

A Prospective Health Impact Assessment of the **proposed** new leisure facilities to replace existing Church Farm leisure centre in East Barnet ward of the London Borough of Barnet (LBB)

Authors

Dr Wazirzada. M. R. Khan – Senior Health Improvement Specialist – Barnet Public Health Team
Rachel Wells – Consultant in Public Health – Barnet Public Health Team

Conflict of Interest: *None of the above authors have any direct association (residence or business) with the proposed sites.*

Date produced

05 -10- 2015

Acknowledgements

We would like to thank Joanna Boutros, Carol Douet, Nalini Iyanger, Natalie Daley, Robert Reed, Brain Johnston, Andy Spriggs, Magdalena Kosowska and James Beck at London Borough of Barnet (LBB) for their help and assistance with different phases of the HIA and especially with the drop-in sessions. We would also like to thank residents who participated in public consultation and provided their valuable input to the HIA questions.

Glossary of terms and abbreviation

- HIA= Health Impact Assessment
- Danegrove Playing Field= DPF or (DG)
- Victoria Recreation Ground= VRG or (VR)

Executive Summary

This report considers the health impact of the two proposed sites for building a new leisure centre that will replace the existing Church Farm leisure centre, in East Barnet. It takes into account the demographics and the characteristics of the local community, along with evidence relating to the current health status of the population and the views of residents gathered as part of a public consultation exercise. Using a detailed HIA methodology, the report concludes with a list of recommendations made in line with the aims and objectives of the HIA.

East Barnet – destination for the new leisure centre

In brief, East Barnet is a diverse ward with 23.3% of the population from non-white ethnic background. Nearly 1/5th of the population is between the ages of 0-15 years and around 1/10th is 16-24 years old. Both these groups constitute approximately 1/3rd of the overall population; and although improved physical activity and prevention of childhood obesity are the key indicators for the younger age groups, the prevention of substance misuse and a reduction of smoking uptake among young adults are equally significant. The rates of childhood obesity, poor IMD score and the increased number of ambulance callouts for alcohol and drug related incidents among young people make East Barnet a good candidate for a new leisure centre.

Proposed options for the re-provision of Church Farm LC

There are two sites in contention at present, these are:

A - Victoria Recreation Ground VRG (East Barnet)

The site is approximately 50,000 sqm in size and is located in the north of the borough. It is also adjacent to East Barnet town centre redevelopment. It is approximately 1.6 miles from the current location of Church Farm.

B- Danegrove Playing Fields DPF (East Barnet)

The site is approximately 8,200 sqm in size, forms part of the part of the playing field provision of Danegrove Primary School and is located at the junction of Cat Hill and Park Road. It is approximately 0.8 mile (half of the distance compared to above option) from the current location of Church Farm.

Of the two proposals, Danegrove Playing Field is relatively closer to the current site (0.8mile) and although it may appear to encourage the current users to travel less farther than Victoria Recreation Ground, the feasibility study showed that this is not an issue for the current users as long as the new site is large enough to provide properly enhanced and integrated facilities and has adequate transport links and parking facilities. Barnet's SPA needs assessment highlighted the preference of individuals to use their local venues with on average of 43.3% of people attending sports facilities living within 2km distance from their residence. The feasibility study used a catchment area of 1 mile radius for Church Farm in their report. In light of these two reports, it is anticipated that either one of the new proposed locations are expected to retain a good number of current users.

Aim of the HIA

To identify and assess both positive and negative health impacts of proposed plans for a new leisure centre in East Barnet ward with a special focus on vulnerable groups.

Objectives of the HIA

- To identify the priority groups in the ward
- To engage and involve local community (via public consultation) for their perception of the health impact of the new development.
- To provide recommendations based on the findings in which the positive health impacts of the development can be maximised and the negative health impacts minimised

Screening of the proposal

Screening was undertaken to review the potential impacts of a new build on either site and if following this full HIA was justified. It was found that this was the case since the installation of a new leisure facility was likely to have both positive and negative impacts on the surrounding communities.

Appraisal of the proposal

During the appraisal phase, we further reviewed available literature/evidence and tested the proposals with the local communities. This was undertaken in three phases.

- 1) Appraisal of the suggested changes and their anticipated impacts
- 2) Public consultation held between June 2015 and September 2015
- 3) Combination of the above two phases

The appraisal identified and expanded on the following:

Direct Health Benefits - Impact on physical and mental health

Broadly, there will be a cumulative positive and long term impact for users of the new leisure centre ranging from the immediate positive health impacts of exercise on reducing stress and anxiety to long term physiological impact, such as reduced blood pressure, improved cardio-respiratory fitness and improved/maintenance of a healthy body-weight.

Potential impact on the following wider health determinants and their subsequent impact on the health outcomes

This included a focus on the following:

- Individuals with disabilities
- Social isolation
- Health services
- Demographic income and gender specific
- Employment, working conditions and income generation
- Substance misuse
- Environmental impact
- Community safety

Public consultation on the proposed new sites was carried out from 30th June 2015 to 23rd September 2015. There were twelve drop-in sessions held between July 2015 and Aug 2015. These sessions were organised at three easily accessible venues i.e. East Barnet Library, St James Church and Copthall leisure centre. The key teams who participated in the drop in sessions were SPA project team, Public Health, Opinion Research Services (ORS), procurement, planning, parking and open spaces, design and build and Sports England teams.

All drop-in sessions were held on different days (including weekends) and times of the days with a view to allow better uptake. A media campaign was run prior to and at the same time to ensure residents were informed of these sessions. In addition to this, all residents living nearby (500-600 meters of the proposed sites) were sent invitation letters encouraging them to participate in the sessions.

In order to ask relevant questions about the factors that have a direct and/or indirect impact on the health of the individuals, Barnet Public Health team used these drop-in sessions. Our aim was to have a face to face discussion with the participants where we could explain the rationale behind our questions and provide additional information. In the final phase, we combined the information points from both appraisal (phase 1) and public consultation (phase 2) sections and scored the two proposed sites.

In terms of the overall positive scores, Victoria Recreation Ground (VRG) scored more positive and less negative points than Danegrove Playing Field (DPF).

Danegrove Playing Field	= Positive (+ve 304), Negative (-ve 58)
Victoria Recreation Ground	= Positive (+ve 355), Negative (-ve 30)

It is important to note that the overall scores should be taken into consideration with the scores for each section. The areas where there was the most difference were:

- Community Safety - crime or fear of crime, actual or perceived personal & property safety
- Appearance of the area (real or perceived differences in characteristics)
- Sites/locations which have significance in people's lives
- Land use - availability/ quality of open space & environmental amenity

These were all perceived to have a more positive impact at Victoria Rec and a more negative impact at Danegrove Playing Field.

Final Recommendations

There are multiple factors that need to be taken into account when deciding the final site for a new leisure centre. HIA is one of the technical documents and looks at the proposed site with a health and wellbeing perspective (the ultimate goal of achieving the best outcome). Development of a new leisure centre will have a long term legacy and will offer potential health benefits for all age groups over generations. It is also essential to envisage any potential and long terms negative impacts.

Although Victoria recreation ground appears to offer more health benefits in comparison to Danegrove playing field, there are common themes (potential negative impacts) that were repeated on multiple occasions by the participants for both sites. These are increased level of traffic in the area and risk of accidents, limited public transport, levels of air and noise pollution and safety of those using the new centre. In addition, the lack of design (how the new centre will look) and its visual impact on the appearance of the area was raised by

multiple participants. As at this stage we were collecting feedback on the preference for the type of facilities in the new leisure centre, participants felt that they may change their view in when they review these factors.

Overall, the HIA was successful in identifying the key areas of concerns. In addition to the key findings in scoping exercise, the following key recommendations are made to enhance the positive impacts and reduce the severity of negative impacts.

1. Ensure Public Health Outcomes are incorporated in the development of new leisure service contract.
2. Provide opportunities for sessions aimed at gender specific groups and separate changing rooms for men and women.
3. Provide consultation facilities and a large enough room for health promotion activities and classes
4. Provide crèche facilities to maximise access for parents and carers of young families
5. Provide designated footpath and cycle route to promote walking and cycling.
6. Provide additional lighting for those on foot or using bicycle for safety and minimising accidents.
7. Design new road layout to ease potential traffic congestion and the associated levels of air and noise pollution.
8. Explore opportunities to increase bus route and/or additional service with transport for London.

1. Introduction

An individual's health is influenced not only by health strategies but is also largely dependent on factors outside the control of the healthcare sector. Policies, programmes and projects formulated in the non-healthcare sectors, and concerned with the wider determinants of health - such as transport, housing, employment, access to fresh food, social regeneration, education, leisure provision, and economic activity – have a significant impact on individual's health and sense of wellbeing.¹

Health Impact Assessment (HIA) is a practical and holistic approach of ascertaining and predicting the potential health impacts (both positive and negative) of the proposed interventions in a systematic and transparent way. It supports organisations to assess the potential consequences of their decisions on people's health and well-being. Health impact assessment works best when it involves people and organisations who can contribute different kinds of relevant knowledge and insight. The information is then used to build in measures to maximise opportunities for health and to minimise any risks. The systematic approach of HIA uses the wider or social determinants of health as a framework for appraisal and leads to realistic recommendations. According to WHO², HIA is “a *combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population*”.

This report considers the health impact of the two proposed sites for building a new leisure centre that will replace the existing Church Farm leisure centre, in Barnet. It takes into account the demographics and the characteristics of the local community, along with evidence relating to the current health status of the population and the views of residents gathered as part of a public consultation exercise. Using a detailed HIA methodology, the report concludes with a list of recommendations made in line with the aims and objectives of the HIA.

2. Background

One of the vision statements from London Borough of Barnet (LBB) Corporate Plan 2015/20³ is around providing personalised and integrated health and social care services with more people supported to live long with a particular relevance to physical activity; “*Barnet's residents will be some of the most active and healthy in London, benefitting from improved leisure facilities and making use of the borough's parks and open spaces (Barnet's vision for 2020)*”. Barnet Council plans to invest in new, modern leisure centres to replace older centres and work with local sports clubs and community groups to increase participation in sports and leisure activities. Similarly, one of the plan's indicators for success is to encourage people to make healthy choices, with an increase in the proportion of adults taking part in regular sports activity or exercise to 55.6%.

In early 2015, Barnet Local Authority's sports and physical activity team developed a revised Outline Business Case for Sports and Physical Activity (OBC for SPA)⁴. Two of the core strategic outcomes expected from SPA project were;

¹ Joffe M, Mindell J. Health impact assessment. *Occup Environ Med.* 2005 Dec;62(12):907-12, 830-5
<http://oem.bmj.com/content/62/12/907.full.pdf+html>

² World Health Organisation (WHO): Definitions of Health Impact Assessment <http://www.who.int/hia/about/defin/en/>

³ London Borough of Barnet (LBB) Corporate Plan 2015/20

⁴ Revised Outline Business Case (2015): Sports and Physical Activity, London Borough of Barnet

- To improve the levels of physical activity within Barnet, particularly in target geographical areas for both adults and children, leading to improvements in public health outcomes and general wellbeing; and
- To enhance the opportunities and access to sport and physical activities for individuals of all ages and abilities.

It is also intended that the new contract is to be Public Health Outcome Focused⁵ to enable and support leisure providers in engaging and contributing to wider public health gains. The revised OBC incorporated these suggestions into the plans for the new leisure management contracts with the expectation that the new contract and services would deliver a significant contribution to the Council's public health aims and objectives.

The development of revised OBC also included a detailed feasibility study⁶ on the five existing leisure facilities commissioned by the Council. One of the key recommendations of this study was to renew and rebuild "**Church Farm leisure centre**".

A list of five potential new sites to replace the current Church Farm was produced and consulted with the population in early 2015. At the end of the consultation, two sites were shortlisted for final selection. The options were **Danegrove Playing Fields (DPF)** and **Victoria Recreation Ground (VRG)**, both located in East Barnet ward.

In line with the processes outlined in revised OBC, a detailed HIA on the final replacement options for Church Farm LC was also recommended. The following document provides more information on the process, methodology and the outcome of the HIA.

3. Aim of the HIA

To identify and assess both positive and negative health impacts of proposed plans for a new leisure centre in East Barnet ward with a special focus on vulnerable groups.

4. Objectives of the HIA

- To identify the priority groups in the ward
- To engage and involve local community (via public consultation) for their perception of the health impact of the new development.
- To provide recommendations based on the findings in which the positive health impacts of the development can be maximised and the negative health impacts minimised

5. Putting HIA into context

5.1 Physical inactivity is one of the major risk factors causing death and ill-health. The risks of lifestyle diseases such as coronary heart disease (CHD), stroke and type II diabetes are markedly raised in people who are less physically active.

5.2 Physical inactivity is directly linked with an increased cost to the NHS and wider cost to the society – absence from work, premature death of productive individuals (table 1).

⁵ Public Health England's Public Health Outcomes Framework (PHOF) (2013-2016)
<https://www.gov.uk/government/publications/healthy-lives-healthy-people-improving-outcomes-and-supporting-transparency>

⁶ Leisure Centre Feasibility Study for Sports and Physical Activity (2014), London Borough of Barnet.

Disease category	Barnet	London	England
Cancer lower GI e.g. bowel cancer	£528,989	£9,647,613	£67,816,189
Breast Cancer	£419,610	£10,473,802	£60,357,887
Diabetes	£854,400	£28,881,611	£190,660,420
Coronary heart disease	£3,643,665	£68,351,198	£491,095,943
Cerebrovascular disease e.g. stroke	£1,218,855	£19,641,408	£134,359,285
Total Cost	£6,665,518	£136,995,632	£944,289,723
Cost per 100,000 population	£1,958,417	£1,776,346	£1,817,285

Table 1 - Health costs of physical inactivity

Source: Sport England⁷ commissioned data from British Heart Foundation Health Promotion Research Group for PCTs, reworked into estimates for LAs by TBR Year: 2009/10, Measure: Health costs of physical inactivity split by disease type

5.3 Increasing physical activity has the potential to improve the physical and mental health of the nation, reduce all-cause mortality and improve life expectancy (table 2). It can also save money by significantly easing the burden of chronic disease on the health and social care services especially in deprived areas. Similarly other potential benefits linked to physical activity in children and young people include the acquisition of social skills through active play (leadership, teamwork and co-operation), better concentration in school and displacement of anti-social and criminal behaviour⁸.

Percentage more active	Barnet	London	England
25%	15	236	1,749
50%	68	1,526	13,438
75%	120	2,815	25,127
100%	172	4,104	36,815

Table 2- Preventable deaths by increasing levels of physical activity among 40-79 year olds. Source: Public Health England - Health Impact of Physical Inactivity. Year: 2010

Measure: Estimated preventable deaths in persons aged 40-79, all causes, 2010

5.4 The Barnet Health and Wellbeing Strategy (2012-2015)⁹ identified a commitment to make better use of the range of green spaces and leisure facilities in the borough to increase levels of physical activity.

6. Local picture

⁷ Sports England, Local Sports Profile; <http://www.sportengland.org/our-work/local-work/local-government/local-sport-profile/>

⁸ Warwick I, Mooney A and Oliver C (2009) National Healthy Schools Programme: Developing the evidence base. London: Thomas Coram Research Unit and Institute of Education, University of London

⁹ Keeping Well, Keeping Independent – A Health and Wellbeing Strategy for Barnet 2012 – 2015 http://www.barnet.gov.uk/downloads/download/1056/barnet_health_and_wellbeing_strategy

- Barnet is an outer borough located in the north of the Greater London. It has a total population of 357,653 (2011 censuses), making it the 14th most populated authority in England and Wales and the second largest in London. This population is unevenly distributed with greater density in the southern and western areas of the borough (Finchley, Colindale and Hendon) and lower density in the north as the edge of London and a greater proportion of open space is approached⁶.
- The population estimates suggest that Barnet population is set to grow from its current estimates 367,265 in 2015 to 406,341 by 2025. The population growth is linked with continued migration and regeneration and new housing developments. The wards with the most population growth will be Colindale and Golders Green.

Wards	2015	% of Barnet population	2025	% of Barnet population
Brunswick Park	16,406	4.5%	17,230	4.2%
Burnt Oak	18,087	4.9%	18,059	4.4%
Childs Hill	20,695	5.6%	21,207	5.2%
Colindale*	21,657	5.9%	36,843	9.1%
Coppetts	17,241	4.7%	16,898	4.2%
East Barnet	16,180	4.4%	16,995	4.2%
East Finchley	16,291	4.4%	16,148	4.0%
Edgware	17,929	4.9%	19,753	4.9%
Finchley Church End	16,011	4.4%	16,215	4.0%
Garden Suburb	16,078	4.4%	16,054	4.0%
Golders Green*	18,976	5.2%	32,083	7.9%
Hale	17,354	4.7%	17,120	4.2%
Hendon	18,893	5.1%	18,629	4.6%
High Barnet	15,372	4.2%	15,826	3.9%
Mill Hill	20,188	5.5%	24,789	6.1%
Oakleigh	15,770	4.3%	15,601	3.8%
Totteridge	15,173	4.1%	15,643	3.8%
Underhill	16,149	4.4%	15,994	3.9%
West Finchley	16,959	4.6%	17,458	4.3%
West Hendon	17,956	4.9%	18,281	4.5%
Woodhouse	17,927	4.9%	19,511	4.8%
Barnet	367,265	100%	406,341	100%

Table 3 - Current against projected population growth by wards – London Borough of Barnet

**Wards with the largest population growth*

- The borough is generally relatively affluent with half of the wards in the top half (i.e. less deprived) of the Index of Multiple Deprivation (IMD). However, there are areas of greater deprivation in the more populated south of the borough, including six wards in the bottom 10% and a further 19 in the bottom 20% compared to England and Wales as a whole⁶.
- Although the residents of Barnet enjoy better than average health and have a higher life expectancy compared to England's average, the experience is not universal across the borough and life expectancy is 7.8 years lower for men and 5.6 years

lower for women in the most deprived areas of Barnet than in the least deprived areas¹⁰. There is evidence that cardio-vascular disease mortality increases as area deprivation increases.

- Based on the most up to date, in 2012, 55.6% of the adults in Barnet were considered overweight and 20.5% were classified as obese¹⁰. As for the prevalence of obesity among children, in 2013/14, 9.4% of the children in reception and 19.4% of the children in year 6 in Barnet were considered obese (close to national level of 9.5 and 19.1% respectively¹¹).
- Adults and children who are overweight or obese are less likely to meet the physical activity recommendations of at least moderate intensity physical activity on five or more days a week compared with those who are not overweight or obese.
- Based on the latest available comparison data on *participation of adults in Sports and Active Recreation (SAR -produced by Sport England⁷ as part of the two Active People Surveys 2005/06 & 2011/13)*, it is evident that participation has risen among both males and females in Barnet and is better than London and national level. Except for young adults (16-24 years old), the SAR participation has improved among all age groups and although SAR participation has remained better among white population in general, there has been an improvement among non-white population in Barnet as well. The same is true for people with non-limiting disabilities in Barnet (table 4).
-
- The greatest public health benefit is to get these groups at least minimally active, i.e. women, individuals from non-white background, young adults (16-24 years old), disabled residents, individuals with lifestyle related (usually long term) diseases and those living in most deprived areas of the Borough¹².

¹⁰ Public Health England – Barnet Health Profile (2014); <http://www.apho.org.uk/resource/item.aspx?RID=142299>

¹¹ National Child Measurement Programme, NCMP – LA profile PHOF data <http://fingertips.phe.org.uk/profile/national-child-measurement-programme/data#gid/8000011/pat/6/ati/102/page/4/par/E12000007/are/E09000003>

¹² Sport and Physical Activity Needs Assessment for Barnet (2012)

Adult (16+) Participation in Sport & Active Recreation (formerly NI8) by year, frequency and gender										
Indicator	Year	Barnet			London			England		
		All	Male	Female	All	Male	Female	All	Male	Female
12+ days / 3x30 - NI8	2005/06	21.7%	22.4%	21.0%	21.5%	23.9%	19.1%	21.3%	24.0%	18.7%
	2011/13	24.8%	24.8%	24.8%	23.7%	27.6%	19.9%	24.7%	28.3%	21.3%

Adult (16+) Participation in Sport & Active Recreation (formerly NI8) by year, frequency and ethnicity										
Indicator	Year	Barnet			London			England		
		All	White	Non white	All	White	Non white	All	White	Non white
12+ days / 3x30 - NI8	2005/06	21.7%	23.4%	16.7%	21.5%	22.7%	18.1%	21.3%	21.5%	18.7%
	2011/13	24.8%	27.3%	20.4%	23.7%	25.8%	20.3%	24.7%	25.0%	22.7%

Adult (16+) Participation in Sport & Active Recreation (formerly NI8) by year, frequency and disability										
Indicator	Year	Barnet			London			England		
		All	Limiting disability	No limiting disability	All	Limiting disability	No limiting disability	All	Limiting disability	No limiting disability
12+ days / 3x30 - NI8	2005/06	21.7%	*	23.6%	21.5%	9.2%	23.3%	21.3%	9.0%	23.6%
	2011/13	24.8%	*	26.3%	23.7%	12.1%	25.4%	24.7%	12.2%	27.2%

Adult (16+) Participation in Sport & Active Recreation (formerly NI8) by year, frequency, age band and socio-economic class										
Indicator	Year	All	Barnet				NS SEC 1-2	NS SEC 3	NS SEC 4	NS SEC 5-8
			16-25	26-34	35-54	55+				
12+ days / 3x30 - NI8	2005/06	21.7%	32.9%	26.5%	22.3%	12.0%	20.5%	*	*	19.2%
	2011/13	24.8%	28.1%	31.1%	27.9%	15.2%	30.7%	*	*	23.0%

Table 4 – Comparison of participation in Sport & Active Recreation (formerly NI8) by Barnet’s adult population. Adopted from Sport England Local Sport Profile⁷ 2015 Source: Active People Survey, Year: 2005/06 (APS1), 2011/13 (APS6/7). Measure: Adult participation

7. Overview of East Barnet ward ¹³

7.1 Based on the Greater London Authority (GLA) population estimates (2015), East Barnet has a population of 16,180 (4.4% of Barnet’s population); and is set to grow to an estimated 16,995 by 2025 (especially in over 65 years old) - fig 1. However, the percentage of total individuals living in East Barnet ward is expected to drop slightly to 4.2% of the overall Barnet population in the next ten years (Tab 3).

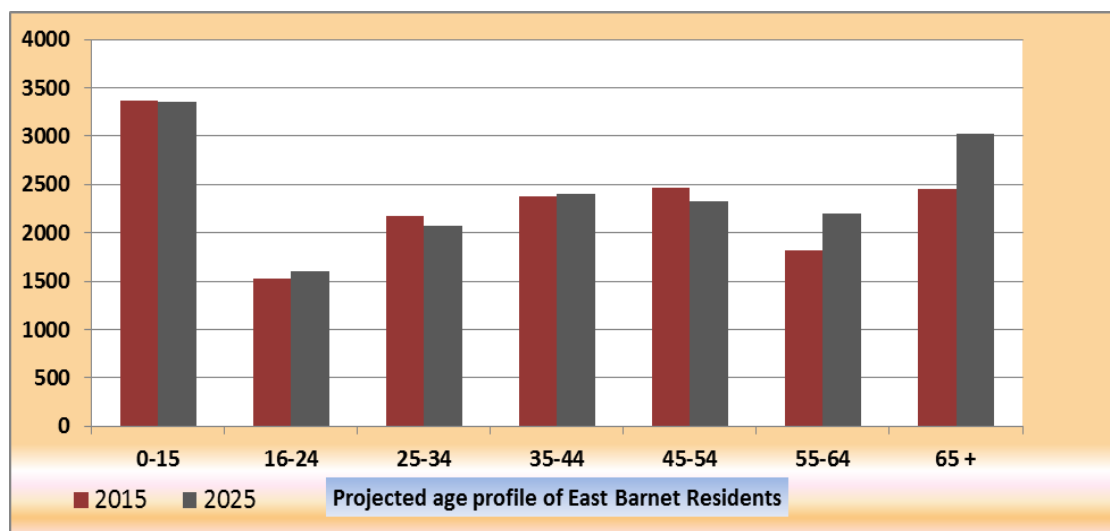


Figure 1 – Projected population estimates by age groups in East Barnet

¹³ Equalities data dashboard - London Borough of Barnet

- 7.2 Around **30%** of the current population (2015 projection) is between the ages of 0-24 years (21%, n=3,371 are 0-15 years old and 9%, n=1,524 are 16-24 years old).
- 7.3 The prevalence of childhood obesity among children in reception year and those in year 6 in East Barnet is 9.6% and 18.1% respectively (2009/10 to 2011/12). These figures are slightly below but close to Barnet's average of 9.7% and 18.3%.
- 7.4 An estimated (76.6%) of the East Barnet population is from White ethnic background, followed by Asian and Asian British (10.6%) and Black or Black British (5.1%) (2011 census) which is roughly in line with the Barnet average for all other groups.
- 7.5 An estimated 5.2% of the households with children in East Barnet do not have an adult in employment (2011 census) which is higher compared to both Barnet (4.9%) and England (4.2%).
- 7.6 Based on the 2011 census, 4.5% of the East Barnet population self-reported their health as bad or very bad and 6.5% self-reported having a disabling condition which limits their day to day activities a lot. Both of these are slightly **higher** for the Barnet as a whole (4.3% and 6.0% respectively) but close to England and Wales (4.9% and 6.5%) respectively.
- 7.7 East Barnet was in the **top two** wards for the number of ambulance callouts for young people related to alcohol (1st was Edgware) and drugs (1st was Woodhouse) in the borough in 2013/14¹⁴.
- 7.8 The cumulative data for Time4us (2007 to 2013/14) showed the highest number of referrals from East Barnet ward. Time4us is a service that offers supports to young people and young carers who feel isolated, let down and in need of resilience building as a result of their parents' drug and/or alcohol use¹⁴.
- 7.9 Based on the index of multiple deprivation (IMD) score, **30%** (n=3/10) of the lower super output areas (LSOA) in both East Barnet and Oakleigh wards were in the category for the LSOA in the worst 50% nationally. East Barnet had the **third lowest GCSE** equivalent point scores per pupil in the borough¹⁵. In terms of labour market and employability, 17.1% of the population in East Barnet do not have any qualification which is higher compared to Barnet (15.5%); while 36.5% have Level 4 qualifications and above which is lower compared to Barnet (40.3%).

In brief, East Barnet is a diverse ward with 23.3% of the population from non-white ethnic background. Nearly 1/5th of the population is between the ages of 0-15 years and around 1/10th is 16-24 years old. Both these groups constitute approximately 1/3rd of the overall population; and although improved physical activity and prevention of childhood obesity are the key indicators for the younger age groups, the prevention of substance misuse and a reduction of smoking uptake among young adults are equally significant. The rates of childhood obesity, poor IMD score and the increased number of ambulance callouts for alcohol and drug related incidents among young people make East Barnet a good candidate for a new leisure centre.

¹⁴ Barnet Young People, Substance Misuse Needs Assessment and Specialist Service Review (2014)

¹⁵ Performance & Data Management, Children's Service, LBB, referred in Profile of East Barnet Ward (2013); Barnet Insight Unit, London Borough of Barnet

It is also important to note that the health and social benefits will not be limited to East Barnet ward only, and individuals living in three closest wards would equally benefit from a new and improved facility. A snapshot of comparative variables between East Barnet and its neighbouring three wards is shown below (table 5).

	East Barnet	High Barnet	Brunswick Park	Oakleigh	Barnet
Total population (2015)	16,180	15,372	16,406	15,770	367,265
0-15 years old	3371 (21%)*	2834 (18%)	3240 (20%)	3081 (20%)	77788 (20%)
16-24 years old	1524 (9%)	1321 (9%)	1691 (10%)	1474 (9%)	37556 (10%)
25-44 years old	4548 (28%)	4138 (27%)	4322 (26%)	4403 (28%)	116794 (32%)
45-64 years old	4281 (26%)	4305 (28%)	4451 (27%)	4031 (26%)	83550 (23%)
65 years plus	2456 (15%)	2774 (18%)	2702 (16%)	2781 (18%)	51576 (14%)
Ethnicity breakdown (%White + % all other ethnic groups combined)	76.6% + 23.4%	81.7% + 18.3%	68.4% + 31.6%	73.3% + 26.7%	64.1% + 35.9%
Childhood obesity prevalence (reception 2009/10 to 2011/2012)	9.6%	7.2%	10.7%	8.4%	9.7%
Childhood obesity prevalence (year 6 -2009/10 to 2011/2012)	18.1%	15.1%	17.9%	14.9%	18.3%
% People with Bad or Very Bad Health	4.5%	4.2%	4.7%	4.6%	4.3%
% People who's Day-to-day activities are limited a lot	6.5%	6.9%	6.5%	6.8%	6.0%
Index of multiple deprivation (IMD score) - % of LSOAs in worst 20% nationally	0%	0%	0%	0%	NA
Index of multiple deprivation (IMD score) - % of LSOAs in worst 50% nationally	30%	11.1%	20%	30%	NA
Proportion of total population (16-64) claiming benefits	11.0%	8.1%	9.5%	8.8%	9.9%
Assault incidents attended by ambulance (2013)	29	23	24	21	834
No of ambulance callouts for alcohol related illnesses (2013)	28	45	22	21	817

Table 5 - Demographic details and comparison of the four closest wards to the proposed new leisure centres.

* Data in red text indicates a comparatively high value for the indicator in that row

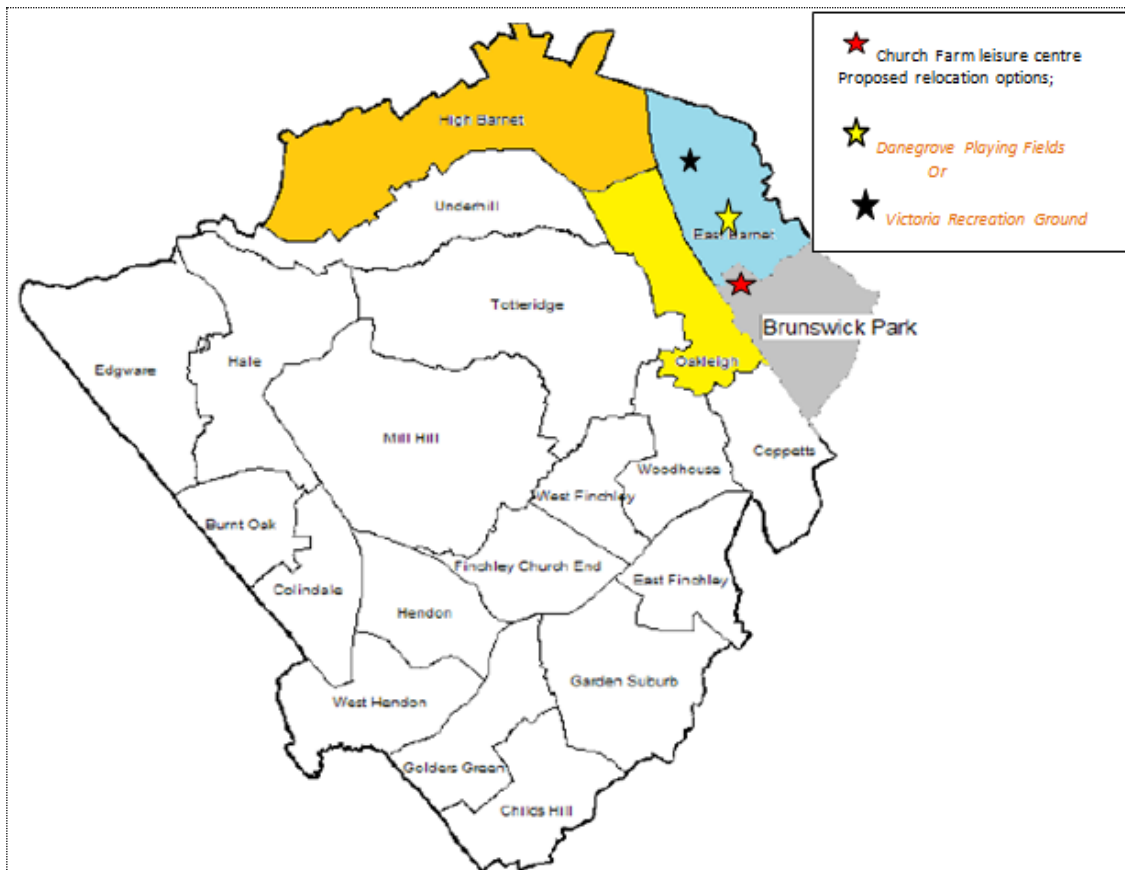


Fig 2: Location of Church Farm and the proposed new locations in relation to neighbouring wards (Colour coded to the above table)

8 Church Farm leisure centre

Church Farm leisure centre was originally built in 1960. It has a 19m, 3 lane swimming pool and an activity hall. The feasibility study on all leisure facilities in Barnet (2014¹⁶) concluded that although Church Farm LC offered a local and loyal customer base with a good school swimming programme, the centre was generally in a very poor condition with poor roof on the pool, restricted reception area, restricted car park (limiting its usage) and the secluded location of the centre from the main road (Church Hill Road) which meant many potential users were not aware of it. The study also incorporated conditional survey and site visits and based on the unmet demands of the local population proposed a **re-provision** for the Church Farm LC as a priority with the following facility mixes;

- 25m, 6 lane pool
- Learner pool with moveable floor
- 70-75 station gym – based on the latent demand of 1,173 members (25members per station)
- 2 dance studios
- Café
- Six-court sports hall

¹⁶ Leisure Centre Feasibility Study for Sports and Physical Activity (2014), London Borough of Barnet.

The current leisure centre is 1,900 sqm in size while typical wet and dry leisure centre built to modern standards and capable of accommodating the proposed facility mixes require a site of circa 7,000 sqm. In light of the above, five sites were proposed and consulted with the users/population (appendix A). Of these, two potential sites (Victoria Recreation Ground and Danegrove Playing Fields) received significant support from residents and hence were shortlisted for final consultation and a detailed HIA.



Figure 3 –
An aerial
view of the current and proposed new sites

9 Proposed options for the re-provision of Church Farm LC

A - Victoria Recreation Ground VRG (East Barnet)

The site is approximately 50,000 sqm in size and is located in the north of the borough. It is also adjacent to East Barnet town centre redevelopment. It is approximately **1.6** miles from the current location of Church Farm.

B- Danegrove Playing Fields DPF (East Barnet)

The site is approximately 8,200 sqm in size, forms part of the part of the playing field provision of Danegrove Primary School and is located at the junction of Cat Hill and Park Road. It is approximately **0.8** mile (*half of the distance compared to above option*) from the current location of Church Farm.

Of the two proposals, Danegrove Playing Field is relatively closer to the current site (0.8mile) and although it may appear to encourage the current users to travel less farther than Victoria Recreation Ground, the feasibility study¹⁶ showed that this is not an issue for the current users as long as the new site is large enough to provide properly enhanced and integrated facilities and has adequate transport links and parking facilities. Barnet's SPA needs assessment¹⁷ highlighted the preference of individuals to use their local venues with on

¹⁷ Sport and Physical Activity Needs Assessment for Barnet (2012)

average of 43.3% of people attending sports facilities living within **2km distance** from their residence. Feasibility study¹⁸ used a catchment area of 1 mile radius for Church Farm in their report. In light of these two reports, it is anticipated that either one of the new proposed locations are expected **to retain** a good number of current users.

Victoria Recreation Ground (VRG)

On foot - 20 - 30 mins from Cockfosters tube station and 15 mins from New Barnet rail station.

Cycling – 5 mins from Cockfosters tube station and 4 mins from New Barnet rail station (as per Google maps)

By Bus – No 384, from outside Cockfosters station and New Barnet rail station has a frequent service every 15-20 mins which stops outside the recreation ground depending on the stops as it is hail and ride for part of the journey.

Danegrove Playing Fields (DPF)

The nearest tube station to the Danegrove location is new Barnet which is over 30 mins on foot.

Bus Route - No 307 runs between Brimsdown to Barnet hospital and vice versa and offers a frequent service, every 10 mins. Individuals can alight at Belmont Avenue and take a 3-5 mins walk to Danegrove site. A second bus service **No 184** runs between Barnet Chesterfield road and Turnpike lane bus station and vice versa. It offers a frequent service 8-12 mins. Individual can alight at East Barnet village and take a 10 minutes' walk to Danegrove site. The walk from this side is an uphill climb via a quiet residential street and can be difficult for people with mobility issues.

In light of above, both venues are in fairly close proximity to the current location in Brunswick Park ward but due to the fact that Barnet is fairly large and some parts are relatively remote, the transport can be a little infrequent at times.

Between the two options, Victoria Recreation Ground was a relatively more convenient when walking or using a bus or cycle from either tube or rail station

¹⁸ Leisure Centre Feasibility Study for Sports and Physical Activity (2014), London Borough of Barnet.

10 - HIA - Screening of the proposed options

Screening of the proposals involves a consideration of whether a proposal will have a direct impact on the health or via wider determinant of health including social conditions and community cohesion.

In light of this, both new proposed venues were screened with a set of standard questions that explored the above links. Summary of the key findings is below (for a detailed screening outcome, please see appendix B).

- The closure of Church Farm LC, in Brunswick Park ward, in the East of the borough will have some perceived **negative** impact on the social life of its current users especially those from the disadvantaged groups. However, as the plans are to replace it with a new and modern centre which will offer improved facilities and will incorporate public health outcomes based contract; the overall positive impacts will outweigh the negative impact. The **positive** impacts will be directed on the physical, mental and emotional wellbeing of the residents (of all ages and from all groups including disadvantage groups) in the four neighbouring wards including Brunswick Park, East Barnet, Oakleigh and High Barnet.
- Similarly, to maximise the **positive** impacts, one of the key items in the new leisure contract will be an expectation from the contractor to provide a varied programme of recreational, sporting and community activity that is accessible to all including the disadvantaged and vulnerable groups across the borough. The feasibility study¹⁹ also highlighted a good support for centre's relocation to either of the new sites as the current facilities at Church Farm did not meet the needs of the users.
- A new leisure centre in East Barnet will provide a good platform to **enhance** community and cultural networks. It will create opportunities for individuals to improve their own health and wellbeing especially for young people. As a result, it is anticipated that there will be reduced demand on the health and social care services. For example, some of the positive impacts for young people will be the uptake of physical activities and avoidance of harmful agents such as smoking, drugs and alcohol intake. Engaging more young people in physical activities may lead to a reduction in substance misuse²⁰ among this group with anticipated positive outcome at individual, family and community level.
- Development of a new leisure centre will also have an economic impact in the borough by providing work opportunities and work experience to local residents and businesses. Similarly, businesses benefiting from the current sites may suffer in turn, however, the effects is expected to be minimal as the current site is not surrounded by local shops.
- In addition to the above, screening also identified a **negative** impact on the local environment during the construction phase of the new leisure centre. These effects can be the increased levels of noise, traffic congestion, road closures, rerouting and land digging. Majority of these are expected to be on a short term basis (12-18 months of reconstruction). Any long term effects will be identified via HIA will be reported back to the design and build team.

11 . HIA - Appraisal/assessment of proposals

¹⁹ Leisure Centre Feasibility Study for Sports and Physical Activity (2014), London Borough of Barnet.

²⁰ Mark A. Smith and Wendy J. Lynch (2012): Exercise as a potential treatment for drug abuse: evidence from preclinical studies <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3276339/>

This stage is undertaken in three phases.

- 1) Appraisal of the suggested changes and their anticipated impacts
- 2) Public consultation held between June 2015 and September 2015
- 3) Combination of the above two phases.

Phase 1 – Appraisal exercise

Direct Health Benefits - Impact on physical and mental health

The exercise is one of the most important preventive health-related behaviors. The new leisure centre will offer opportunities for the residents of East Barnet, and its neighbouring wards in particular, to engage in activities which have the potential to enhance their health & wellbeing. Similarly, the new leisure contract between the Council and the operator will incorporate Public Health Outcomes (PHO)²¹ and hence will also contribute towards health benefits.

Some of the expectations from the new operator are around the delivery of programmes that address excess weight issues among all age groups (especially among 4-5 years and 10 -11 years old) and innovative programmes to encourage more people engaging in physical activities and develop sports programmes that support athletes with a potential to represent the Council at a regional, national and international platforms.

There is evidence that increasing physical activity among individuals can reduce the risks of bowel and breast cancers and lifestyle diseases such as coronary heart disease (CHD), stroke and type II diabetes²². The provision of an inclusive physical activity resource also has significant implications for people with existing conditions in that there is also strong evidence that physical activity plays a vital part in the treatment of many conditions, including (but not limited to): many forms of cancer²³; cardiovascular disease; dementia; and, HIV and AIDS.

In addition, access to sports and leisure centre will provide opportunities to improve health and wellbeing of carers and individuals living with a mental health conditions. There is strong evidence that exercise has a positive impact in reducing the stress, anxiety and depression²⁴. Knapen et al (2014)²⁵ concluded that exercise may have an effect similar to antidepressant medication and psychotherapy for mild to moderate depression and can also be a valuable complementary therapy to the traditional treatment for severe depression. Exercise can improve sleep quality, boost self-esteem and reduce the risk of dementia. There is an expectation that the new operator will work with the mental health partnership board and other borough agencies to support campaigns and developments and offer schemes such as a Fit & Active Barnet Leisure Card for the carers.

The new site will offer these opportunities and will give individuals a feeling of control and the ability to influence their lives.

²¹ Public Health England's Public Health Outcomes Framework (PHOF) (2013-2016)
<https://www.gov.uk/government/publications/healthy-lives-healthy-people-improving-outcomes-and-supporting-transparency>

²² Benefits of Exercise – NHS Choices - <http://www.nhs.uk/Livewell/fitness/Pages/Whybeactive.aspx>

²³ Shiraz I Mishra et al (2012); Exercise interventions on health-related quality of life for people with cancer during active treatment

²⁴ Takács J (2014)- Regular physical activity and mental health. The role of exercise in the prevention of, and intervention in depressive disorders

²⁵ Knapen J et al (2014) - Exercise therapy improves both mental and physical health in patients with major depression

To further enhance the positive impact of new leisure centre, the access to services should be **equitable** with consideration to the different and ever-changing needs of the community. This will mean that there will be a need to offer **subsidised access** for low income groups; **disabled-friendly facilities** (i.e. IFI gyms); **family-friendly** facilities (including family changing and breastfeeding-friendly zones); consideration of **religious beliefs** (including ladies only activities) and a **dedicated room for health** professionals to raise health promotion and awareness events (e.g. nutrition and healthy eating, stop smoking cessation, substance misuse, sexual health and contraception awareness, mental health and employment support work etc). There is an expectation that the operator will offer hygienic and healthy catering options (*including vending machines to a minimum of 50% of product line*) to promote healthy eating habits.

In light of the above, there will be a cumulative **positive and long term impact** for users of the new leisure centre ranging from the immediate positive health impacts of exercise on reducing stress and anxiety to long term physiological impact, such as reduced blood pressure, improved cardio-respiratory fitness and improved/maintenance of a healthy body-weight.

[Potential impact on the following wider health determinants and their subsequent impact on the health outcomes](#)

Individuals with disabilities

Public Health Outcomes²¹ focused leisure contract is expected to have an environment that is fully inclusive, incorporating elements of equipment, facility and programme design. Although the range of disabilities covered means that it may not be possible to cater directly to everyone's needs (particularly those with high levels of support requirements), the facilities are expected to be **as inclusive as possible** to support the health and wellbeing of people with disabilities.

There is also an expectation from the operator to have appropriately trained staff who can support individuals with disabilities. For example, all staff members would be **trained in 'disability awareness'** and fitness staff would hold specific qualifications, such as the YMCA Fit 'Exercise and Disability' course, (an additional module accessible by all levels of fitness professionals). It will also be necessary for the operator to make provision for **BSL translation services**. Similarly, there is an expectation that operator will offer **carers** a free access to centres when accompanying person they are caring for.

In light of the above, it is anticipated that the new leisure centre will have a **positive and long term health impact** with enhanced opportunities for individuals with disabilities and their carer.

Social isolation

Social isolation²⁶ has been shown to have a direct negative impact on mental and physical wellbeing of the individuals and is independently associated with a reduced life expectancy.

The groups identified as being most at risk are;

- those who are disabled or frail aged;
- those on a low income;
- ethnic and religious minorities; and
- older single/widowed women with limited mobility.

²⁶ Campaign to end Loneliness – A toolkit for Health and Wellbeing Boards <http://campaigntoendloneliness.org/toolkit/>

Proximity and easy access to community assets can motivate individuals to engage in activities that can reduce social isolation. The proposed facilities for the new leisure centre (including a café) will offer such a community space where people of all ages can gather and socialise and hence develop and maintain connections with friends and family while remaining connected to their communities.

There is an anticipated **positive and long term mental health impact** on a large number of people in the borough, particularly vulnerable groups. However, the operator would need to provide more information on how they will address social inclusion, particularly for isolated groups, such as older people and Looked After Children. Need for provision of meeting areas, groups/clubs and local noticeboard etc.

Health services

There is some evidence that the time during construction could have a **negative impact** on the ambulance response time due to traffic congestion in and around the areas. Although the immediate effect would be during the construction phase, the developer would be expected to ensure high priority services (police/ambulance and fire) have appropriate access in the area.

In the long run, the plan to have a dedicated room for health related programmes and promotional/awareness events will have a **long term positive impact** on the life of residents and service users.

Demographic income and gender specific

Barnet has a diverse population and there is evidence that individuals from minority ethnic groups do not actively engage in sports activities²⁷. Although challenging, it will be possible to ensure opportunities to use leisure facilities are available to all. PHO specific new leisure contract will create an expectation from the operator to market programmes that are inclusive and promote activities for women and girls, individuals from certain faith groups and ethnicities. Similarly as part of PHO, Council will also expect that the activity prices, annual memberships and pay and play prices are affordable to people on **low income** and those considered as **talented athlete** to ensure there is improved participation from all groups while sufficient income is generated to sustain leisure centre services.

The operator will also need to consider the changing borough demographics and the need to make a special effort to **include under-represented groups**. This will be a constantly changing picture due to the rapidity with which London demography changes and the provider would be required to keep up-to-date with this.

If the operator can manage this expectation successfully, then there will be an anticipated **positive and long term** health benefit for individuals in all groups including those from minority ethnic groups. If, however, these opportunities are not explored to the full potential then the expected benefits will be minimum for individuals in minority groups.

Employment, working conditions and income generation

There is strong evidence that a stable, good quality and well paid employment has a positive impact on the mental, physical and social health of the individuals.

It is anticipated that building a new leisure centre will require development projects with a potential to create local jobs and once built, the new leisure centre with its proposed

²⁷ Sport and Physical Activity Needs Assessment for Barnet (2012)

additional facilities such as café, dance floor, and a swimming pool with added lanes will provide employment opportunities for local residents.

It is also possible that the new jobs may be poor quality, low paid, fixed term and/or part time. To minimise this effect, the new contract based on PHO will expect operator to improve working conditions and comply with the provisions of all relevant employment legislation such as; the Equality Act 2010, the EU Working Time Directive and relevant Working Time Regulations, the London Living Allowance. Similarly, PHO also expect the operator to provide career development opportunities for local residents by working with partners from education and employment to support training events linked to career progression.

Finally, the Council will be entering into a cost neutral contract with a leisure management supplier for the 2 new leisure centres on the 1st January 2018 with the possibility of generating revenue for the council. These funds can then be used on other essential health and social services.

In light of the above the overall impact of these activities is expected to be **positive** on the local population. The closure of Church Farm in Brunswick may have a small negative impact on the current staff, however, there is potential that the staff may find new employment with the new provider.

Substance misuse (tobacco, alcohol drug)

Leisure centres provide an opportunity to engage in exercise and physical activities. There are epidemiological studies that reveal that individuals who engage in regular exercise such as aerobics²⁸ are less likely to use and abuse illicit drugs. The association is based on the link that under some conditions, exercise increases measures of euphoria and well-being in human populations in a manner similar to that of abused drugs^{29, 30}.

The new leisure center will offer a range of activities from swimming to dance studio. It is anticipated that these activities will encourage local residents, especially young people, to engage with health activities and will have a **positive impact** on their health. In the long run a healthy neighborhood may lead to reduction in current high level of ambulance call outs related to alcohol and drug misuse in East Barnet. Similarly, the PHO oriented leisure contract will require operator to implement a no smoking policy at the premises for both the customers and staff and display promotional materials at the sites e.g. Stoptober and Dry January.

Community safety

Crime and fear of crime have a negative impact on the health of the individuals. There is a possibility that some elements of the urban design (e.g. access and use after dark) can have an impact on crime and/or fear of crime and safety of the individuals. Similarly, as leisure centre increase the footfall in the area, it can attract local businesses (including off licenses) which can promote violence, street litter and lack of safety particularly for old people, women and children. Council's licensing and trading standards team and the design and build team will have to ensure that the licensing of new fast food/local shops (if any) and the layout of new site does not have any negative impact on the neighbourhood area and the local residents.

28 Mark A. Smith and Wendy J. Lynch (2012): Exercise as a potential treatment for drug abuse: evidence from preclinical studies <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3276339/>

29 Janal, M. N., Colt, E. W., Clark, W. C., and Glusman, M. (1984): Pain sensitivity, mood and plasma endocrine levels in man following long-distance running: effects of naloxone. *Pain* 19, 13–25

30 Nabetani, T and Tokunaga, M. (2001): The effect of short-term (10- and 15-min) running at self-selected intensity on mood alteration. *J. Physiol. Anthropol. Appl. Human Sci.* 20, 231–239.

Environmental Impact

As a new leisure centre will be built to replace the existing Church Farm, there will be an environmental impact of the building work. Environmental impact can be in the shape of **noise** and **air** pollution, **traffic** congestion and pest. Similarly, the **energy and resources use**, and **waste production** of the facilities will also have an environmental impact.

There is a strong evidence that exposure to high levels of **noise** (as expected during the construction time) has a negative health impact. In particular noise causes annoyance and sleep disturbance and in severe cases can lead to hypertension, ischemic heart disease and even hearing loss. There is also added risk that even after the construction phase is completed, the new leisure centre may increase the traffic flow to local area (more people travelling via cars) and hence generate noise, air pollution and traffic congestion during peak times.

Similarly, **air quality** and pollution are of increasing concern to the public. There is strong evidence that poor air quality can lead to respiratory and cardiovascular health impacts e.g. inducing asthma, chronic lung disease and allergies. The construction of new leisure centre will cause construction dust and pollutants emitted from the operation of energy plant. In the long run, the increased traffic related to the new centre will be the main cause of changes in the air quality.

Although the construction work will be **short term** (during the construction time) **negative** impact, the increased traffic and footfall in the area will have a **long term negative impact** especially on the residents living in the close proximity to the site. To minimise these negative impacts during the construction phase, the design and build team would need to provide reassurance that the negative impacts will be kept to the minimum.

There is strong evidence that development work will result in an **increased traffic** to the site during the construction phase. There is also a possibility that the provision of multiple car park spaces and a potential new bus route to the new site may increase traffic flow in the area. In addition to the creating noise and pollution, increase in traffic has a potential for road traffic accidents. The design and build team would need to consider incorporating pedestrian controlled traffic lights, safe cycle lanes, speed controls/restrictions, better lighting and wider footpaths in the area to minimise traffic accidents and encourage green forms of travel to and from the leisure centre.

Pest control would need to be considered as the facilities will have the potential to generate large volumes of waste. If pests are not adequately controlled it would have the greatest impact on residents living in close proximity to the leisure facilities. It could also have a negative health impact for staff and service users.

There is a small but possible risk of legionella bacteria, which can lead to legionnaire's disease in some service users. People most at risk are old people, those who smoke and patients with chronic lung disease, poor immune system or those on immunosuppressing drugs.

Both pest control and legionella risks are associated with any leisure centre offering water sports/showers and hence would need to be managed vigorously by the operator as part of their site and water management programmes.

Phase 2 – Public consultation

Public consultation on the proposed new sites was carried out from 30th June 2015 to 23rd September 2015 and included;

- Posters (distributed at Barnet owned five leisure centres and Libraries)
- Screen saver in Barnet Library computers
- Social media (Facebook and Twitter)
- Newsletters (via partnership boards)
- Press releases
- Monthly bulletin
- Presentations
- Leaflets
- Internet - including Barnet Online and partner organisation's websites

In addition to the above, there were twelve drop-in sessions between July 2015 and Aug 2015). These sessions were held on three easily accessible venues i.e. East Barnet Library, St James Church and Copthall leisure centre (appendix c). The key teams who participated in the drop in sessions were SPA project team, Public Health, Opinion Research Services (ORS), procurement, planning, parking and open spaces, design and build and Sports England teams.

All drop-in sessions were held on different days (including weekends) and times of the days with a view to allow better uptake. A media campaign was run prior to and at the same time to ensure residents were informed of these sessions. Finally, all residents living nearby (500-600 meters of the proposed sites) were sent invitation letters encouraging them to participate in the sessions.

Methodology

In order to ask relevant questions about the factors that have a direct and/or indirect impact on the health of the individuals, Barnet Public Health team used the drop in sessions. Our aim was to have a face to face discussion with the participants where we could explain the rationale behind our questions and provide additional information.

In order to record their views and responses, we produced bespoke poster in A0 size with key questions on one side and boxes for answers on the other side (appendix D). The questions were designed as an interactive exercise with the aims of capturing both;

- a) the type of impact i.e. negative or positive and
- b) the level (quantitative measure) of impact (graded from 1 to 5 on the poster).

For each questions, participants were given a blue sticky dot to place in the box of their choice. Participants who answered a particular question with either high negative (-ve 5) or high positive (+ve5) response were encouraged to provide further information. This was recorded by both PH and ORS teams. The whole session was kept as an interactive exercise where participants felt empowered to share their views.

In each chart we asked 13 key questions which were divided into four main criteria to measure both direct and indirect impact of new leisure entre for each of the proposed site.

Criteria 1:

- Opportunities to exercise
- Opportunities to participate in sport as a family
- Opportunities to socialise and make new friends
- General health and wellbeing

Criteria 2:

- Improving diet and eating habits
- Reducing smoking/alcohol/drug taking

Criteria 3:

- Opportunities for jobs and training

Criteria 4:

- The appearance of the area
- How safe the area feels
- Living in the area
- Traffic in the area
- Public transport in the area
- Levels of pollution such as air, light & noise

Analysis

1. Majority of those who attended the drop-in sessions participated in the HIA and found it useful in asking the relevant questions. An estimated **120** individuals provided their feedbacks to the HIA questions.
2. The initial analysis by each question indicates that both sites have increased proportion of **positive** responses for criteria 1 (health/social benefits) and **negative** responses for criteria 4 (appearance/traffic/safety & pollution in the area). As the HIA was related to a new leisure/sports facility, we anticipated that this would be the case (fig 4&5).
3. For both sites, there is a high proportion of “**no impact or not sure**” responses to criteria 2 questions (i.e. impact of leisure centre in improving diet/eating habits and reducing smoking/alcohol intake). We anticipated these responses as the perceived impact of a new leisure centre on reducing smoking/alcohol intake is expected to most beneficial in the long run (*i.e. new generation and young people not starting smoking and alcohol and being more health/diet conscious in general due to their engagement with exercise and sports related activities from an early age*). In addition the participants were either “unsure” or identified “no impact” in their responses to the question on the effect on “public transport” in the area. There are limited public transport options for both sites.
The above are valid responses and indicate that participants have been through and systematic in their feedbacks and critically appraised each site & question before providing their input, increasing the validity of the overall exercise.
4. For criteria 3, participants felt that either of the sites will offer good opportunities for local jobs and training in sports (criteria 3).
5. On further analysis, participants felt that **negative** impacts related to the “appearance of the area” and “levels of pollution” were slightly higher for Danegrove site (46% and 64%) compared to Victoria recreation site (25% and 53% respectively). On the other hand, participants felt that the positive impacts of “opportunities to exercise”, “opportunities to participate in sports as a family” and “general health and

wellbeing” were more significant for Victoria recreation site (92%, 87% and 94%) compared to Danegrove site (88%, 85% and 88% respectively) (fig 6 &7).

6. Both sites received equal level of negative responses (75%) in relation to bringing more traffic to the area. This was one of the key concern and many local residents felt that the team should ensure that, during and after construction, roads layout, footpaths and pedestrian control crossings are managed systematically to avoid any accidents and unnecessary congestion in the area (fig 6).
7. In relation to safety in the area, participants felts positively that a new facility in Victoria recreation ground will benefit locals by bringing more footfall, lighting and a general feeling of busyness in the area. For Danegrove site, the predominant response was “no impact” as the area is considered safe by local residents and participants (fig6).
8. Victoria recreation ground also received positive response in lifting the appearance of the area. In comparison a significant number of respondents felt that having a new leisure centre at Danegrove playing field will have a negatively impact as it will deprive them of a green space. Risk of flooding from the removal of green space at Danegrove site was also raised as a concern by a small number of respondents.
9. Finally the “level of pollution” and the impact on “living in the area” both received negative and positive responses respectively and the difference between the two sites was minimal albeit more in favour of Victoria recreation site than Danegrove site (fig 6).

In summary, participants felt that a new and modern leisure centre, with a variety of new facilities, will inevitably have a positive impact on the health and wellbeing of the residents. The concerns raised were mostly in relation to increased traffic and levels of pollution (air/noise). In terms of comparison between the two sites, albeit by a small majority, participants felt that a new leisure centre in Victoria recreation site will be more beneficial than Danegrove playing field.

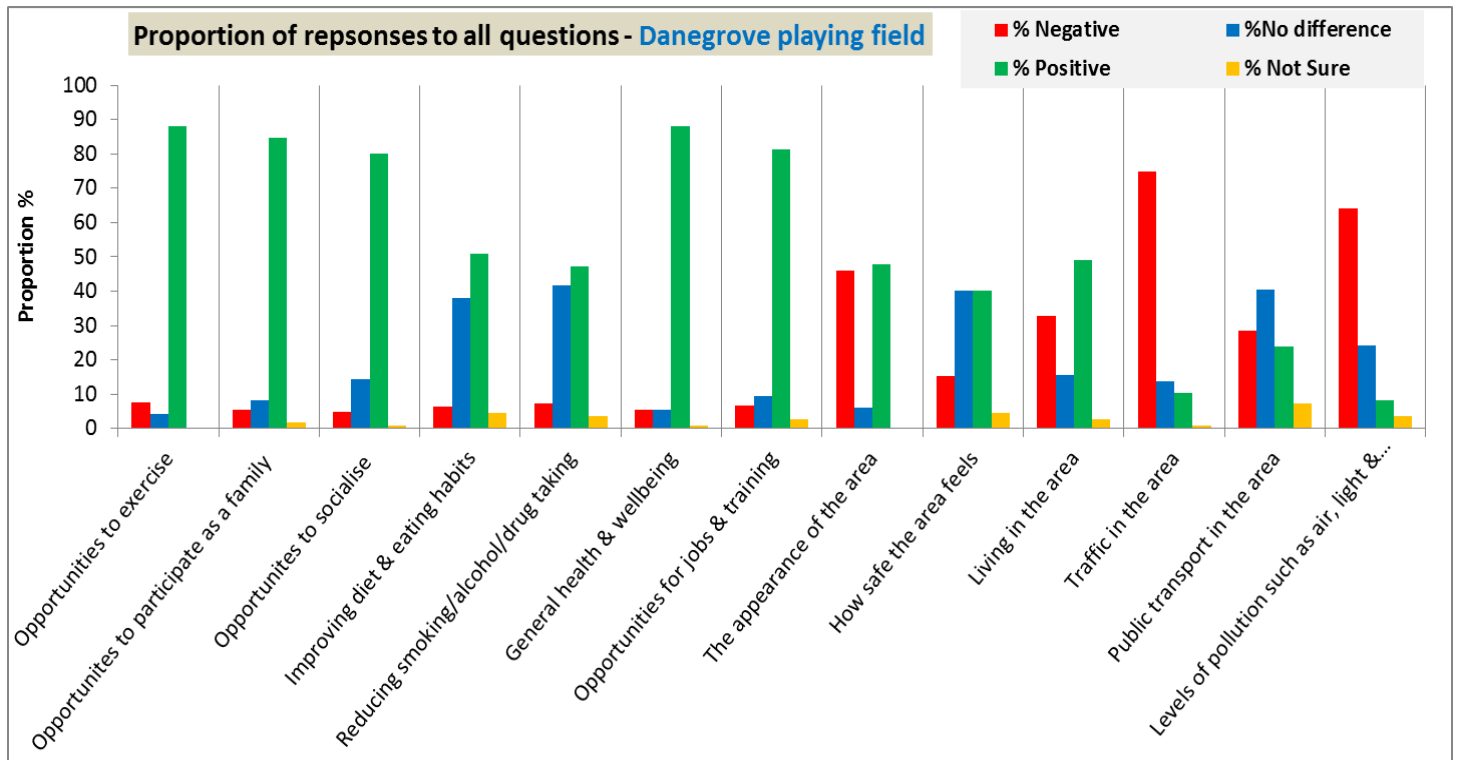


Figure 4

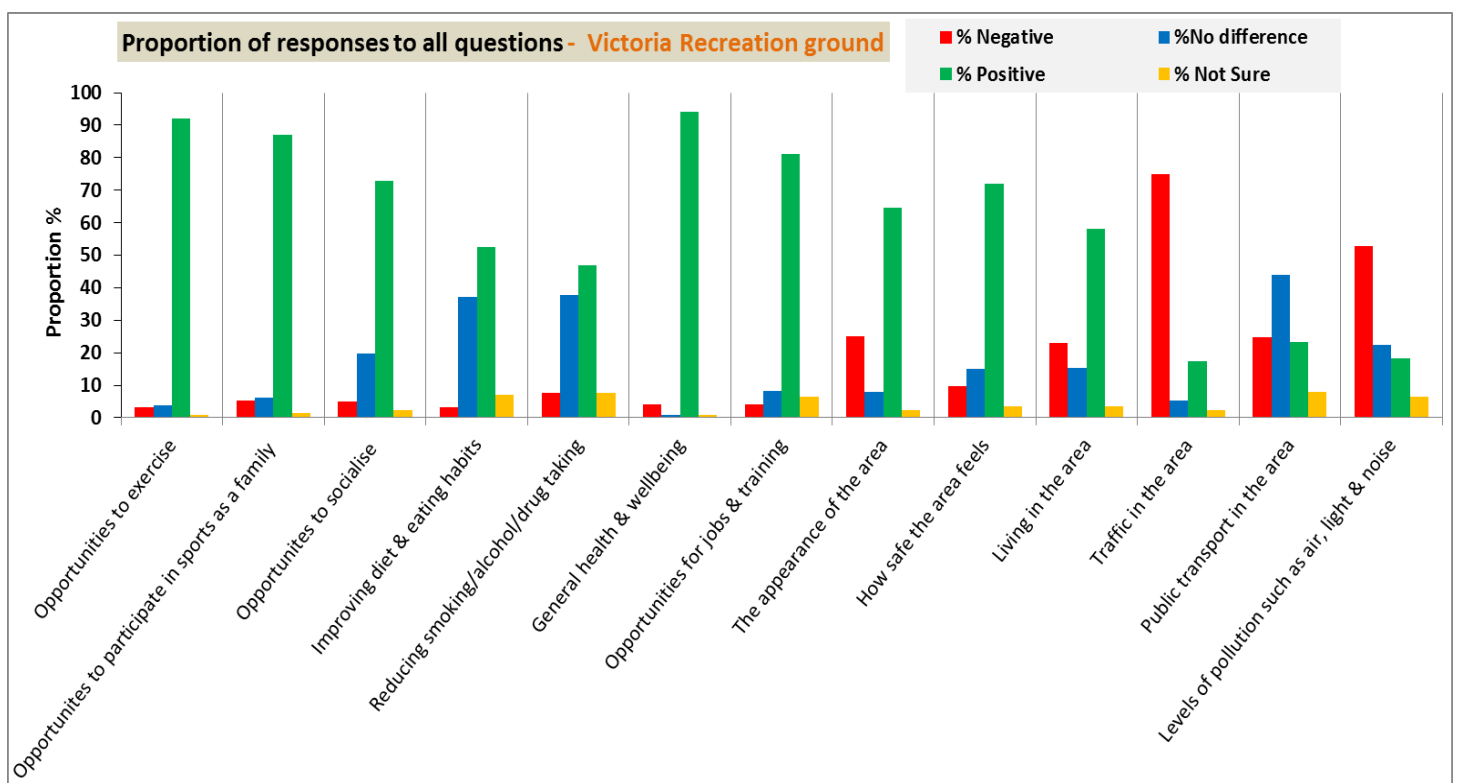


Figure 5

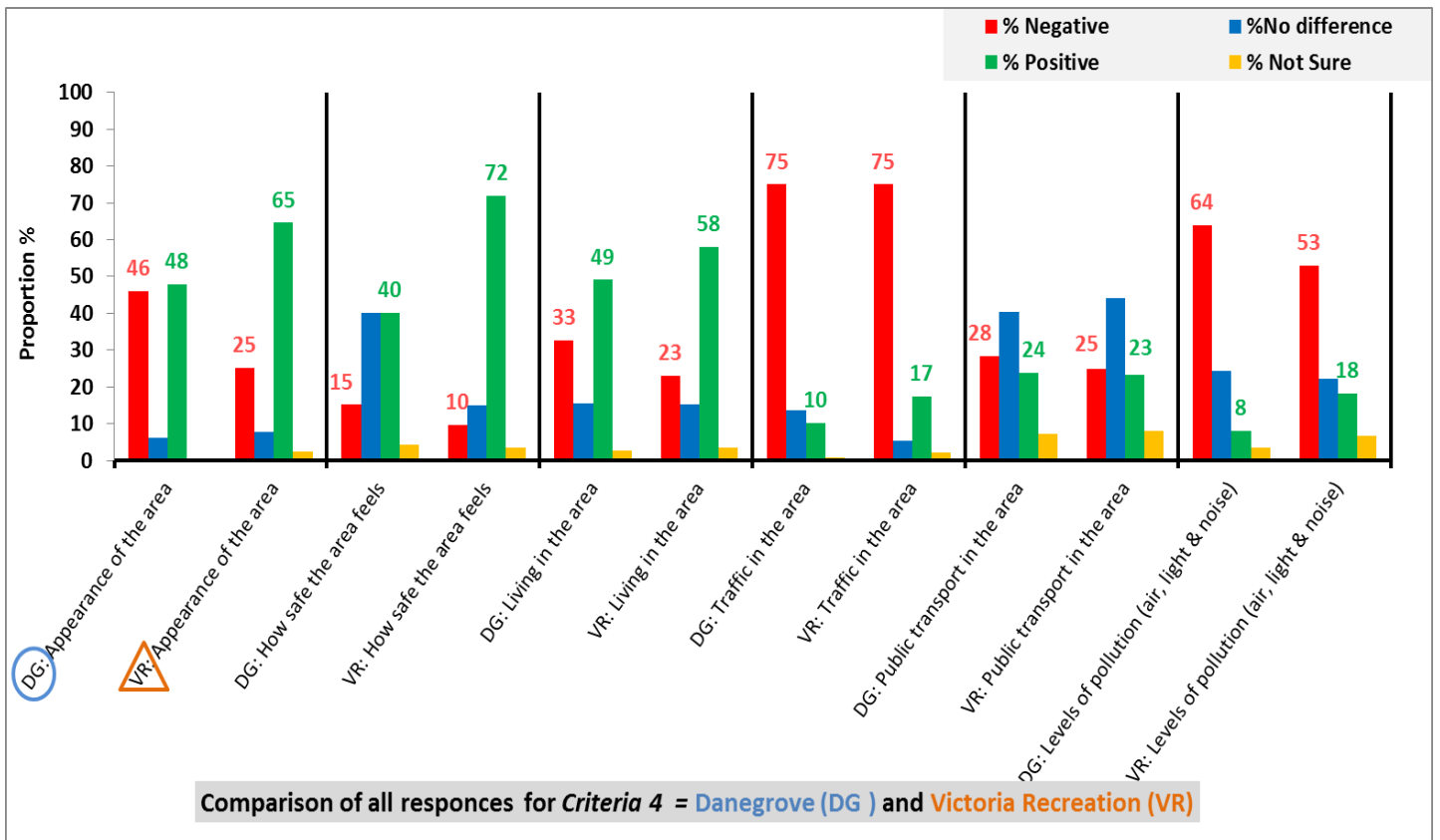


Figure 6

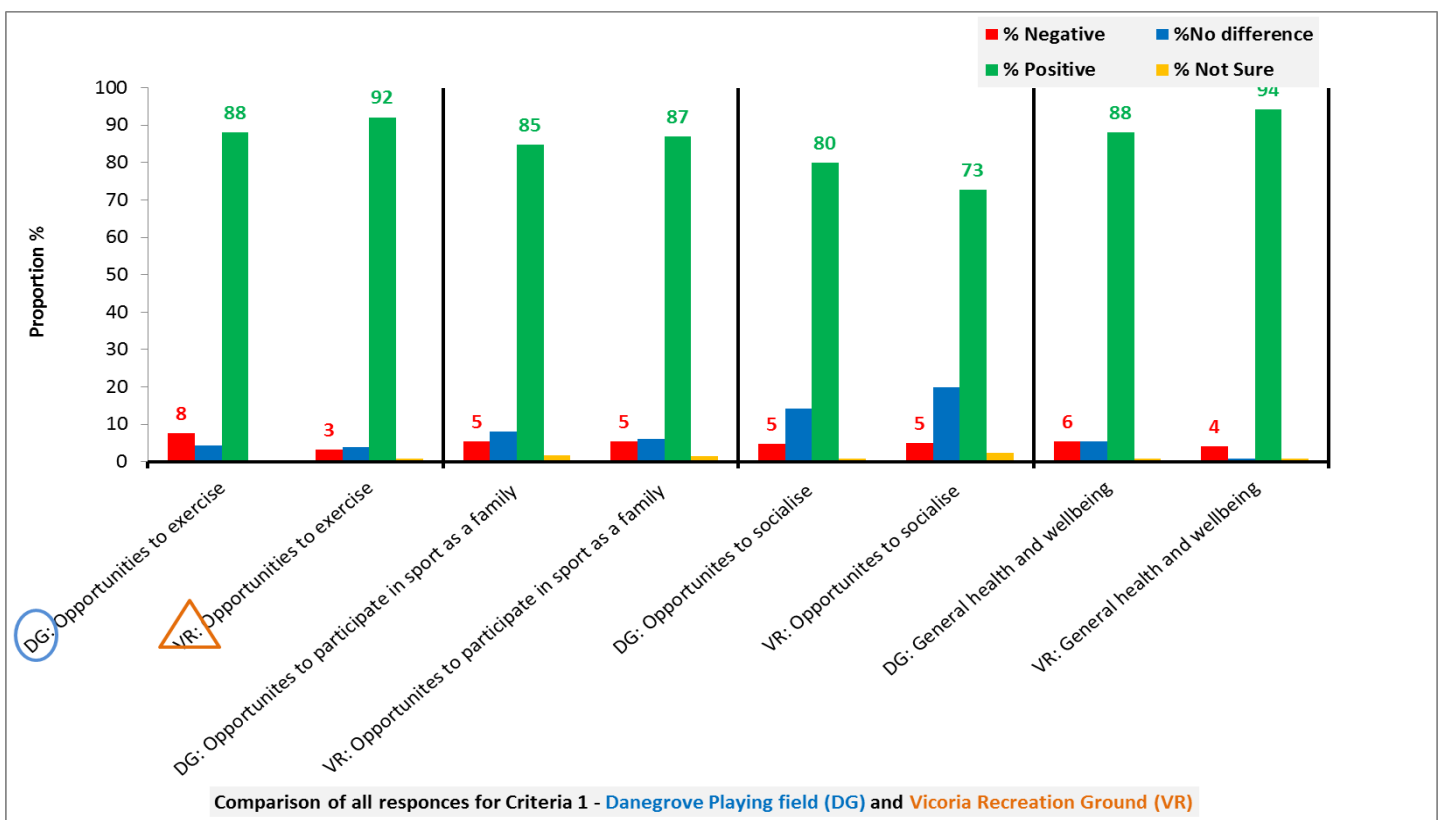


Figure 7

Phase 3 – Combination of phase 1 and 2 using the following scoring system

In this section, we have used the positive and negative points from both appraisal (appraisal – phase 1) and public consultation - phase 2) sections to score the two proposed sites. Scoring system was adopted from the Luton Council HIA toolkit³¹.

In terms of the overall positive scores, Victoria Recreation Ground (VRG) scored more positive and less negative than Danegrove Playing Field (DPF).

Danegrove Playing Field – DPF= **Positive (+ve 304), Negative (-ve 58)**

Victoria Recreation Ground – VRG = **Positive (+ve 355), Negative (-ve 30)**

Please see appendix D for the scoring system and full details on the scores.

The key areas of difference were;

Key differences	Impact type (=ve or –ve) and severity for each proposed site		
Determinants of health	Danegrove Playing Field (DPF)	Victoria Recreation Ground (VRG)	Comments
Community Safety - crime or fear of crime, actual or perceived personal & property safety	No Impact	Positive (+12)	Participants felt that DPF site was already a safe area and having a new facility will either have no impact or a slight negative impact. On the other hand, participants felt that a new leisure centre in VRG site would bring more footfall and better lighting etc. Based on this we have scored it as medium +ve.
Appearance of the area (real or perceived differences in characteristics)	Negative (-12)	Positive (+24)	Participants felt that a new leisure centre in DPF will deprive the area of a green space and will increase the number of cars parked on the road, more traffic and busyness. Based on this we have scored it as a medium negative. While a new development at VRG was seen by majority as uplifting the local area. As this impact is long term, we have scored it in the positive.
Sites/locations which have significance in people's lives	Negative (-3)	Positive (+3)	Both the responses and the level of impacts were minor, however, for DPF it was a feeling of losing the playing field while in VRG , the proposed change would make the area more significant by adding additional activity to the existing football pitches, tennis courts and bowling ground.
Land use: availability/ quality of open space & environmental amenity	Negative (-12)	Positive (+24)	Nearby residents to DPF were anxious about losing green space which at present absorbs rain water and prevent the water running down the slope. Any future development will have to manage this risk alongside providing sufficient parking spaces (rooftop/underground?) to compensate for the use of land. On the other hand this was not an issue for VRG and as mentioned above, the site and land use would add more value (positive impact) alongside existing football pitches, tennis courts and bowling ground.

12. Limitations of the HIA

³¹ An easy guide to Health Impact Assessments for Local Authorities (2002)

<http://www.google.co.uk/url?url=http://www.apho.org.uk/resource/view.aspx%3FRID%3D44880&rct=i&frm=1&q=&esrc=s&sa=U&ved=0CBQQFjAAahUKewjr74W9mY3IAhVIOj4KHVFGBtc&usg=AFQjCNH7Oxf0wEdMWXXIMSfxETNTNko1rw>

1. As this HIA was carried out for a new leisure centre, there was a general consensus that it will have positive health impacts due to increased sports and physical activities regardless of the either proposed site. In light of this, HIA alone should not be used for deciding the proposed site; and other factors such as planning, build environment, cost, traffic, public transport and appearance of the area should be taken into account.
2. Both proposed sites are approximately 0.8 mile from each other, have limited bus service and the same demographic (age/gender) and ethnic population. Due to this reason (similarity), the comparison between the two proposed sites, for their health benefits, is difficult. It also reinforces the above point that the HIA should not be used as a sole document for selecting the final site.
3. Due to lack of any information (at the time of HIA) on the design, traffic layouts to the proposed sites or the possibility of additional bus routes; participants felt it was difficult to answer these questions or make an informed decision. This information may prove to be significant a later stage.
4. Although the location/timings of drop-in sessions was spread out to ensure local residents closer to both Danegrove playing field and Victoria recreation ground, had equally opportunities to participate; there is a small possibility that this would have benefited one site over the other due to participation of residents closer to this proposed site.
5. In order to allow space and not make the questionnaire too wordy, we did not ask participants their current use of leisure centre or current sports and exercise activities. Although our aim was to get an insight from the public in general, and not just those who use leisure centre, having this information would allow additional analysis of the responses. Similarly, a final question on "of the two which site would you prefer for a new leisure centre" would also be useful for a quick analysis and comparison.
6. Due to logistical reasons (space/timing), drop-in sessions were not held at Church Farm leisure centre. In terms of HIA, a couple of sessions at this site would provide a valuable insight to the preference of the users for a new proposed site.
7. For the purpose of drop-in sessions, the age and gender of those who participated was not recorded. In retrospect, this additional information would add more power and insight to the analysis especially in relation to extreme positive or extreme negative responses.
8. The HIA questionnaire was only available in drop-in sessions as it required facilitators to explain and support each participant in completing it. Due to this limitation, it was only completed by those who participated in the drop-in sessions, although a face to face discussion with the participants gave a better insight to their perspective.

13. Final Recommendations

There are multiple factors that need to be taken into account when deciding the final site for a new leisure centre. HIA is one of the technical documents and looks at the proposed site with a health and wellbeing perspective (the ultimate goal of achieving the best outcome). Development of a new leisure centre will have a long term legacy and will offer potential health benefits for all age groups over generations. It is also essential to envisage any potential and long terms negative impacts.

Although Victoria recreation ground appears to offer more health benefits in comparison to Danegrove playing field, there are common themes (potential negative impacts) that were repeated on multiple occasions by the participants for both sites. These are **increased level of traffic** in the area and **risk of accidents, limited public transport, levels of air and noise pollution** and **safety** of those using the new centre. In addition, the lack of design (how the new centre will look) and its visual impact on the appearance of the area was raised by multiple participants. As at this stage we were collecting feedback on the preference for the type of facilities in the new leisure centre, participants felt that they may change their view in when they review these factors.

Overall, the HIA was successful in identifying the key areas of concerns. In addition to the key findings in scoping exercise (item 9), the following key recommendations are made to enhance the positive impacts and reduce the severity of negative impacts.

1. Ensure Public Health Outcomes are incorporated in the development of new leisure service contract.
2. Provide opportunities for sessions aimed at gender specific groups and separate changing rooms for men and women.
3. Provide consultation facilities and a large enough room for health promotion activities and classes
4. Provide crèche facilities to maximise access for parents and carers of young families
5. Provide designated footpath and cycle route to promote walking and cycling.
6. Provide additional lighting for those on foot or using bicycle for safety and minimising accidents.
7. Design new road layout to ease potential traffic congestion and the associated levels of air and noise pollution.
8. Explore opportunities to increase bus route and/or additional service with transport for London.

Appendix A

Consultation summary for Church Farm³²

- All Church Farm workshop attendees (and members of the Women's Group) acknowledged that the current leisure centre site is too small to accommodate a modern facility, which was considered essential for the area. As such, they supported the centre's relocation - and none felt they would be sorry to see it go
- Some participants expressed no preference so long as there are adequate transport links to, and parking facilities at the centre - and that the site chosen is large enough to provide properly enhanced and integrated facilities.
- *Danegrove Playing Fields* received significant support at the workshop, primarily because the site has good transport links, is in a good location and is sufficiently large to accommodate the enhanced facilities needed for the area's growing population. There was some minor concern about the loss of a school playing field, however further discussions with Ward Members suggest that the area is considered to be an underdeveloped and unutilised asset that is neither used by the school nor the public.
- *Victoria Recreation Ground* was also a popular proposition as there are convenient bus links to the area and because of the lack of facilities in the north of the borough. It was also said that the area is in need of regeneration, that its population is growing and that there are many primary schools there that would make use of the facility. Others felt, though, that the site is in the 'middle of nowhere' and that a leisure centre there could not be self-sustaining – and there was also a concern about the small size of the site.

³² Leisure Centre Feasibility Study for Sports and Physical Activity (2014), London Borough of Barnet.

Appendix B – Screening of the proposed options

The following table outlines relevant screening questions for any HIA. Based on these questions, it is clear that both new sites i.e. Dane Grove Playing Fields and Victoria Recreation Ground will have an impact on the health of local residents.

Screening Question	No – if there is no impact(s). Provide a brief explanation for your response	Yes If there will be an impact(s). Provide a brief explanation
Health		
<p>Will the proposal have a direct impact on health, mental health and wellbeing?</p> <p>For example would it cause ill health, affecting social inclusion, independence and participation? You should consider whether any socioeconomic or equalities groups* will be particularly affected.</p>		<p><i>Yes – Positive Impact</i></p> <p><i>The proposal of new leisure centre based on PH outcomes will have positive impacts on the physical and mental health and wellbeing of local residents in East Barnet and the neighbouring wards in Barnet. It will offer with more opportunities and encourage residents to engage in physical activities with health benefits.</i></p> <p><i>An Equality Impact Assessment (EqIA) will also be carried out to ensure all groups have good access to the new centre.</i></p>
<p>Will the proposal have an impact on <i>social</i> conditions that would indirectly affect health? (community networks, culture, lifestyles, fear of crime)</p>		<p><i>Yes – Positive Impact</i></p> <p><i>A new leisure centre closer to the previous site (Church Farm) will support people to remain connected to their communities and will also offer additional opportunities to make new friends and hence providing good conditions for social and cultural mix.</i></p> <p><i>Similarly, incorporating PH outcomes will encourage adults and young people to choose healthy options and this will indirectly reduce the intake of substance misuse and the related crime in the borough.</i></p>
<p>Will the proposal have an impact on <i>economic</i> conditions that would indirectly affect health? (employment, access to training & education, benefits)</p>		<p><i>Yes – Mix Impact</i></p> <p><i>Development of the current facilities will provide economic opportunities to local community, rejuvenating the area and providing access to training for the local community.</i></p> <p><i>The closure of current facility at Church Farm may have a slight negative impact on the local businesses in Brunswick Park area i.e. members using local shops on the way to and from the leisure centre.</i></p>
<p>Will the proposal have impact on <i>environmental</i> living conditions that would indirectly affect health? (land, water, air pollution, transport, housing conditions, land use)</p>		<p><i>Yes – Negative Impact</i></p> <p><i>As the proposal will lead to redevelopment of the current facilities, it will have an initial negative impact on the environmental conditions that may indirectly affect health e.g. transport disruption, noise and air pollution during the reconstruction phase.</i></p>

		<i>Long term negative impacts can be due to excess traffic to the vicinities near new leisure centre. This would need to be taken into account and opportunities for cycle stands, clear lit walkways and improved public transport to the new leisure centre would reduce future negative impacts.</i>
Are there any potentially <u>serious</u> <u>negative</u> health impacts associated with the initiative that you currently know of?		<i>Yes – Negative Impact</i> <i>As above the redevelopment is likely to lead to increased noise, traffic congestion, road closures, rerouting and land digging in the short term. The effect will be more severe for the neighbouring communities during the reconstruction phase, but is unlikely to be considered serious or severe.</i>
Will the proposal affect an individual's ability to improve their own health and wellbeing? For example will it affect their ability to be physically active, choose healthy food, reduce drinking and smoking?		<i>Yes – Positive Impact</i> <i>As the proposal of new leisure centre is based on PH outcomes, there is an expectation that the operator will be engaged in delivering health benefits programme for all groups (children adults and those with disabilities).</i> <i>Consideration however, must be given to ensuring equitable access to all groups.</i>
Will there be a change in demand for or access to health and social care services? For example: Primary Care, Hospital Care, Community Services, Mental Health and Social Services?		<i>Yes – Positive Impact</i> <i>There is an expectation that as the physical and mental health and wellbeing of the local residents improves (as directed by the PH outcomes), there would be a reduced future demand for health and social care services.</i>
Is further investigation necessary because more information is required on the potential health impacts?		<i>Yes</i> <i>Further investigation will be needed to fully evaluate the potential health impacts of the project - this will also include a consultation phase with local residents and service users.</i>
Are the potential health impacts well-known and is it straightforward to suggest effective ways in which beneficial effects are maximised, and harmful effects minimised?		<i>Yes</i> <i>It is possible to predict future health impacts, especially positive, to a certain extent using local demographics, and specific needs of the population and through overlap with similar projects in other boroughs.</i> <i>In comparison, the harmful effects are perceived to be minimal and time limited.</i>
Do you (or others) judge the identified health impacts as being small in effect?	<i>No</i> <i>The potential health impacts are likely to be significant and long-lasting.</i>	
Are the health impacts likely to generate cumulative and/or synergistic impacts?		<i>Yes – as discussed above</i>
Community		
Is the population affected by the initiative more than 1000 people?		<i>Yes</i> <i>Based on the current level of usage of Church Farm facilities by the surrounding communities and the local population of East Barnet and surrounding wards.</i>

<p>Are any socially excluded, vulnerable, or disadvantaged groups likely to be affected? Or, more affected by potential negative impacts?</p>		<p style="text-align: right;"><i>Yes – Mixed Impact</i></p> <p><i>Closure of Church Farm leisure centre in Brunswick Park would remove a good resource for social mix and will have a negative impact especially for users in socially excluded, vulnerable or disadvantaged groups.</i></p> <p><i>During the development of new leisure centre in East Barnet, there is a possibility of a negative impact on the vulnerable or disadvantaged groups.</i></p> <p><i>Post development of new leisure centre- will have a positive impact as it would provide a platform for social and cultural mix. Any continued disadvantages will need to be addressed to ensure adequate facilities and access for these vulnerable groups.</i></p> <p><i>A detailed Equality Impact Assessment (EqIA) will also be carried out to monitor and mitigate the impacts on all groups.</i></p>
<p>Are there public or community concerns about any potential impacts?</p>		<p style="text-align: right;"><i>Yes</i></p> <p><i>There are likely to be public concerns regarding the impact of the regeneration. These will be explored and addressed in more detail during the consultation phase</i></p>
<p>Is there an 'evidence-base' to support a HIA?</p>	<p style="text-align: center;">Not fully</p>	<p><i>There is evidence to support knowledge around the impact of aspects of construction, distance and use of leisure, though these are brought together to be reflected here.</i></p>
Initiative		
<p>Is the cost of the initiative high?</p>		<p style="text-align: right;"><i>Yes</i></p> <p><i>The initial cost is expected to be high; however, there are suggestions to agree a long term contract in which the potential supplier commits to their own capital investment.</i></p> <p><i>The Council's financial modelling has assumed that zero subsidy will be achieved from the start date (January 2018) of the new contract.</i></p>
<p>Is the nature and extent of the disruption caused by the initiative likely to be major? Or difficult to remedy? Or have an irreversible impact?</p>		<p style="text-align: right;"><i>Yes – Mixed impact</i></p> <p><i>As the new contract will lead to redevelopment of the site, there will be major disruption to local communities and businesses during this period (12-18 months). Some existing sites will remain open during the redevelopment. At this stage, we do not anticipate any irreversible disruptive impacts.</i></p>
Organisation		
<p>Is the initiative a high priority OR important for the organisation/ partnership?</p>		<p style="text-align: right;"><i>YES – High priority</i></p> <p><i>The proposal will incorporate PH outcomes and hence is a high priority initiative. Similarly, by providing a long term contract, it will strengthen the partnership with the providers.</i></p>

Appendix C - Details of public consultation (Drop-in sessions – venues/dates and timings)

Where	Address	Dates	Session Type
East Barnet Library	85 Brookhill Road, Barnet, Hertfordshire EN4 8SG	14 th July	Morning
		16 th July	Afternoon
		18 th July	Weekend
St James Church	71 East Barnet Road, New Barnet, Hertfordshire, EN4 8RN	22 nd July	Morning
		23 rd July	Afternoon
		25 th July	Weekend
St James Church	71 East Barnet Road, New Barnet, Hertfordshire, EN4 8RN	4 th August	Morning
		6 th August	Afternoon
		8 th August	Weekend
Copthall Leisure Centre	Champions Way, Barnet, Greater London, NW4 1PX	18 th August	Morning
		20 th August	Afternoon
		22 nd August	Weekend

Appendix E: Appraisal (adopted from Luton HIA toolkit for Local Authorities³³)

Key to the following analysis

- a) **Likelihood of impact** (a subjective estimate of the probability of a health impact occurring as a result of the proposal being implemented)
- ✓ **None = 0** (*in which case, no need to continue along that row, except to put 0 in the total score column*)
 - ✓ **Speculative = 1** (some chance of an impact, no official evidence (although there may be some grey literature); however, the impact is still worth noting)
 - ✓ **Probable = 2** (likely or plausibly could impact upon the population's health, some evidence to back this up)
 - ✓ **Definitive = 3** (clearly defined research and evidence showing the impact to be true or indisputable)
- b) **Length of time people may be affected** (approximate time that the health impact will continue to affect the community after the implementation of the proposal)
- ✓ **Short term = 1** (up to 1 year)
 - ✓ **Medium term = 2** (between 1-3 years)
 - ✓ **Long term = 3** (3 years and above)
- c) **Approximate number of people affected by the policy/decision**
- ✓ **Few/Medium numbers of people = 1** (less than 1000 people)
 - ✓ **Many people = 2** (more than 1000 people)
- d) **Importance / severity** of impact
- ✓ **Minor importance/ severity = 1**
 - ✓ **Major importance/ severity = 2**

Key (DPF + Danegrove Playing Field) and (VRG = Victoria Recreation Ground)

³³ An easy guide to Health Impact Assessments for Local Authorities (2002)

<http://www.google.co.uk/url?url=http://www.apho.org.uk/resource/view.aspx%3FRID%3D44880&rct=j&frm=1&q=&esrc=s&sa=U&ved=0CBQQFjAAahUKewjr74W9mY3IAhVIOj4KHVFGBtc&usg=AFQjCNH7Oxf0wEdMWXXIMSfxETNTNko1rw>

Determinants of health

1.Social & economic environment

Specific influences	Likelihood of impact on health? (a) 0=Not likely 1=Speculative 2=Probable 3=Definitive	If yes, will the impact be (+) or (-)?	Length of time people may be affected (b) 1=Short 2=Medium 3=Long	No. of people affected (c) 1=Fewer 2=Many	Severity of impact (d) 1=Minor 2=Major	TOTAL (a) x (b) x (c) x (d) = Health Impact AND +ve / -ve	Comments (if any)	
Employment: paid/ unpaid opportunities for individuals and/or communities	DPF	2	+	3	1	2	2x3x1x2 = +ve12	
	VRG	2	+	3	1	2	2x3x1x2 = +ve12	
Income: creation & distribution of income and/or wealth	DPF	1	+	3	1	1	1x3x1x1 = +ve3	
	VRG	1	+	3	1	1	1x3x1x1 = +ve3	
Education & skills: lifelong learning & training opportunities, knowledge & skills held in the community	DPF	3	+	3	2	2	3x3x2x2=+ve36	
	VRG	3	+	3	2	2	3x3x2x2=+ve36	
Family cohesion: levels of family contact, family support	DPF	1	+	3	2	2	1x3x2x2=+ve12	
	VRG	1	+	3	2	2	1x3x2x2=+ve12	
Social cohesion: levels of community interaction & support, neighbourliness, opportunities for meaningful social contact, spiritual participation	DPF	1	+	3	1	2	1x3x1x2=+ve6	
	VRG	1	+	3	1	2	1x3x1x2=+ve6	
*Community safety: crime or fear of crime, actual or perceived personal & property safety	DPF	0	NA	NA	NA	NA	0 (No impact)	
	VRG	1	+	3	2	2	+12ve	

Determinants of health

Specific influences	Likelihood of impact on health? (a) 0=Not likely 1=Speculative 2=Probable 3=Definitive	If yes, will the impact be (+) or (-)?	Length of time people may be affected (b) 1=Short 2=Medium 3=Long	No. of people affected (c) 1=Fewer 2=Many	Severity of impact (d) 1=Minor 2=Major	TOTAL (a) x (b) x (c) x (d) = Health Impact AND +ve / -ve	Comments (if any)
Access to affordable healthy food: quality, supermarkets, local shops	DPF 0	-	NA	NA	NA	0 (No impact)	
	VRG 0	-	NA	NA	NA	0 (No impact)	
Housing: chance to live in decent affordable home	DPF 0	-	NA	NA	NA	0 (No impact)	
	VRG 0	-	NA	NA	NA	0 (No impact)	
Discrimination	DPF 0	-	NA	NA	NA	0 (No impact)	
	VRG 0	-	NA	NA	NA	0 (No impact)	
* Appearance of the area (real or perceived differences in characteristics)	DPF 1	-	3	2	2	1x3x2x2=-ve12	Please see Fig 6. The design and build team will carry out a further public consultation once the decision on proposed site and facilities mix has been finalised.
	VRG 2	+	3	2	2	1x3x2x2=+ve24	
* Sites/locations which have significance in people's lives	DPF 1	-	1	-	3	1x3x1x1=-ve3	
	VRG 1	+	1	+	3	1x3x1x1=+ve3	
* Air quality (in buildings or externally) & pollution	DPF 2	-	3	2	2	2x3x2x2=-ve24	
	VRG	-	2	-	3	2x3x2x2=-ve24	
Water quality & pollution	DPF 0	-	NA	NA	NA	0 (No impact)	

2. Physical environment

Specific influences	Likelihood of impact on health? (a) 0=Not likely 1=Speculative 2=Probable 3=Definitive	If yes, will the impact be (+) or (-)?	Length of time people may be affected (b) 1=Short 2=Medium 3=Long	No. of people affected (c) 1=Fewer 2=Many	Severity of impact (d) 1=Minor 2=Major	TOTAL (a) x (b) x (c) x (d) = Health Impact AND +ve / -ve	Comments (if any)
	VRG 0		NA	NA	NA	0 (No impact)	
Built Environment: quality and/or use	DPF 3	+	3	2	2	3x3x2x2=+ve36	
	VRG 3	+	3	2	2	3x3x2x2=+ve36	
*Land use: availability/ quality of open space & environmental amenity	DPF 2	-	3	1	2	2x3x1x2=-ve12	Flooding risk for DPF as identified by participants
	VRG 2	+	3	2	2	2x3x2x2=+ve24	
*Noise	DPF 3	-	1	1	2	3x1x1x2=-ve6	
	VRG 3	-	1	1	2	3x1x1x2=-ve6	
*Safety: accidental injuries, physical safety & security	DPF 1	-	1	1	1	1x1x1x1=-ve1	
	VRG 1	-	1	1	1	1x1x1x1=-ve1	
Working conditions	DPF 1	+	1	1	1	1x1x1x1=+ve1	
	VRG 1	+	1	1	1	1x1x1x1=+ve1	
*Transport: accessibility, mobility, accidents	DPF 1	-	3	2	2	1x3x2x2=+12	
	VRG 1	-	3	2	2	1x3x2x2=+12	
Diet & eating habits	DPF 1	+	3	2	2	1x3x2x2=+ve12	

Determinants of health

Specific influences	Likelihood of impact on health? (a) 0=Not likely 1=Speculative 2=Probable 3=Definitive	If yes, will the impact be (+) or (-)?	Length of time people may be affected (b) 1=Short 2=Medium 3=Long	No. of people affected (c) 1=Fewer 2=Many	Severity of impact (d) 1=Minor 2=Major	TOTAL (a) x (b) x (c) x (d) = Health Impact AND +ve / -ve	Comments (if any)
	VRG 1	+	3	2	2	1x3x2x2=+ve12	
Exercise & physical activity	DPF 3	+	3	2	2	3x3x2x2=+ve36	
	VRG 3	+	3	2	2	3x3x2x2=+ve36	
Recreation: chances for leisure activities & experiences, leisure & cultural amenities	DPF 3	+	3	2	2	3x3x2x2=+ve36	
	VRG 3	+	3	2	2	3x3x2x2=+ve36	
Substance abuse: tobacco, alcohol, drugs	DPF 0		NA	NA	NA	0 (No impact)	
	VRG 0		NA	NA	NA	0 (No impact)	
Risk-taking (sexual) behaviour	DPF 0		NA	NA	NA	0 (No impact)	
	VRG 0		NA	NA	NA	0 (No impact)	
Individuals' feeling of control over their own lives, or ability to influence their lives & locality	DPF 2	+	3	2	2	2x3x2x2=+ve24	
	VRG 2	+	3	2	2	2x3x2x2=+ve24	
Feelings of anxiety, fear or distress; stress at home/ work	DPF 2	+	3	2	2	2x3x1x1=+ve24	Exercise is linked with decreasing anxiety and stress.
	VRG 2	+	3	2	2	2x3x1x1=+ve24	

Determinants of health	Specific influences	Likelihood of impact on health? (a)	If yes, will the impact be (+) or (-)?	Length of time people may be affected (b)	No. of people affected (c)	Severity of impact (d)	TOTAL	Comments (if any)	
		0=Not likely 1=Speculative 2=Probable 3=Definitive		1=Short 2=Medium 3=Long	1=Fewer 2=Many	1=Minor 2=Major	(a) x (b) x (c) x (d) = Health Impact AND +ve / -ve		
4. Access to health	Health care services	DPF	1	+	3	2	2	1x3x2x2=+ve12	If the new centre incorporates a dedicated room for health activities, the potential positive impact would be far greater. The room can be used for health promotion activities such as stop smoking sessions, nutritional and dietary advice.
		VRG	1	+	3	2	2	1x3x2x2=+ve12	
5. Other services	Child care services	DPF	1	+	3	1	2	1x3x1x2=+ve6	If the new centre provides a crèche facility, the positive impact would be far greater than the current +6.
		VRG	1	+	3	1	2	1x3x1x2=+ve6	
	Social services	DPF	0		NA	NA	NA	0 (No impact)	
		VRG	0		NA	NA	NA	0 (No impact)	
	Voluntary services	DPF	0		NA	NA	NA	0 (No impact)	
		VRG	0		NA	NA	NA	0 (No impact)	
	Housing services	DPF	0		NA	NA	NA	0 (No impact)	
		VRG	0		NA	NA	NA	0 (No impact)	
	Leisure facilities	DPF	3	+	3	2	2	3x3x2x2=+ve36	

Determinants of health Specific influences	Likelihood of impact on health? (a)	If yes, will the impact be (+) or (-)?	Length of time people may be affected (b)	No. of people affected (c)	Severity of impact (d)	TOTAL (a) x (b) x (c) x (d) = Health Impact AND +ve / -ve	Comments (if any)
	0=Not likely 1=Speculative 2=Probable 3=Definitive		1=Short 2=Medium 3=Long	1=Fewer 2=Many	1=Minor 2=Major		
	VRG 3	+	3	2	2	3x3x2x2=+ve36	
Adult education	DPF 0		NA	NA	NA	0 (No impact)	
	VRG 0		NA	NA	NA	0 (No impact)	
Police	DPF 0		NA	NA	NA	0 (No impact)	
	VRG 0		NA	NA	NA	0 (No impact)	

Total scores

Danegrove Playing Field – DPG= **Positive (304), Negative (-58)**

Victoria Recreation Ground – VRG = **Positive (355), Negative (-30)**