 years plus have higher ‘zero participation’ rates for both men and women compared with the other three boroughs, which may indicate a gap in provision for this particular age group. As noted in section 1.3, the 33 to 54 age groups for both men and women are notably less inactive than the other boroughs. Females aged 16 to 24 are also notably less inactive than their counterparts in Haringey, Waltham Forest and Enfield. Males in the same age group lag behind both Enfield and Haringey.

Table 3.4 – ‘Zero Participation’ Rates

	Barnet	Enfield	Haringey	Waltham Forest	London
Males 16 - 24	3.5	2.7	3.1	3.8	3.6
Males 25 – 34	8.2	7.2	7.4	9.7	7.9
Males 33 – 54	14.4	18.4	16.9	17.5	16.5
Males 55+	19.2	16.9	15.0	15.6	16.6
Females 16 - 24	5.4	6.1	7.9	5.8	6.8
Females 25 – 34	8.9	8.6	10.7	9.8	10.3
Females 33 – 54	15.3	18.5	20.8	18.9	17.9
Females 55+	25.10	21.6	18.4	19.0	20.4

Source: Active People Survey (2006)

Table 5 outlines participation rates at least 3 days a week x 30 minutes in sport for both age and gender across four neighboring boroughs in north London and provides some indication of the physical activity needs already met by sports facilities within the borough and the frequency of participation. Interestingly, males in Barnet aged 25 to 34 take part the least in regular sport amongst their counterparts across three neighboring boroughs and compared with the London average. Males aged 33 to 54 also take part in much less sport than the London-wide average participation rates. Older males, aged 55+ are relatively active – participating in more sport than those aged 55+ in Haringey and Waltham Forest. Female participation rates are relatively in line with results from neighboring boroughs, and are higher than the regional average across all age groups. Participation is notably high within the female aged 55+ category.

Table 3.5 – Gender and age profile - Participation at least 3 days a week x 30 minutes in sport

	Barnet	Enfield	Haringey	Waltham Forest	London
Males 16 - 24	12.9	16.2	11.6	15.3	12.2
Males 25 – 34	13.1	19.6	24.0	17.4	17.5
Males 33 – 54	17.1	17.8	17.6	20.2	19.0
Males 55+	6.8	10.5	5.7	4.4	6.5
Females 16 - 24	8.2	10.0	5.2	4.3	7.9
Females 25 – 34	13.4	7.3	16.4	13.4	13.1
Females 33 – 54	18.6	18.0	15.1	18.8	17.0
Females 55+	9.5	9.6	4.5	6.2	6.8

11.5 Ethnicity and Participation Rates

The overall ethnic profile of Barnet will also have an influence on open space usage levels. Census data, as outlined in Table 6 demonstrates that Barnet has a lower proportion of non-white residents (26%) than the London average (29%). More recent estimates for 2008 suggest that the proportion of non-white residents is more at 35.5%^{9[9]} and that Barnet is the 20th most ethnically diverse borough in England (based on size and profile).

At a borough level, the proportions of Asian/ Asian British - Indian people in Barnet is higher than the London average (8.6% compared with 6.1%) and is significantly higher than the national average (2.1%). The proportion of Black or Black British - Black Caribbean residents in Barnet (1.3%) is significantly lower than the regional average (4.8%) and is more in line with the national average (1.1%). Generally the proportions of mixed ethnicity and Chinese and other ethnic groups, in Barnet are very close or equal to the London-wide figures.

Table 3.6 - Ethnic Group Populations at Borough level

	England %	London %	Barnet %
White - British	87.0	59.8	59.9
White - Irish	1.3	3.1	3.4
White - Other	2.7	8.3	10.8
Mixed - White and Black Caribbean	0.5	1.0	0.5
Mixed - White and Black African	0.2	0.5	0.5
Mixed - White and Asian	0.4	0.8	1.0
Mixed - Other	0.3	0.9	1.0
Asian or Asian British - Indian	2.1	6.1	8.6
Asian or Asian British - Pakistani	1.4	2.0	1.3
Asian or Asian British - Bangladeshi	0.6	2.1	0.5
Asian or Asian British - Other	0.5	1.9	2.0
Black or Black British - Black Caribbean	1.1	4.8	1.3
Black or Black British - Black African	1.0	5.3	4.3
Black or Black British - Other	0.2	0.8	0.3
Chinese or other ethnic group - Chinese	0.4	1.1	2.0
Chinese or other ethnic group - Other ethnic group	0.4	1.6	2.6

Source: ONS (2001)

At ward level, the populations of each group of ethnic minorities vary significantly. Whilst the many of the wards have proportions of populations similar to the borough average, some display notably higher or lower populations of certain ethnic groups. For example, Burnt Oak, Colindale, West Hendon and West Finchley have lower proportion of white inhabitants than the borough and regional average. Other notable features include the high proportion of Black inhabitants in Colindale ward (17.8%) and Burnt Oak (13.7%), which are both higher than the London-wide average of 10.9% and Barnet average of 6.0%. The proportion of Asian inhabitants in West Hendon (25.9%) and Colindale (19.0%) wards are also higher than the Barnet average of 12.3% and London-wide average of 12.1%. There is also a notably higher proportion of Chinese/ other ethnic group within Totteridge ward – 8.4% compared with a 4.6% borough average.

Table 7 – Ethnic Group Populations at Ward Level

Ward	White: British, Irish, Other %	Mixed %	Asian, Asian British %	Black, Black British %	Chinese or other ethnic group %
Brunswick Park	79.1	2.5	11.9	3.8	2.7
Burnt Oak	62.8	4.3	13.0	13.7	6.2
Childs Hill	73.9	3.6	9.4	6.8	6.3
Colindale	51.7	4.2	19.0	17.8	7.4
Coppetts	73.6	3.9	11.7	6.6	4.2
East Barnet	86.6	2.4	6.6	2.8	1.7
East Finchley	76.5	3.4	10.0	6.4	3.7
Edgware	73.1	2.0	13.5	5.0	2.7
Finchley Church End	74.1	2.8	13.1	4.8	5.2
Garden Suburb	84.6	2.4	5.8	2.9	4.2
Golders Green	73.1	3.1	11.4	6.6	5.7
Hale	71.4	2.7	14.2	7.1	4.5
Hendon	72.6	3.0	13.1	6.1	5.1

High Barnet	89.3	2.2	4.8	1.9	1.9
Mill Hill	76.7	3.1	10.6	5.6	4.0
Oakleigh	83.2	2.3	9.2	2.9	2.3
Totteridge	75.2	2.6	11.3	2.6	8.4
Underhill	83.6	2.7	6.6	4.6	2.5
West Finchley	66.3	3.2	19.4	4.0	7.1
West Hendon	55.0	3.1	25.9	8.6	7.3
Woodhouse	71.3	3.1	17.5	4.5	3.6

Barnet Average	74.0	3.0	12.3	6.0	4.6
London Average	71.2	3.2	12.1	10.9	2.7
England Average	90.9	1.3	4.6	2.3	0.9

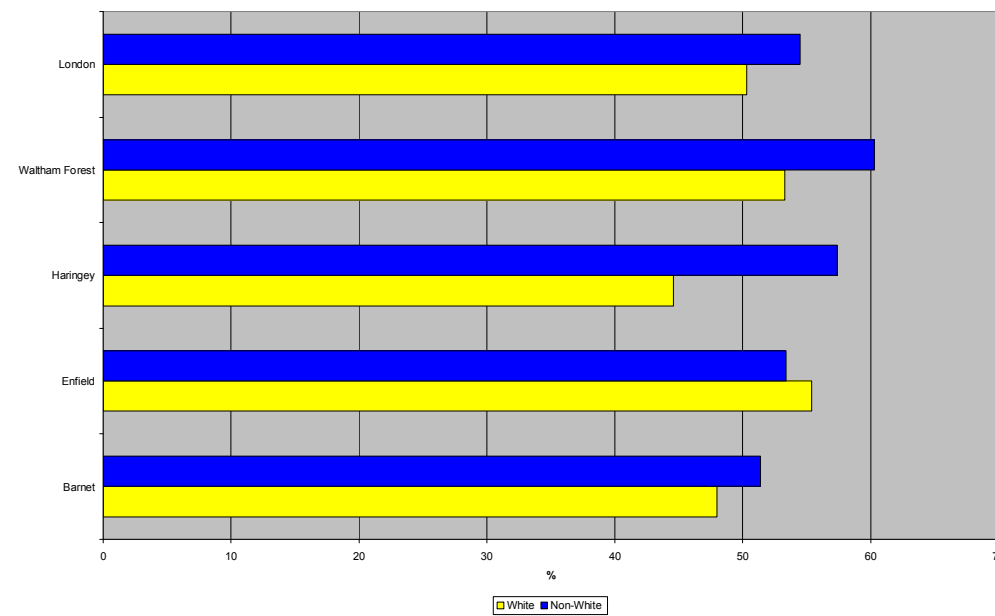
Source: ONS (2001)

In October 2000, Sport England published a report of its national survey of sports participation and ethnicity, which considered participation rates for the top ten sports as well as parks and other open spaces by ethnic group. The survey found that ethnic minority groups had a sports participation rate of 40%, against a national average of 46%. However, regular participation in football amongst ethnic minority groups exceeded participation rates amongst the population as a whole for both men and women. Participation was highest amongst Black, Black African and Black Caribbean groups. For cricket there is also a contrast to the overall trend, with regular participation rates amongst Pakistani, Indian, Black Other and Bangladeshi groups exceeding the national average. Rates amongst the other ethnic groups were below the national average.

RSGB^{10[10]} also found that the use of parks by white inhabitants was slightly higher, at 63%, than by black and ethnic minority (BME) inhabitants, at 57%. However, of those who do use parks, BME adults were slightly more likely to use urban/town parks than white adults. The findings are similar to those in the Sport England report (2000). The report concludes that the reasons for this include general preferences, lack of time, and health problems. Those BME adults who do use parks tend to use them more frequently than white adults, suggesting that there may be barriers experienced by BME adults that once addressed allow for greater participation.

The Active People Survey (2006) outlines participation rates for white and non-white residents. Non-white residents in Barnet have lower 'zero participation' rates than the neighboring boroughs and the London average – indicating that ethnic groups in Barnet are generally more active than their counterparts elsewhere in London. White zero participation rates in Barnet are lower than Enfield, Waltham Forest and the London average, but are higher than Haringey.

Figure 3.1: Zero Participation Rates: by Ethnicity

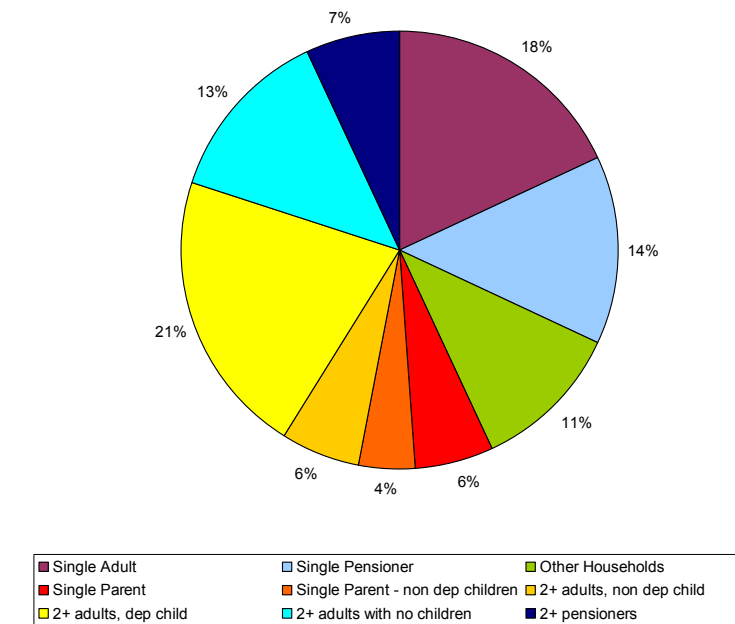


I1.6 Household composition

In addition to age, gender and ethnicity, a range of other factors influence participation in sport. Further research investigating the demographic characteristics influencing participation and reasons given for sports participation and non participation was undertaken by Mintel in their report 'Sports Participation' published in May 2000. The report suggests that the life stage of individuals is a significant factor in sport participation rates. Participation levels are highest amongst those who are employed but are not married and are influenced by their family status and occupational group as individuals grow older. Whilst the demographic trend of an ageing population has served to increase the level of non-participation amongst the population as a whole, the current trend towards later marriages and starting a family later have increased the length of time that individuals participate most actively in sport.

As illustrated in Figure 2, 21% of households in Barnet are couples with dependent children. As a proportion of the total population this has reduced by 5% since 1991, or by 2869 households. The number of single adults (non-pensioners) increased significantly from 1991 to 2001 by 6783 households, increasing from 14% to 18% of the total population in Barnet. Single pensioners account for 14% of Barnet's population, a decrease from 1991 figures. Single parent families increased by an additional 3567 households, during the 1990s and accounted for 6% of the population by 2001. Barnet households are more likely to be owner-occupied than the rest of London, and residents are less likely to live in the social rented sector. They are also less likely to be single non-pensioner households and are more likely to contain older people. They are also more likely to be under-occupied than other households in London.^{11[11]}

Figure 3.2 – Household Composition



Source: ONS Census (2001)

I1.7 Working Hours and Employment

I1.8 Working hours

Any demographic profile data should be understood in the context of the hours worked by Barnet inhabitants. Those in employment may access recreational or sporting opportunities less frequently, or only at particular times, or access particular types of opportunities in preference to others. The increasing demands that are being placed on individuals both from the workplace and from within the family, may have eroded the amount of time that is available to participate in leisure activities. For many, the opportunity to participate in a leisure activity is prevented due to it coinciding with working hours, or causing uncertainty in terms of keeping up regular participation, such as at set times of the week.

Table 8 shows the number of hours per week that those in employment in Barnet work. Analysis of the data shows that female residents of Barnet are more likely to work part time when compared to the London, but not national average. Interestingly, males are more likely to work part-time in Barnet, in comparison with both the London and national average. The majority of male and female residents in employment work more than 38 hours per week. This is similar or slightly higher (40.1% of males, 20.1% of females) than the London (39.7% of males, 21.1% of females) and national (41.0% of males, 16.3% of females) averages.

Table 3.8: Working Hours

Working Hours	% of Barnet workforce	% of London workforce	% of England workforce
Total males in employment (aged 16 - 74)	78,405	1,775,020	12,155,166
Males: Part time 1-30 hours	6.1	5.8	5.2
Males: Full time 31-37 hours	7.5	8.0	8.0
Males: Full-time 38-48 hours	26.2	26.5	27.9
Males: Full-time 49 hours or more	13.9	13.2	13.1
Total females in employment (aged 16 - 74)	67,516	1,544,114	10,286,332
Females: Part time 1-30 hours	16.2	14.3	19.4
Females: Full time 31-37 hours	10.0	11.1	10.2

Females: Full-time 38-48 hours	15.9	16.5	13.1
Females: Full-time 49 hours or more	4.1	4.5	3.2

Source: ONS

These statistics suggest a significant proportion of residents are likely to find it difficult to participate in sport due to the time constraints that their occupations place upon them. In some cases, long working hours effectively exclude some members of the population from participating in leisure activities, especially if those working more than 38 hours a week have parental or other responsibilities.

People who work more than 48 hours a week are likely to find it difficult to play team sports, which usually require members to attend training sessions regularly. As such, long working hours may contribute to more informal types of team sport participation, such as five-a-side leagues. A further implication of this may be that there is a greater demand for more informal types of sport, such as swimming, running or membership of a gym or health club, or recreational use of open spaces such as parks and green chains.

I1.9 Un/Employment levels

Employment and unemployment is an important factor in the determination of levels of participation in sport and access to facilities. Those in employment may have the opportunity to access recreational or sporting opportunities less frequently, or only at particular times due to the demands placed on individuals both from the workplace and from within the family.

Unemployment is an important determinant of inequalities in the health of adults of working age in Britain. Unemployed people are often found to have lower levels of psychological well-being, ranging from symptoms of depression and anxiety to committing self-harm and suicide. In relation to physical health, unemployment increases the risk of morbidity and premature mortality. In the latest analysis from the Longitudinal Study covering England and Wales, mortality from all major causes was consistently higher than average among unemployed men. Unemployed men, for example, had high mortality from coronary heart disease and injuries and poisonings, including suicide. This has repercussions for the provision of facilities, such as open space, which can help to alleviate health problems such as depression and obesity,

The quarterly overall employment rate (the number of people in employment expressed as a percentage of all people) in Barnet has increased steadily recently from 68.7% (Q1, 2006) to 71.2% (Q1, 2007), but nonetheless remained below the England average (74.6%). However, over the past decade, levels of unemployment (often a more meaningful measure than the overall employment rate) in Barnet have been slightly below the average for outer London. In September 2007 unemployment was below the national rate at 2%. Youth unemployment is also very low at 5.1%, compared to 18% in London and 14.3% nationally.

In addition, the percentage of resident working age people who claim Jobseeker's Allowance (payable to people under pensionable age who are available for, and actively seeking, work) is lower for Barnet (1.9% in November 2007) than for London (2.6%) and Great Britain (2.1%). For the worst performing wards however, the respective figures are Burnt Oak (2.9%), Colindale (3.1%) and Coppetts (2.3%).

I1.10 Population density

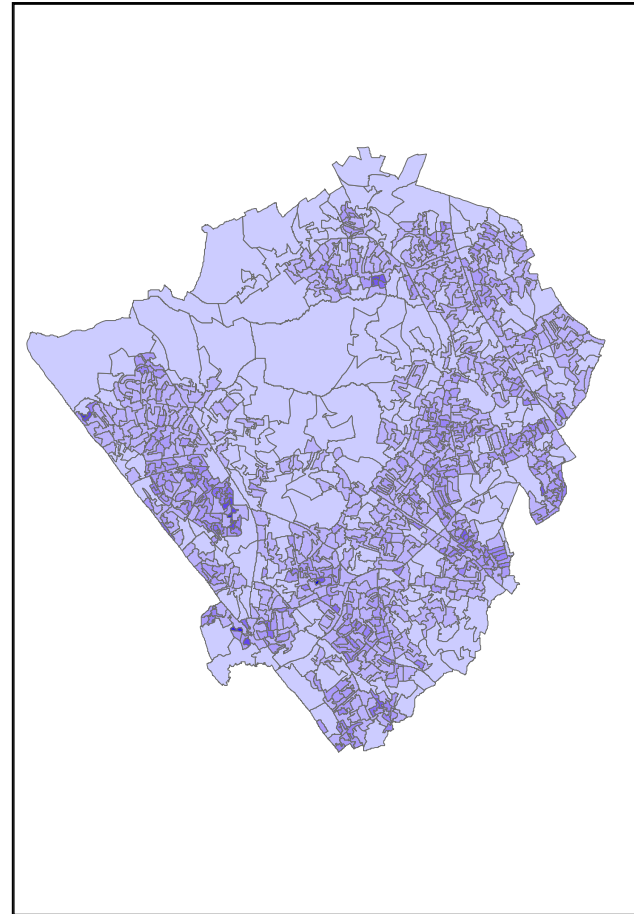
I1.11 Total population density

Population density is an indicator of open space need since open spaces are likely to be within reach of a greater number of people, and potentially be used more often due to a lack of private amenity space. Table 9 shows population density by ward in Barnet in terms of number of persons per hectares. This has been calculated from the total population divided by area (in hectares) of census output area. There are some very high density population areas which are spread out around the Borough in the wards of Burnt Oak, to the west and West Finchley and Woodhouse to the east. The wards with the lowest population densities are Mill Hill, Totteridge and High Barnet, and are all located to the north of the borough.

Table 3.9: Population Density

Ward	Population	Area (ha)	Population per ha
Burnt Oak	15243	210	72.6
West Finchley	14264	220	64.8
Woodhouse	15533	260	59.7
East Finchley	14534	250	58.1
Childs Hill	17261	310	55.7
Hendon	15377	280	54.9
Golders Green	16249	300	54.2
Coppetts	14504	270	53.7
Colindale	13860	260	53.3
Finchley Church End	13810	270	51.1
Brunswick Park	14668	320	45.8
Oakleigh	14740	330	44.7
West Hendon	14587	340	42.9
East Barnet	15332	370	41.4
Barnet	314564	8650	36.4
Underhill	15721	450	34.9
Garden Suburb	14727	470	31.3
Hale	15663	540	29.0
Edgware	14816	550	26.9
High Barnet	13847	830	16.7
Totteridge	14449	870	16.6
Mill Hill	15379	940	16.4

Figure 3.3 – Population Density



Oakleigh	2,625	330	8.0
West Hendon	2,671	340	7.9
Underhill	3,357	450	7.5
Barnet	60,058	8650	6.9
Hale	3,280	540	6.1
Garden Suburb	2,626	470	5.6
Edgware	3,039	550	5.5
Mill Hill	3,059	940	3.3
Totteridge	2,739	870	3.1
High Barnet	2,427	830	2.9

I1.12 Child Population Density

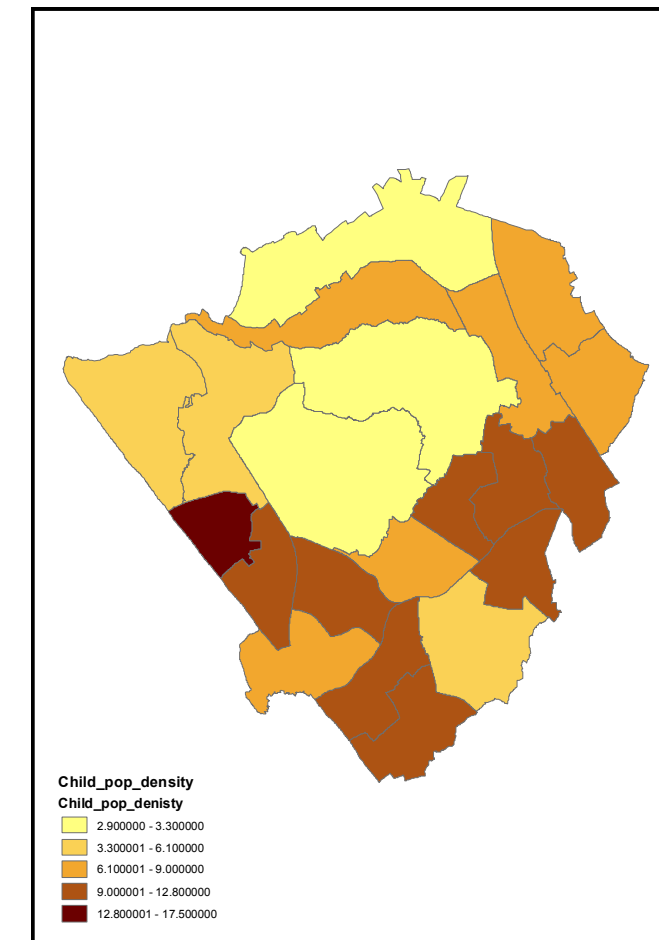
The proportion of the population that are children (aged 0-15) is an indicator of open space need since children are a key user group of open spaces, whether with other children, in school or community-organised groups, or with family. Areas with higher child densities should possess open spaces which are accessible, and with suitable facilities, for children and families. Figure 4 shows how the child population density varies throughout Barnet.

The highest densities of young people are in Burnt Oak, Golders Green and Colindale, all located to the south and west of the borough. The majority of the wards have child population densities above average for Barnet. There clusters of low child population density dotted around the borough, with the general trend being towards the north of the borough (High Barnet and Totteridge).

Table 3.10: Child Population Density

Ward	Children (Aged 0-15)	Area (ha)	Child population density (per ha)
Burnt Oak	3,669	210	17.5
Golders Green	3,826	300	12.8
Colindale	2,990	260	11.5
Woodhouse	2,729	260	10.5
Hendon	2,784	280	9.9
West Finchley	2,163	220	9.8
East Finchley	2,444	250	9.8
Coppetts	2,621	270	9.7
Childs Hill	2,949	310	9.5
Brunswick Park	2,871	320	9.0
Finchley Church End	2,214	270	8.2
East Barnet	2,975	370	8.0

Figure 3.4 – Child Population Density



I1.13 Community turnover

Community turnover is the migration of persons into or out of an area and provides a good indication of any new requirements for open spaces in the borough, as well as additional pressure which may be placed on existing open space and sports facilities by the net inflow of migrants. The 2001 Census reported a net inflow of approximately 2000 people from the rest of the UK to Barnet in the year to Census day 2001. This did not include international in-migration, as the census could not measure international outmigration, but does highlight the increase in Barnet's population. In and out migration flows in Barnet - including international immigration is dominated by people aged 25-44, which is in line with regional averages. 35% of all moves in the year prior to Census Day 2001 involved moves within Barnet. 12,000 migrants came to Barnet from other London Boroughs. 10,500 migrants left Barnet for another London Borough, thus experiencing a net migration flow of 1,500. This in line with average migration flows experienced in London.

Most in and out-migrants came from or went to neighboring authorities such as

- Brent (12%/11%),
- Camden (16%/11%),
- Enfield (11%/13%) and
- Haringey (15%/11%).

11.14 Residential dwelling type

The percentage of dwellings that are terraced, flats/apartments or maisonettes is an indicator of open space need, since it represents the extent to which the population has no access to private open space (front and back gardens, yards) and therefore have greater needs, and different requirements in terms of facilities and types, of open space. The indicator cannot be linked to population, since households vary in size, and some of the above types of properties will have some private open space available (e.g. to ground floor residents only).

The majority (61%) of all dwellings in Barnet are houses or bungalows. As Table 11 illustrates, there is a variety between wards in the types of housing that are dominant. East Finchley, Hendon and West Finchley have a majority proportion of flats, apartments and maisonettes. Brunswick Park and Hale have notably high proportions of houses and bungalows – 83.0% and 78.1% of the housing stock in these areas are houses.

Table 3.11: Housing Type

Ward	House or bungalow (% within ward)	Flat, maisonette or apartment (% within ward)	Mobile/ temporary/ other shared dwelling (% within ward)
Brunswick Park	83.0	16.7	0.4
Burnt Oak	68.8	30.5	0.7
Childs Hill	49.3	48.5	2.2
Colindale	50.4	48.0	1.6
Coppetts	50.8	48.9	0.3
East Barnet	65.9	33.8	0.4
East Finchley	44.8	54.4	0.8
Edgware	68.3	31.4	0.4
Finchley Church End	50.4	48.7	0.9
Garden Suburb	63.2	35.1	1.7
Golders Green	66.9	32.4	0.7
Hale	78.1	21.4	0.5
Hendon	47.0	52.7	0.3
High Barnet	64.2	35.5	0.3
Mill Hill	72.5	27.2	0.3
Oakleigh	62.8	37.2	0.1
Totteridge	67.8	32.0	0.2
Underhill	68.5	30.0	1.4
West Finchley	49.0	50.1	0.8
West Hendon	59.3	39.4	1.3
Woodhouse	56.7	42.4	0.8

In terms of dwelling size, all types of rented (private, LA, and RSL) accommodation in Barnet are generally smaller than owner occupied property. Around 30% of all rented accommodation has only two rooms compared to 1.9% of owner occupied homes. This has implications for open space requirements, as those residents with a lack of internal space may be more likely to seek more space outdoors. A further 14.6% of rented properties comprise only one room, with the highest proportion of these in Housing Association sector. 57% of all dwellings consist of 5 rooms or more, which would equate to a 3-bed dwelling. This increases to 70% for owned homes, and reduces to 24% for properties rented from housing associations. There is a relationship between tenure, dwelling size,

and overcrowding, although in Barnet the majority of the housing stock is comprised of houses or bungalows and are therefore more likely to have access to a garden.

11.15 Residential dwelling density

Residential dwelling density provides an indicator of the availability of open space compared with the number of households. Higher average densities tend to be found within areas with poorer access to open space. Table 12 shows the gross residential dwelling density in each ward. The highest dwelling density is in Burnt Oak at 27.9 dwellings per hectare and the lowest in Mill Hill, at 6.3 dwellings per hectare. The average for the borough is 14.6 dwellings per hectare.

Table 3.12: Residential Dwelling Density

Ward	Hectares	Number of dwellings	Dwelling density per hectare
Burnt Oak	210	5,856	27.9
West Finchley	220	6,018	27.4
East Finchley	250	6,415	25.7
Woodhouse	260	6,371	24.5
Coppetts	270	6,254	23.2
Hendon	280	6,344	22.7
Childs Hill	310	6,753	21.8
Colindale	260	5,658	21.8
Finchley Church End	270	5,750	21.3
Golders Green	300	5,726	19.1
Oakleigh	330	5,958	18.1
Brunswick Park	320	5,637	17.6
East Barnet	370	6,387	17.3
West Hendon	340	5,695	16.8
Barnet	8650	126,366	14.6
Underhill	450	6,263	13.9
Garden Suburb	470	6,074	12.9
Hale	540	5,931	11.0
Edgware	550	5,529	10.1
High Barnet	830	6,077	7.3
Totteridge	870	5,786	6.7
Mill Hill	940	5,884	6.3

11.16 Indices of Deprivation

The Department for Communities and Local Government released an updated version of the English Indices of Deprivation 2007, which replaces the 2004 version. Deprivation data is given for all local authorities and the lower super output areas (LSOAs) into which they are divided for government statistical purposes. There are 210 LSOAs in Barnet. While the borough is generally prosperous, there are pockets of deprivation, particularly in the west. The borough is ranked 128 of 354 districts in the 2007 national Index of Multiple Deprivation.

The 2007 Indices shows:

- Barnet is more deprived in relation to other local authority areas than it was in 2004 and is now close to the top third of most deprived authorities in the country
- Deprivation in Barnet is concentrated particularly along the western edge of the borough, although there is a significant concentration in the east, and pockets of deprivation in the north.

- Barnet now has six LSOAs within the 10% most deprived nationally, while in 2004 there were none in this bracket. Within London, Barnet ranks below the middle point, close to the bottom third of least deprived boroughs
- Barnet's rank on most domains (i.e. types of deprivation) has risen, showing that its deprivation has increased for most types of deprivation - the exception is the 'education, skills and training' domain, on which Barnet's rank has fallen, showing it to be now less relatively deprived in this area
- Barnet has six super output areas (SOA) within the 10% most deprived nationally. Three of these SOAs are in Colindale ward, and the remaining three are in East Finchley, West Hendon and Edgware wards

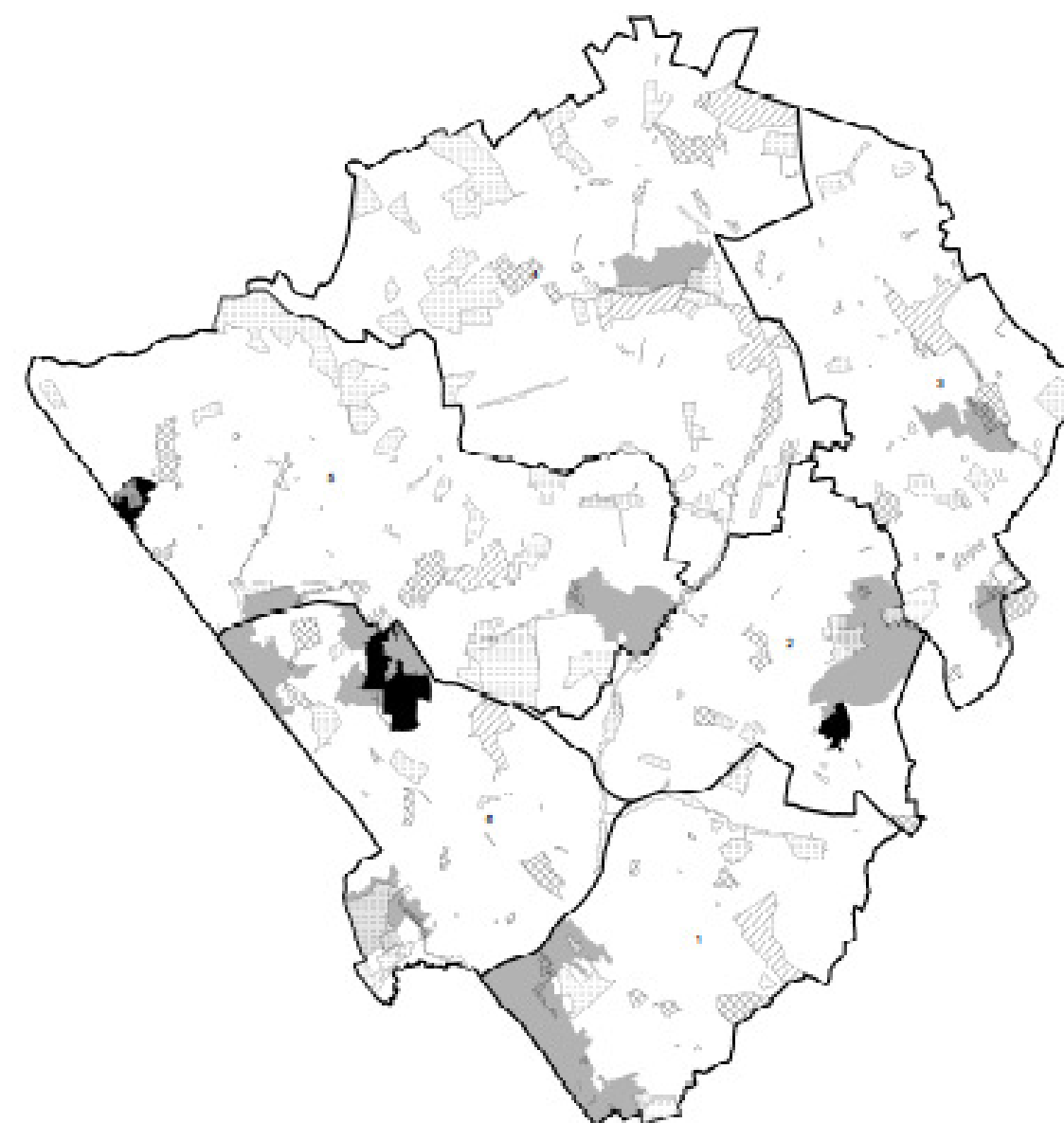
Two aspects of deprivation that are particularly relevant to open space needs are illness and disability, and mental health. Many studies have demonstrated the association of increasingly poor health with increasing material disadvantage.

Mapping illness and disability deprivation indices highlights areas where open spaces need not only to be accessible to users with illnesses and disabilities, but also actively designed for their use, with suitable access arrangements and facilities. Research demonstrates that people living on low incomes, including those whose income consists entirely of state benefits, have insufficient money to buy items and services necessary for good health. In a similar vein, mapping mental health deprivation indices, highlights areas where open spaces can offer benefits to users with minor mental health issues and can help play a preventative role in providing opportunities for relaxation, access to tranquil areas and opportunities for physical exercise, sports or play.

The restorative effects of experiencing nature have been confirmed by research over the past three decades. Therefore, opportunities such as allotments or other types of community gardening, wildlife appreciation (e.g. nature reserves), may be of particular value in areas with a higher prevalence of mental illness. In all areas, such opportunities may have a preventative effect upon prevalence of mental illness, though unmeasurable.

The map opposite illustrates the most deprived parts of the Borough.

IMD_2007_IMD_RANK
IMD_RANK
10%
20%



11.17 Crime rates

Crime requires consideration in this assessment since crime and fear of crime negatively impact upon residents' experiences and perceptions of open space. The level of crime and fear of crime is one of the most commonly cited influences on people's quality of life. Table 13 shows that compared to England as a whole, Barnet has a low crime rate, with 52.4 total offences recorded in the borough in 2006/07 per 1,000 people (compared to 71.0 in London and 60.7 in England). Barnet also recorded a significant decline in overall crime in 2006/07 (down almost 14% on 2005/06 figures).

Table 3.13: Recorded crime for six key offences per 1,000 population 2006/07

Type of crime	Barnet	London	England and Wales
Violence against the person	16.7	24.2	19.3
Theft from a vehicle	11.9	12.2	9.3
Burglary dwelling offences	7.5	8.0	5.5
Theft of a motor vehicle	4.1	5.0	3.6
Robbery	3.2	6.1	1.9
Sexual offences	0.9	1.2	1.1
Interfering with a motor vehicle	0.5	0.5	1.3

Source: Home Office: Crime and Disorder Reduction Partnerships - Recorded Crime for Key Offences 2005/06 to 2006/07

The IMD measures the rate of recorded crime in Barnet, and takes 33 different types of recorded offences into account, from burglary to violence. Pockets of the most 'crime and disorder deprived' SOAs can be found all over Barnet, but tend to be mostly concentrated in the west of the borough (Burnt Oak, Colindale, West Hendon), in addition to in/around Coppetts Ward. Some areas of high deprivation resulting from crime are associated with town centres.

11.18 Car ownership and public transport

11.19 Car ownership

Car ownership is likely to increase accessibility to larger and more distant open spaces. It may also increase accessibility to a range of open spaces for users such as the elderly and families with dependent children, who may experience difficulties with walking, cycling or public transport. It also suggests the extent to which car parking may be needed in current and future provision.

The Census shows that car ownership in Barnet was at the national average in 2001 but above the London average. A survey conducted with residents as part of the Barnet Housing Needs Assessment (2006) showed that almost 26% of residents had no access to a car or van, which increased to half for those households in social rented housing. This compared with only 8.6% of owner-occupied households.

Analysis indicates that with the exception of Edgware, all the wards in the west of the borough have more than 30% of households with no access to a car or van. The lowest access levels were in the two most deprived wards of the borough, Burnt Oak and Colindale. There is a particular need for open space accessible by pedestrians, cyclists or public transport in those parts of the borough with lower car ownership. Areas displaying higher car ownership are likely to have a lower demand on local spaces due to the greater ability to travel to the larger and more multifunctional spaces both within the borough and beyond.

11.20 Public transport

Access to public transport is an important alternative to owning a car. As a London borough, Barnet scores well on the connectivity index, ranking 72nd out of 408 boroughs nationally. However, among the London boroughs Barnet ranks 3rd from bottom. In 2001, 37% of Barnet working age residents

travelled to work by public transport (underground, train or bus). This compares with 56% for London as a whole but only 15% nationally. The size of the borough poses significant transport challenges for service users as well as service providers. Transport links north-south (radial) are good, but transport links east-west (orbital) are poor. Furthermore, some of Barnet's housing estates are particularly poorly served by public transport.

Linked to this, monitoring and modelling studies in Barnet have shown that the Air Quality Objectives for nitrogen dioxide and fine particles (PM10) are exceeded in areas close to busy roads. For this reason the whole of the borough of Barnet has been designated an Air Quality Management Area. Furthermore, the large improvements in air quality seen many years ago in Barnet, have now tailed off. Whilst air quality is not on the whole getting worse, there has been no appreciable improvement in air quality over the last five years. This is consistent with other comparable London Boroughs and probably reflects that there were greater improvements in air quality to be achieved in earlier years than there are now.

11.21 Health profile of residents

The health of the population is inextricably linked to participation in sport and the use of open spaces and facilities and increased emphasis on the importance of participation opportunities for formal and informal activities to combat ill health should be explored. Barnet is generally a healthy borough with good health outcomes against both the London and national averages. 72.5% of people in Barnet rate their health as 'good' which is higher than the London average of 70.8% and England average of 68.8%.¹²⁽¹²⁾ Overall Barnet has comparatively few areas with large proportions of people suffering health deprivation.

The three biggest contributors to premature death in Barnet are coronary heart disease, cancers and respiratory diseases. Women continue to live longer than men in Barnet, but the gap in the UK has been closing in recent years as men are living proportionately longer. In 1983-85, there was a difference of 4 years between male and female life expectancy at age 65 in the UK. By 2003-05 this had narrowed to 2.8 years. For Barnet, the gap was 2.5 years for 2004-06. The average life expectancy in Burnt Oak, Colindale, High Barnet and Coppetts is lower than the England average but not significantly so.

The most common causes of acute ill health among people in Barnet are coronary heart disease, chronic obstructive pulmonary disease, stroke, diabetes and cancer. Coronary heart disease, cancer and respiratory problems are the three biggest causes of premature death. However, the death rates from these conditions are lower in Barnet than in England as a whole.

11.22 Cardiovascular disease

Cardiovascular disease (coronary heart disease (CHD) and stroke) are the biggest causes of premature death in Barnet. The proportion of people in the population dying from coronary heart disease is lower in Barnet than the London and national averages. Against a baseline of the CHD mortality rate taken in the period 1995 -1997, there has been an overall downward trend and also a reduction in inequality in death rates between wards. However, the death rates from coronary heart disease for people aged under 75 years in medium deprived wards (i.e. West Finchley, Golders Green, Hale, Hendon, Brunswick Park, Child Hill and Edgware) has increased slightly and death rates for people living in the seven most deprived wards is worse than the national average.

11.23 Lifestyle

Estimates suggest that the residents of Barnet lead healthy lives compared to England overall. For example, a higher percentage of adults eat a healthy diet, fewer binge drink and fewer smoke compared to the national average. An upward trend in obesity has been experienced in England. This is seen as the result of a combination of factors such as less active lifestyle and changes in eating patterns. In Barnet, it is estimated that there are 102,000 overweight adults, over 50,000 obese men and women, and just over 4,000 men and women that are morbidly obese. This means that approximately 1 in 5 adults in Barnet is obese. National data shows that the prevalence of obesity also varies according to ethnicity and socio-economic status. According to the 2002 Health Survey for

England, Black Caribbean women had obesity levels 50% higher than the national average and Pakistani women 25% higher than the national average. Black Caribbean men and Irish men have the highest rate of obesity among men.

11.24 Satisfaction with leisure facilities and open spaces

As mentioned in previous sections, the Active People Survey (2006) conducted on behalf of Sport England in 2006 showed that only 21.9% of adults in Barnet do moderate exercise of up to 30 minutes at least 3 days a week and only 29.3% were club members. In both categories, these rates placed Barnet in the middle 50% when compared to the rest of the country. Other notable indicators related to participation include:

- 13.7% of Barnet residents walk at least 3 times a week for at least 30 minutes at a moderate pace. This is higher than residents in neighbouring Haringey (13.3%), Waltham Forest (12.8%) and Enfield (9.7%).
- 1.3% of residents cycle for at least 3 days a week for at least 30 minutes at a moderate pace. This is higher than residents in neighbouring Haringey (1.2%), Waltham Forest (0.7%) and Enfield (0.9%).
- The most popular sports for Barnet residents include use of the gym, swimming and football. This is broadly in line with other boroughs.

In terms of satisfaction with local sports provision, Barnet was placed in the bottom 25%. The Barnet Resident Survey (2008) reported that there were significant opportunities for Barnet to develop a more strategic approach for the identification of gaps in existing provision and how these gaps can be addressed.

- Whilst the review reported 23% of respondents were satisfied with current sports provision, it is notable that 55% of respondents had 'no opinion' about Barnet sports and leisure facilities.
- Young people rated the delivery of council owned leisure facilities in Barnet much higher than adults – 53% of young people rated the service good or excellent, where adult residents gave a low rating of 23%. The satisfaction rating for London as a whole is 52%.
- Residents felt that Barnet was not seen to have a strong reputation for engaging vulnerable members of the community in sports and physical activity
- A lack of recreational facilities featured as a 'personal concern' for 4% more of residents than in the previous 2004/5 survey
- In terms of LB Barnet's delivery of parks and open spaces, 64% of residents feel that the council is doing a good or excellent job. This is the highest satisfaction rating for this category since the residents' surveys began in 1995.
- Use of Barnet's parks and open spaces and council owned leisure facilities has decreased since last year.

This dissatisfaction with sports facility provision may be having an impact on participation rates. The table below compares satisfaction with facility provision against the London boroughs scoring highest for participation and shows a strong correlation between satisfaction with sports provision and levels of participation. Top scoring Richmond has the highest levels of satisfaction (72.8%) and as general rule satisfaction levels increase with adult participation rates.

Table 3.14 – Participation rates correlated with satisfaction rates

Local Authority	AP score	Satisfaction
Richmond upon Thames	29.8	72.8
Kingston upon Thames	25.0	71.1
Wandsworth	27.2	69.2
Westminster	25.1	68.7

Kensington and Chelsea	27.9	68.1
Barnet	21.7	64.1

It should be noted that the reverse of this trend does not apply so clearly and it does not follow that low participation always equates to low satisfaction with provision. For example, the London Borough of Newham has a 3 x 30 Active People score of just 14.5%, yet satisfaction with sports provision stands at 72.6%.

11.25 Conclusions and Key Issues for the Assessment

11.26 Conclusions

The socio-economic demographic profile of Barnet has a direct influence on sports participation and open space usage, as people's involvement in sport varies with gender, age, ethnicity and other socio-economic factors. This section of the Open Space Assessment highlights the following:

Demographic

- Barnet's population will increase by 11% to 364,000 by 2016^{13[13]} – growth will be highest in Colindale, Edgware, Golders Green, Mill Hill, Underhill and West Hendon wards;
- In terms of age, the population is skewed - Barnet has the second highest proportion of children and young people in London and a marginally higher proportion of people aged 65+ than the regional average;
- Barnet has a marginally higher proportion of female residents than the London average – activity rates for females in Barnet are also higher than the London average;
- Older residents in Barnet have higher 'zero sports participation' rates than neighbouring Boroughs – which may indicate a gap in provision for this age group;
- Barnet is characterised by a relatively high proportion of Asian/ Asian British – Indian residents – particularly in West Hendon and Colindale;
- Non-white residents in Barnet are more active than their counterparts in neighbouring Boroughs;

Economic

- The majority of male and female residents in employment work more than 38 hours per week. This is similar or slightly higher than both the London and national averages.
- Unemployment levels are lower than the regional and national average, although Burnt Oak, Colindale and Coppetts wards all have high unemployment rates;

Housing

- High population densities are found in Burnt Oak, West Finchley and Woodhouse wards. Population density is an indicator of open space need since open spaces are likely to be within reach of a greater number of people, and potentially be used more often due to a lack of private amenity space. Low densities are Mill Hill, Totteridge and High Barnet, which are all in the north of the Borough.
- The highest densities of children and young people are in Burnt Oak, Golders Green and Colindale wards. The lowest densities are in High Barnet, Totteridge and Mill Hill;
- Almost two thirds of dwellings in Barnet are houses or bungalows. However, East Finchley, Hendon and West Finchley wards have a majority proportion of flats as part of the housing stock;
- Dwellings are more likely to be owner occupied in Barnet than in the rest of London;

- Although the average residential dwelling density across Barnet is 14.6 per ha, Burnt Oak, West Finchley and East Finchley wards all have densities above 25 dwellings per ha;

Deprivation and crime

- Burnt Oak, Colindale, East Finchley, West Finchley and Edgware SOAs are all within the 10% most deprived areas in the UK. In 2004, Barnet had no areas within this deprivation bracket;
- Barnet has a relatively low crime rate, compared with the national average;
- Car ownership is above the London average, although one in three households does not have access to a car. Lowest accessibility levels are in the two most deprived wards of Burnt Oak and Colindale;
- In London, Barnet is third from bottom in the public transport connectivity index. Transport links east-west are particularly poor;

Health and satisfaction with sports facilities

- Almost three quarters of residents in Barnet consider themselves to have good health (LB Barnet Health Profile (April 2008)) - this is a higher proportion than the London and regional average;
- 21.9% of adults in Barnet do moderate exercise of up to 30 minutes at least 3 days a week and only 29.3% were club members. In both categories, these rates placed Barnet in the middle 50% when compared to the rest of the country;
- In terms of satisfaction with local sports provision, Barnet was placed in the bottom 25% in the UK;
- Young people rated the delivery of council owned leisure facilities in Barnet much higher than adults – 53% of young people rated the service good or excellent, where adult residents gave a low rating of 23%. The satisfaction rating for London as a whole is 52%.
- Use of Barnet's parks and open spaces and council owned leisure facilities has decreased since last year

11.27 Key Issues:

This chapter has drawn out key demographic issues for the Open Space Assessment, based upon a selection of the socio-economic indicators. Therefore, the following key indicators must be considered when looking at the need for open space in Barnet

- High population density - provides an indication of greater demand for access to open space and sports facilities;
- Areas with a relatively high density of residential dwellings and areas with a high proportion of dwellings as flats or apartments, - housing type is a good indicator of open space need as, like density, it provides an indication of access to private open space in the form of gardens or yards;
- The child population as a proportion of the total population - child population densities provide an indication of the need for children's play provision within the Borough;
- The age profile of residents - influences the range and type of recreation provision needed, especially in relation to children's play and the balance between dedicated and informal recreational activities.
- Proximity to public transport and car ownership. Owning a car and accessibility to public transport is likely to increase accessibility to larger and more distant open spaces. It may also increase accessibility to a range of open spaces for users such as the elderly and families with dependent children,

- A prevalence of illness and disability - recent best practice guidance identifies the contribution of open space towards healthy living, stating that open spaces have a preventative effect on ill health as a population;
- Proximity to key growth areas within Barnet, including the Cricklewood, Brent Cross and West Hendon regeneration area, Colindale and Mill Hill East, where there will be significant extra demand for open space and sports facilities;
- Areas in the most 10% deprived SOAs in the country – as an indicator of access to open space.

In terms of participation rates, older residents in Barnet have higher 'zero sports participation' rates than neighbouring Boroughs. Considering the high numbers of older people living within the borough, this may indicate a gap in provision for this age group. Although participation rates across most age groups under 55 are high compared with boroughs such as Enfield and Waltham Forest, in a national context, Barnet is within the middle 50%. There is a notable dissatisfaction with local sports provision and use of Barnet's parks and open spaces and council owned leisure facilities has decreased since last year.