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OLD OAK AND PARK ROYAL DEVELOPMENT CORPORATION

Sports Courts and Swimming Pools Study

LOCAL PLAN SUPPORTING STUDY

June 2018

MAYOR OF LONDON

49. Sports Courts and Swimming Pools Study

Document Title	Sports Courts and Swimming Pools Study
Lead Author	Sport England
Purpose of the Study	Provide an overview of the current public access sports halls and swimming pools provision within and around the London Borough of Hammersmith and Fulham (LBHF) and the likely need arising from future growth.
Key outputs	• Identify existing quantum, quality and locations for public sports halls and swimming pools within and around LBHF. • Identify areas of deficiency in access to sports halls and swimming pools. • Identify the existing and future demand for sports halls and swimming pools. • Inform the location and quantum of need for new sports hall and swimming pool space.
Key recommendations	• Identifies that LBHF is currently reasonably well served by swimming pools but there is an under-provision of sports courts. • As the population grows, there will be increased pressure on swimming pools and the under-provision of sports courts will be further exacerbated. • Identifies that the Old Oak and Park Royal area is currently deficient in access to public sports halls and swimming pools. • Identifies that population projections for the Old Oak and Park Royal area are likely to give rise to a need for approximately 13 sports courts and two 12x25m swimming pools, or 1 sports court per 3,000 residents and 1sqm of swimming pool space for every 90 residents.
Key changes made since Reg 19 (1)	N/A
Relations to other studies	Outputs cross-relate to the Retail and Leisure Needs Study, Development Capacity Study, Infrastructure Delivery Plan, Precedents Study and Catalyst Uses Study.
Relevant Local Plan Policies and Chapters	• Policy SP6 (Places and Destinations) • Policy P1 (Old Oak South) and P2 (Old Oak North) • Policy TCC6 (Sports and Leisure)

Creating a lifelong sporting habit

LONDON BOROUGH OF HAMMERSMITH AND FULHAM: SPORTS COURTS AND SWIMMING POOLS STUDY

Date of report

December 2014

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SPORT ENGLAND

Creating a lifelong sporting habit

Strategic Assessment of need for Sports Halls

2014

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Introduction

The London Borough of Hammersmith and Fulham ("Hammersmith and Fulham") wishes to review the provision of sports halls across the borough and a wider study area. In particular, the Council wishes look ahead to 2037, to assess the impact of the growth in population on the current stock of sports halls. This is to understand the scale and location of additional provision that may be required to meet future needs. Sport England has been requested to undertake this piece of work.

This report provides an overview of the current and future level of provision of sports halls in Hammersmith and Fulham. The assessment uses Sport England's Facilities Planning Model (FPM) and data from the National Facilities Audit as of January 2014.

This study and report sets out:

- How accessible sports halls are based on three travel catchments: by car, public transport and walking.
- The supply and demand for sports halls within Hammersmith and Fulham and makes comparisons with other authorities in the study area.
- The level of total demand for sports halls in Hammersmith and Fulham and how much of this demand is satisfied demand, how much is unmet demand and again with comparisons with other authorities in the study area.
- Unmet demand in Hammersmith and Fulham; the scale of any unmet demand, expressed in courts.
- How full sports halls are estimated to be.

- What is the level of demand for sports halls generated by Hammersmith and Fulham residents which is met (retained) at facilities located within the Borough?
- How much of Hammersmith and Fulham residents demand for sports halls is exported to facilities in neighbouring authorities.
- How much demand is imported into Hammersmith and Fulham from residents in neighbouring local authorities.

The information contained within the report should be read alongside the five appendices. Appendix 1 is a location map of all sports halls in Hammersmith and Fulham. Appendix 2 is a map showing Aggregated Unmet Demand. Appendix 3 is a map showing the Relative Share score across Hammersmith and Fulham. Appendix 4 sets out the Sports halls that have been included within this analysis together with those that have been excluded. Appendix 5 provides background to the Facilities Planning Model (FPM), facility inclusion criteria and the model parameters.

The FPM modelling and dataset builds in a number of assumptions as set out in Appendix 5 regarding the supply and demand of provision. This report should not be considered in isolation and it is recommended that this analysis should form part of a wider assessment of provision at the local level, using other available information and knowledge.

The Study area

Users of sports halls do not necessarily reflect local authority boundaries and whilst there may be management and pricing incentives (and possibly disincentives) for customers to use sports facilities located in the area in which they live, there are some big determinants as to which sports halls people will choose to use.

These are based on: how close the sports hall is to where people live; the age and condition of the facility and inherently its attractiveness; other facilities within/on the site such as a fitness suite; personal and family choice; and reasons for using a particular facility, like clubs are based there or there is regular league play.

Consequently, in determining the ”London Borough of Hammersmith and Fulham position” in the supply and demand for sports halls, it is very important to take full account of the sports hall provision in all the neighbouring local authorities and in particular, to assess the impact of overlapping catchment areas of facilities around Hammersmith and Fulham. The nearest facility for some Hammersmith and Fulham residents may be located outside the authority (known as exported demand) and for some residents of neighbouring authorities their nearest sports hall is inside the London Borough of Hammersmith and Fulham (known as imported demand).

Taking account of all these import and export effects is done by establishing a study area which places the Hammersmith and Fulham at its heart and assesses the import and export of demand into and out of the Hammersmith and Fulham. It also reflects the location, age, condition and size of all the sports halls in the study area.

The study area comprises the London Borough of Hammersmith and Fulham and the seven London boroughs to the north of the River Thames (Ealing, Hounslow, Brent, City of Westminster, Kennington and Chelsea, Richmond upon Thames and Wandsworth) which border it.

Definitions and terms

Before reporting the findings from the study, there are three points to note on definitions and terms. Firstly, is the term for expressing both the demand and supply (supply is also referred to as capacity in this report) for sports halls is known as “visits per week in the weekly peak period”. The weekly peak period for sports hall is 40.5 hours per week and it is estimated that 60% of the total weekly sports halls throughput occurs in these hours.

Secondly, there is what is known as a “comfort factor” which is applied to the assessment of demand for sports halls. In essence, if the facilities were full to their theoretical capacity then there would simply not be the space to undertake the activity comfortably. In addition, there is a need to take account of a range of activities taking place which have different numbers of users. Additionally, there may be times and sessions that, whilst being within the peak period, are less busy and so will have fewer users. To account of these factors the notion of a ‘comfort factor’ is applied within the model. For sports halls 80% of its theoretical capacity is considered as being the limit where the facility starts to become uncomfortably busy.

Thirdly, all known operational Halls available for community use i.e. pay and play, membership, Sports Club/Community Association are included in this assessment. The following have been excluded from the study:

- All Halls not available for community use i.e. private use
- All Halls where the main hall is less than 3 badminton courts in size

Executive Summary

- The fours sports halls in Hammersmith and Fulham are all publically (education) owned, but collectively all offer limited level of community access. There is scope to increase the capacity at these sites through extending the hours that they are available to the wider community.

- The borough has a mostly modern stock in terms of age with three of the four sports halls built since 2000.

- Three of the four facilities in Hammersmith and Fulham are located in middle of the Borough. This means that there is not an even spread of sports halls throughout the borough.

- The accompanying maps show that the greatest levels of demand in Hammersmith and Fulham exist around the middle of the Borough.

- The model estimates that circa 56% of residents that wish to access a sports hall, either inside or outside the borough, are able to do so. This percentage is significantly below both the average for the London boroughs (circa 77%) as well as the majority of surrounding authorities.

- The level of Unmet Demand in Hammersmith and Fulham is estimated to equate to around 30 courts.

- All of the sports halls in Hammersmith and Fulham and the surrounding authorities are calculated to be at 100% of capacity during the hours that they are open during the peak period.

- The residents of Hammersmith and Fulham have the lowest relative share of sports halls in the study area at a level that is significantly below both the London and National average.

- It is recommended that to meet needs from future population growth that a sports court should be provided for approximately every 3,200 new residents

Conclusion

The model indicates that a significant deficit in sports halls provision exists in Hammersmith and Fulham in 2014. When the additional population growth predicted to occur by 2037 is considered the deficit in provision increases by more than 5 badminton courts. The scale of deficit across the borough (and much of the Central London area) cannot be rectified simply by extending opening hours at existing sites. There is a need to provide a significant amount of new provision to meet the needs of the residents of Hammersmith and Fulham and the surrounding authorities.

1. Supply of Sports Halls

Table 1 - Supply	London	Hammersmith and Fulham	Ealing	Brent	Hounslow	Kensington and Chelsea	Westminster	Richmond upon Thames	Wandsworth
Number of halls	608	4	18	17	21	3	14	19	20
Number of hall sites	446	4	13	13	16	1	14	13	15
Supply of total hall space in courts	2311	17	67	67	83	9	56	78	76
Supply of publicly available hall space in courts (scaled with hours available in peak period)	1711	6	51	52	63	8	34	55	63
Supply of total hall space in Visits per week peak period	346427	1308	10230	10612	12843	1697	6900	11116	12668
Courts per 10,000 residents	2	1	2	2	3	1	2	4	2

1.1. The model assumes that Hammersmith and Fulham has four sports halls across four sites. These four sites supply a total of 1,308 visits per week in the peak period. The sports halls sites are as follows:

- Burlington Danes Academy
- Ealing Hammersmith and West London College (Hammersmith Campus)
- Latymer Upper School
- St Paul's Girl's School

1.2. This total number of halls is estimated to be only slightly higher than Kensington and Chelsea (3) but significantly less than all of its surrounding neighbouring authorities, Ealing (18), Brent (17), Hounslow (21), City of Westminster, (14), Richmond upon Thames (19) and Wandsworth (20). It is worth noting that whilst Kensington and Chelsea has three halls, these are all located

on one site – the Kensington Leisure Centre. Of the three halls, two are activity halls. Residents in Kensington and Chelsea therefore rely heavily on sports halls in neighbouring authorities, Hammersmith and Fulham being one of those.

1.3. The same general pattern of supply is seen when looking at supply in terms of courts, as opposed to the number of sites.

1.4. The fours sports halls in Hammersmith and Fulham are all publically (education) owned, but collectively all offer limited level of community access. Of a possible 40.5 hours in the peak period, Burlington Danes Academy offers most with 39 hours, followed by Ealing Hammersmith and West London College (Hammersmith Campus) with 32 hours. The model estimates that Latymer Upper School only offers 10 hours of community use with St Paul's Girl's School only providing 4 hours a week in the peak period.

1.5. Latymer Upper School is the largest facility with 6 courts. Burlington Danes Academy and St Paul's Girl's School have 4 courts and both Ealing Hammersmith and West London College has 3 courts.

Name of facility	Ownership – public/ commercial	Community hours available
Burlington Danes Academy	Public	39
Ealing Hammersmith and West London College (Hammersmith Campus)	Public	32
Latymer Upper School	Public	10
St Paul's Girl's School	Public	4

1.6. In terms of increasing capacity at existing sites further supply could be generated through extending the hours that the current sports halls are open to the community. This is particularly relevant to Latymer Upper School and St Paul's Girl's School.

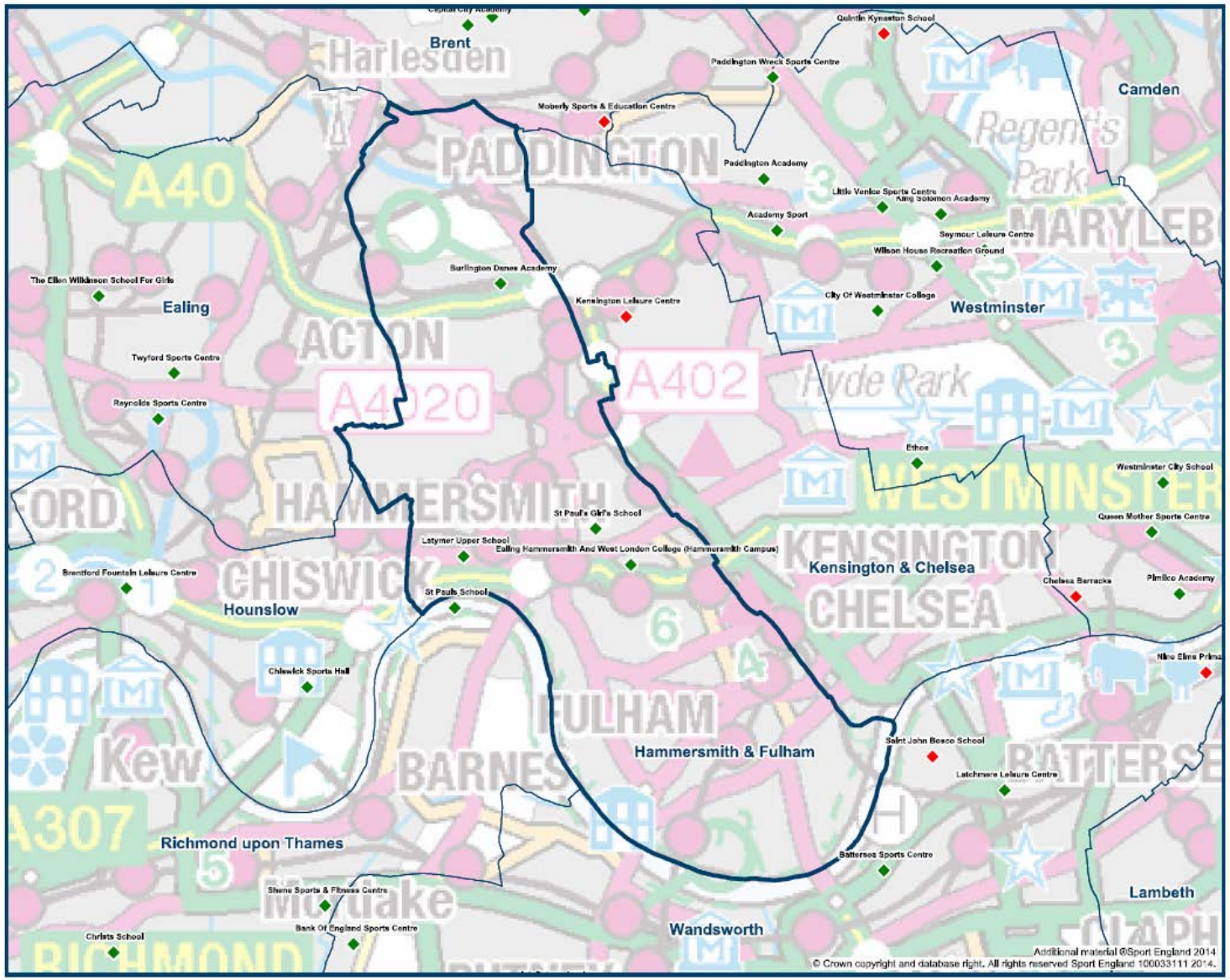
1.7. The borough has a mixture of stock in terms of age. Ealing Hammersmith and West London College is the newest facility, built in 2008 and refurbished in 2013. Latymer Upper School is the oldest facility, built in 1976 whilst Burlington Danes Academy and St Paul's Girl's School were built in 2002 and 2000 respectively.

1.8. In may appear that Hammersmith and Fulham is significantly under-provisioned compared to its neighbouring authorities. However, a final way to look at supply is to consider the amount of courts per 10,000 population in each borough. If considering supply in terms of courts per 10,000 population, it can be seen that Hammersmith and Fulham is slightly more comparable to the London average and to that found in Ealing, Brent, City of Westminster and Wandsworth.

1.9. What can be deduced is that whilst Hammersmith and Fulham has significantly lower levels of supply in number terms than its neighbouring authorities, it also has a significantly smaller resident population (and therefore less demand) than many of the surrounding boroughs. Richmond upon Thames bucks this trend, by having a comparable population to Hammersmith and Fulham but significantly more sports halls provision.

1.10. What this means is that supply cannot be considered in isolation and must be considered alongside demand and other information in order to build an accurate picture. This is explored further in the following sections.

1.11. The map below shows the location of facilities in Hammersmith and Fulham and the immediate surrounding area. As can be seen three of the four facilities in Hammersmith and Fulham are located in middle of the Borough. Therefore those residents located in the south and far north of the Borough will need to rely on accessing sports halls in Wandsworth and Brent to have their sports hall needs met. This is explored further in Section 4 of this report.


Brent
Harlesden
Quintin Kynaston School
Paddington Wreck Sports Centre
Camden
Moberly Sports & Education Centre
PADDINGTON
Paddington Academy
Regent's Park
Little Venice Sports Centre
King Solomon Academy
Academy Sport
Seymour Leisure Centre
Wilson House Recreation Ground
A40
Burlington Danes Academy
The Ellen Wilkinson School For Girls
Ealing
Kensington Leisure Centre
City Of Westminster College
Westminster
ACTON
Twyford Sports Centre
A4020
A402
Hyde Park
Reynolds Sports Centre
Ethos
Westminster City School
HAMMERSMITH
St Paul's Girl's School
Queen Mother Sports Centre
Latymer Upper School
Ealing Hammersmith And West London College (Hammersmith Campus)
KENSINGTON
Kensington & Chelsea
Brentford Fountain Leisure Centre
CHISWICK
St Pauls School
Chelsea Barracks
Pimlico Academy
Hounslow
CHELSEA
Chiswick Sports Hall
FULHAM
Hammersmith & Fulham
Saint John Bosco School
Kew
BARNES
Latchmere Leisure Centre
A307
Richmond upon Thames
Battersea Sports Centre
Mortlake
Shene Sports & Fitness Centre
Lambeth
Bank Of England Sports Centre
Wandsworth
Christs School
RICHMOND
PUTNEY
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2. Demand for Combined Sports Halls

Table 2 - Demand	London	Hammersmith and Fulham	Ealing	Brent	Hounslow	Kensington and Chelsea	Westminster	Richmond upon Thames	Wandsworth
Population	9949845	214475	398959	363821	287019	178697	256133	201702	376106
Visits demanded –visits per week in the peak period	473310	10852	18738	17074	13626	8335	12544	8938	19080
Equivalent in courts – with comfort factor included	2921.7	67	115.7	105.4	84.1	51.5	77.4	55.2	117.8
% of population without access to a car	40	54.3	34.2	40.6	30.5	54.6	62.1	23.6	44.3

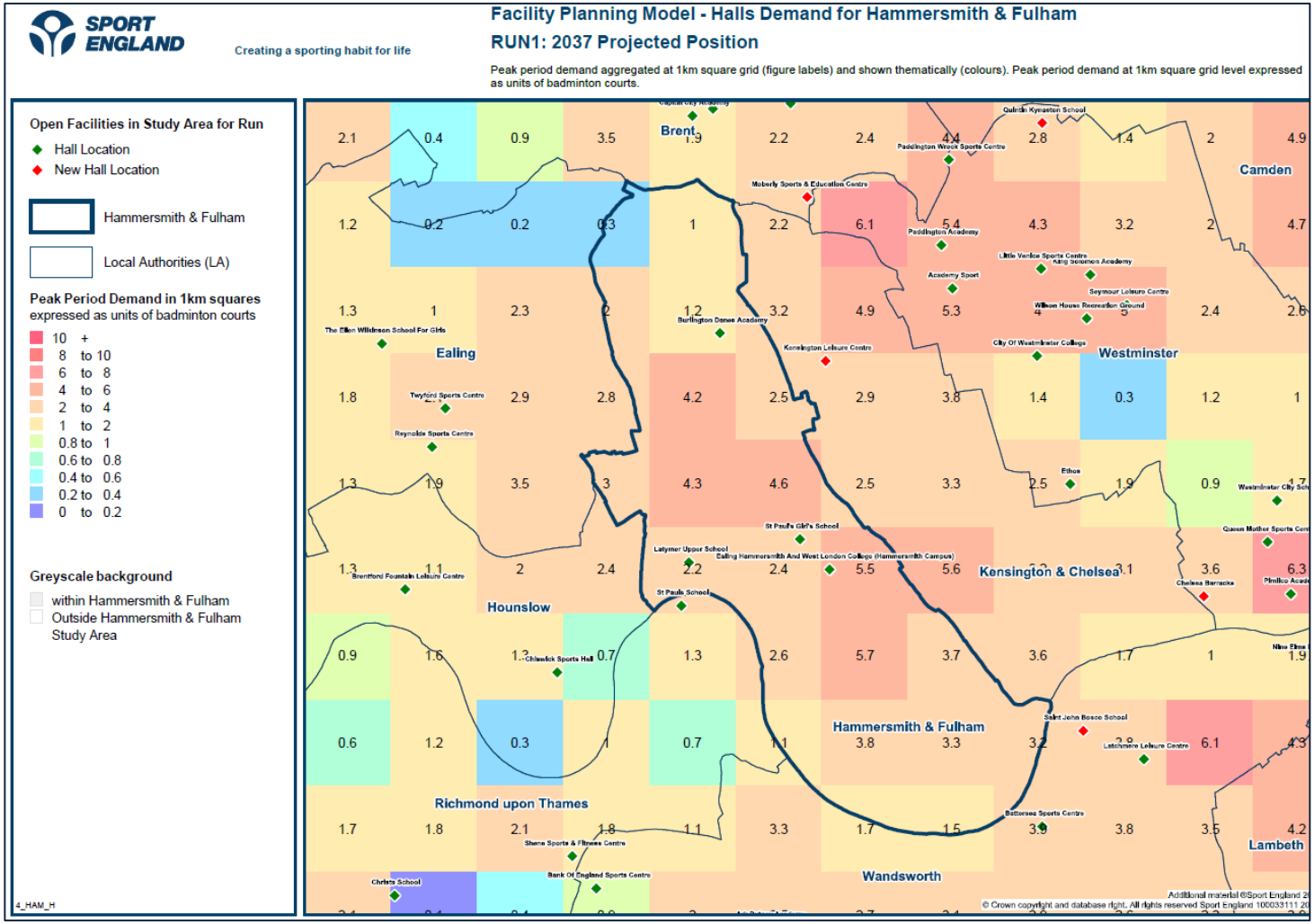
2.1. The Hammersmith and Fulham population is projected to be 214,475 in 2037.

2.2. A population of 214,475 generates a demand for 67 courts of provision (3,200 residents per sports court) or seen another way 10,852 visits per week in the peak period.

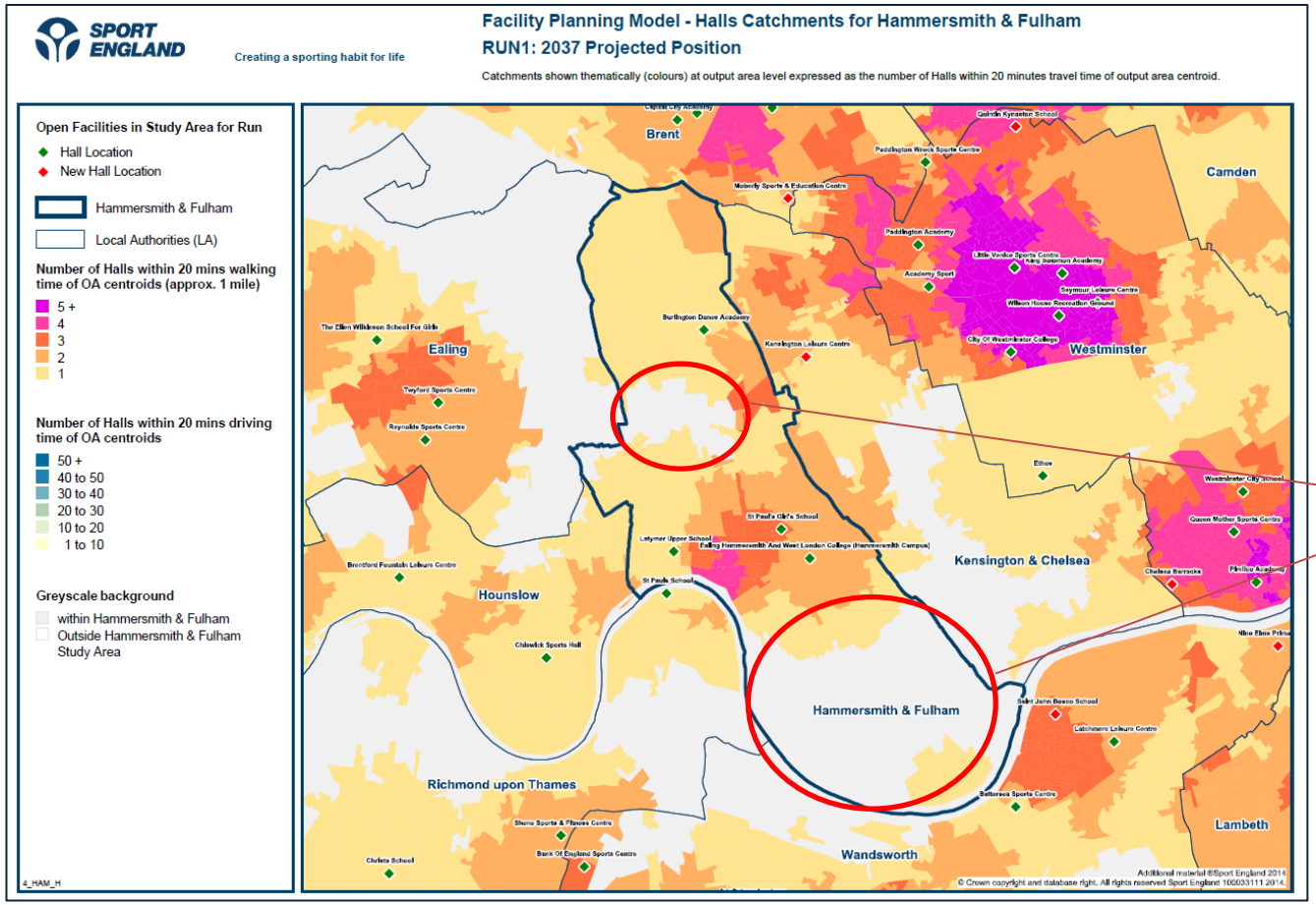
2.3. The level of demand generated will depend on the demographic of the population, in particular the numbers of 25-34 year olds as this is the group with the highest participation rate for sports hall use.

2.4. The next important factor to consider when considering ‘demand’ is how much choice residents have in accessing a sports hall. One of the key determinates in this is whether resident’s have access to a car as, if they do, it obviously makes a considerable difference to their level of choice in terms of which sports hall to try to access.

2.5. As can be seen from the map below, the greatest levels of demand in Hammersmith and Fulham exist to the east and south of Ealing Hammersmith and West London College (Hammersmith Campus) and to the north of St Paul's Girls School (areas denoted darker red). The lowest levels of demand are seen the in very north and south of the Borough.



2.6. In terms of access to a car it is worth noting that 54.3% of residents Hammersmith and Fulham do not have access to a car. This is particularly relevant when we look at the supply of sports halls relative to the demand, as shown on the map above and compared to the walking catchment of facilities as shown on the map below. The white areas denotes those locations where residents are not within the walking catchment of any sports hall facility, despite being located in some of the areas of highest demand.



No walking access to a sports hall

3. Supply and Demand of Combined Sports Halls

Table 3 – Supply/ Demand	London	Hammersmith and Fulham	Ealing	Brent	Hounslow	Kensington and Chelsea	Westminster	Richmond upon Thames	Wandsworth
Supply - Hall provision (courts) scaled to take account of hours available for community use	1710.8	6.5	50.5	52.4	63.4	8.4	34.1	54.9	62.6
Demand - Hall provision (courts) taking into account a 'comfort' factor	2921.7	67	115.7	105.4	84.1	51.5	77.4	55.2	117.8
Supply / Demand balance	-1210.9	-60.5	-65.1	-53	-20.7	-43.1	-43.4	-0.3	-55.2

3.1. Note: This section only provides a 'global' view of provision and does not take account of the location, nature and quality of facilities in relation to demand; how accessible facilities are to the resident population (by car and on foot); nor does it take account of facilities in adjoining boroughs. These are covered in the more detailed modelling set out in the following sections (Satisfied Demand, Unmet Demand and Relative Share). More emphasis should be placed on the Satisfied Demand, Unmet Demand and Relative Share sections of this report than the Supply / Demand Balance section.

3.2. When looking at a very simplistic picture of the overall supply and demand across Hammersmith and Fulham, the resident population is estimated to generate a demand for 67 courts. This compares to a current available supply of circa 7 courts, giving an undersupply of 60 courts.

3.3. As can be seen there is a general picture of undersupply across London and in the neighbouring authorities. The exception being Richmond upon Thames where supply almost equals the level of demand.

3.4. The key issue to note is that the model indicates that a significant deficit in provision in Hammersmith and Fulham exists. However, as referenced above, greater consideration should be given to the ‘Satisfied Demand’, ‘Unmet Demand’, ‘Used Capacity’ and ‘Relative Share’ sections which follow as they consider the data in a more detailed spatial manner.

4. Satisfied Demand - demand from residents currently being met by supply

Table 4 – Satisfied Demand	London	Hammersmith and Fulham	Ealing	Brent	Hounslow	Kensington and Chelsea	Westminster	Richmond upon Thames	Wandsworth
Total number of visits which are met	364994	6097	14335	12111	11278	4523	8336	7766	14287
% of total demand satisfied	77.1	56.2	76.5	70.9	82.8	54.3	66.5	86.9	74.9
% of demand satisfied who travelled by car	69	64.3	76.6	73.9	78.5	61	42.5	81.1	65.7
% of demand satisfied who travelled by foot	21.6	21.7	15.8	16.8	14.4	22.6	47.3	13.4	24.4
% of demand satisfied who travelled by public transport	9.4	14.0	7.6	9.3	7.1	16.4	10.2	5.5	10
Demand Retained	337246	850	7061	6547	5813	811	4772	4916	7500
Demand Retained -as a % of Satisfied Demand	92.4	13.9	49.3	54.1	51.5	17.9	57.3	63.3	52.5
Demand Exported	27748	5247	7274	5563	5465	3712	3564	2850	6787
Demand Exported -as a % of Satisfied Demand	7.6	86.1	50.7	45.9	48.5	82.1	42.7	36.7	47.5

4.1. The report will now consider the level of satisfied demand achieved by Hammersmith and Fulham residents, the throughput at the sites, where this usage originates from and whether the satisfied demand is met at sports halls inside or outside the borough.

4.2. Demand is satisfied when those who want to use a sports hall are able to do so, regardless of where the sports hall is located.

4.3. The model estimates that 56% of Hammersmith and Fulham residents who wish to use a sports hall are able to do so. This percentage is significantly below the London average (77%) as well as being considerably below the figure in the majority of the surrounding London boroughs.

4.4. The percentage of residents in Hammersmith and Fulham that travel to a sports hall by car is 64.3%. This is less than the London average and significantly lower than neighbouring authorities, with the exception of Kensington and Chelsea (61%).

4.5. If the demand is satisfied by a facility outside of the local authority boundary, this is referred to exported demand. If the demand is satisfied by sports hall provision within the local authority boundary it is referred to demand retained.

4.6. In the case of Hammersmith and Fulham the level of exported demand is 5247 visits, which equates to 86% of satisfied demand. What this means is that 86% of the Hammersmith and Fulham residents who use sports halls do so at facilities not within the Hammersmith and Fulham administrative boundary. This is a reflection of the significant lack of sports halls within Hammersmith and Fulham. This is a similar picture with Kensington and Chelsea.

4.7. Hammersmith and Fulham exports more demand to Kensington and Chelsea than it imports from Kensington and Chelsea. In all cases, Hammersmith and Fulham exports more demand to its neighbours than it imports. Both Hammersmith and Fulham and Kensington and Chelsea residents heavily rely on sports halls in neighbouring authorities to meet their demand.

4.8. Hammersmith and Fulham exports most of its demand to Wandsworth, Hounslow and Richmond upon Thames. This is due to the lack of sports halls in the south of the Borough and therefore the closest facilities for those living in the south of the Borough are in these neighbouring authorities.

4.9. This is shown in the import / export map below.

SPORT ENGLAND

Creating a sporting habit for life

Facility Planning Model - Halls Import/Export for Hammersmith & Fulham

RUN1: 2037 Projected Position

Imported and exported demand between study area and surrounding local authorities shown thematically (size of lines) as visits per week in the peak period.

Numbers in areas show retained vpwpp

Hammersmith

Local Authorities (LA)

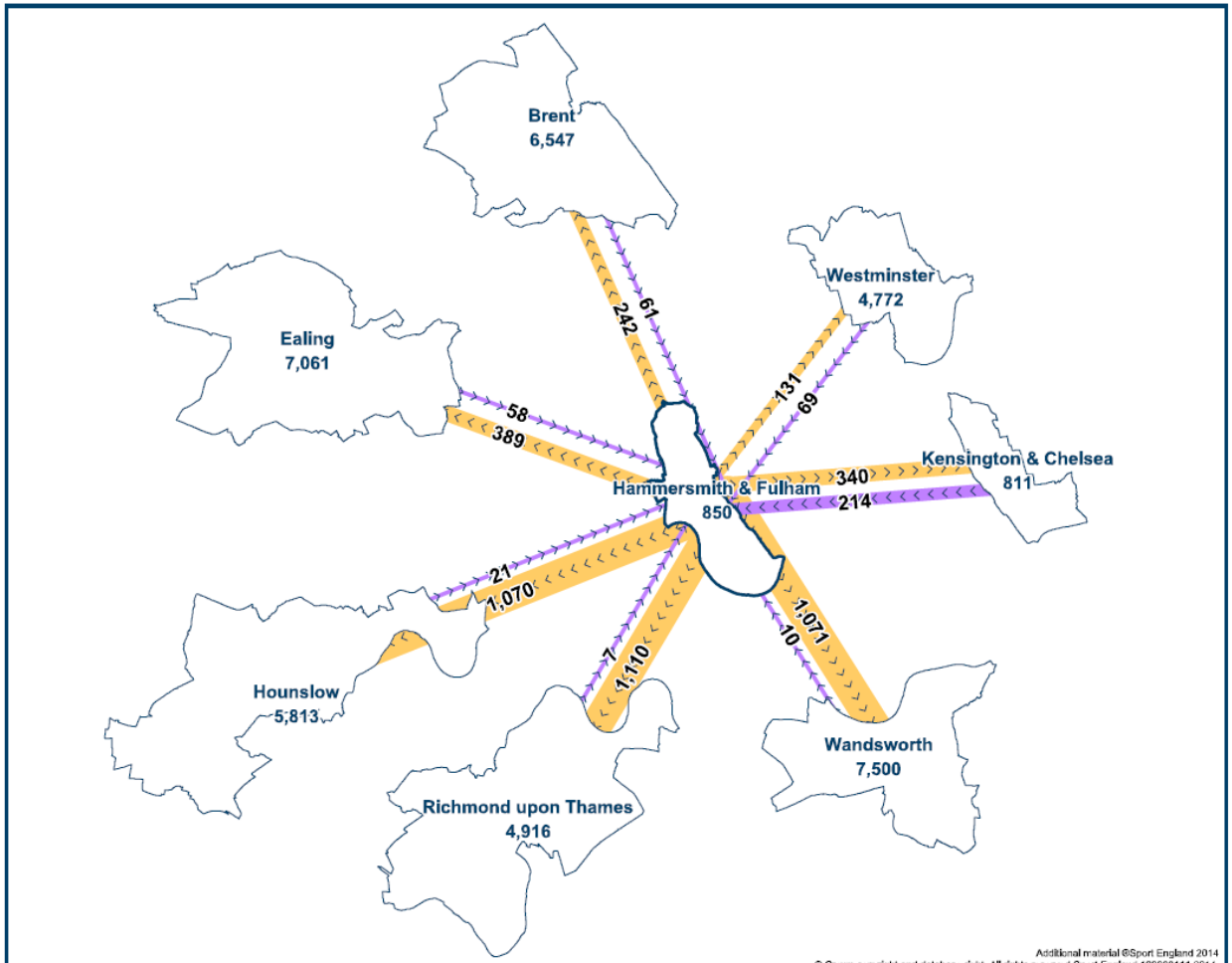
Import/Export

Number on arrows show flow as vpwpp

Direction of flow

Import

Export



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5. Unmet Demand - demand from residents not currently being met

Table 5 – Unmet Demand	London	Hammersmith and Fulham	Ealing	Brent	Hounslow	Kensington and Chelsea	Westminster	Richmond upon Thames	Wandsworth
Total number of visits in the peak, not currently being met	108316	4754	4403	4964	2348	3812	4208	1172	4793
Unmet demand as a % of total demand	22.9	43.8	23.5	29.1	17.2	45.7	33.5	13.1	25.1
Equivalent in Courts - with comfort factor	668.6	29.4	27.2	30.6	14.5	23.5	26	7.2	29.6
% of Unmet Demand due to ;									
Lack of Capacity -	73.3	72.7	73.2	73.3	66	77.7	82.4	65.8	78.5
Outside Catchment -	26.8	27.3	26.8	26.7	34	22.3	17.6	34.3	21.5
Outside Catchment;	26.8	27.3	26.8	26.7	34	22.3	17.6	34.3	21.5
% Unmet demand who do not have access to a car	26.2	27	26.2	26.2	33.1	22	17.3	33	21.2
% of Unmet demand who have access to a car	0.6	0.3	0.6	0.5	1.0	0.2	0.3	1.2	0.4
Lack of Capacity;	73.3	72.7	73.2	73.3	66	77.7	82.4	65.8	78.5
% Unmet demand who do not have access to a car	52.9	43	48.5	46.6	51.6	43.6	48.0	49.8	56.1
% of Unmet demand who have access to a car	20.4	29.7	24.7	26.7	14.4	34.2	34.4	15.9	22.4

5.1. The table above indicates levels of unmet demand, meaning those who wish to access sports halls but are unable to do so.

5.2. The model considers two reasons for unmet demand being generated: 1) Catchment – people who live outside the catchment of a sports hall. The size of a catchment is determined by people's own personal circumstances, for instance whether they have access to a car. 2) Capacity – whether the facility has physical capacity to accommodate users at any given time. This is determined by the size of the sports hall, its opening hours as well as its management type.

5.3. The dominant reason for unmet demand across the London boroughs is lack of capacity rather than catchment issues.

5.4. In terms of unmet demand, the level in Hammersmith and Fulham is almost double the percentage for the average position of the London boroughs.

5.5. The unmet demand in Hammersmith and Fulham is estimated by the model to equate to around 30 courts, which is the level of provision that would be required to provide sufficient capacity for the predicted population in the borough in 2037. The model indicates that the current deficit in sports halls to meet the level of demand from the 2014 population of the borough equates to circa 23 courts. This means that the population growth predicted to 2037 creates an additional demand for a further 7 courts (based on providing a sports court for every 23,200 residents) to meet the needs of the borough's residents.

5.6. In terms of location, the aggregated Unmet Demand Map at Appendix 2 indicates the areas where new sports halls could be best placed. The aggregated unmet demand map suggests the best locations for new sports halls would be around the Shepherds Bush area, south of the A40, Westway and across the centre of the Borough. As mentioned already, a significant number of sports halls would be required to satisfy the current levels of unmet demand. Increasing community access at the existing school sites would also help in meeting some of the unmet demand identified across this central part of the Borough.

5.7. Additional facility provision in neighbouring Kensington and Chelsea may alleviate some pressure on existing facilities in Hammersmith and Fulham.

6. Used Capacity - How well used are the facilities?

Table 5 – Unmet Demand	London	Hammersmith and Fulham	Ealing	Brent	Hounslow	Kensington and Chelsea	Westminster	Richmond upon Thames	Wandsworth
Total number of visits used of current capacity	345150	1308	10230	10612	12843	1697	6900	11116	12668
% of overall capacity of halls used	99.6	100	100	100	100	100	100	100	100
% of visits made to halls by walkers	22.8	61.4	19.8	22.4	13.8	43.1	58	12.9	29
% of visits made to halls by road	77.2	38.6	80.2	77.6	86.2	56.9	42	87.1	71
Visits Imported;									
Number of visits imported	7904	458	3169	4065	7030	887	2128	6199	5168
As a % of used capacity	2.3	35	31	38.3	54.7	52.2	30.8	55.8	40.8
Visits Retained:									
Number of Visits retained	337246	850	7061	6547	5813	811	4772	4916	7500
As a % of used capacity	97.7	65	69	61.7	45.3	47.8	69.2	44.2	59.2

6.1. The table above looks at the capacity of existing facilities. As highlighted in Section 1 of this report, the collective capacity of the existing four sports hall sites in Hammersmith and Fulham expressed in visits per week in the peak period is 1,308.

6.2. In terms of how well used existing facilities are, the model indicates that all sports halls across the study area are operating at 100% capacity at peak times. This picture is reflective across London. However, there is scope to increase capacity in some of those facilities by extending the hours that the facilities are made available to the community. This point is relevant in Hammersmith and Fulham where not all the sports halls are open to the community for the full amount in the peak period.

6.3. In terms of facility capacity and usage, it is clear to note from the table above that users of sports halls in Hammersmith and Fulham primarily access sites via travelling on foot.

6.4. The percentage of visits made to halls in Hammersmith and Fulham and the City of Westminster by walkers is significantly higher than in neighbouring authorities. Whilst the model does not provide reasons for this pattern, local intelligence should be overlaid to build up a more detailed picture of the reasons for this. The constraints on land and availability of parking, demographic profile and the Index of Multiple Deprivation (IMD) will be factors to consider.

6.5. In terms of imported visits, which are visits made to facilities in Hammersmith and Fulham by users who live outside of the Borough, this accounts for 35% of the used capacity at the sports halls in the borough.

6.6. The greatest number of imported visits, as mentioned earlier, is from Kensington and Chelsea residents.

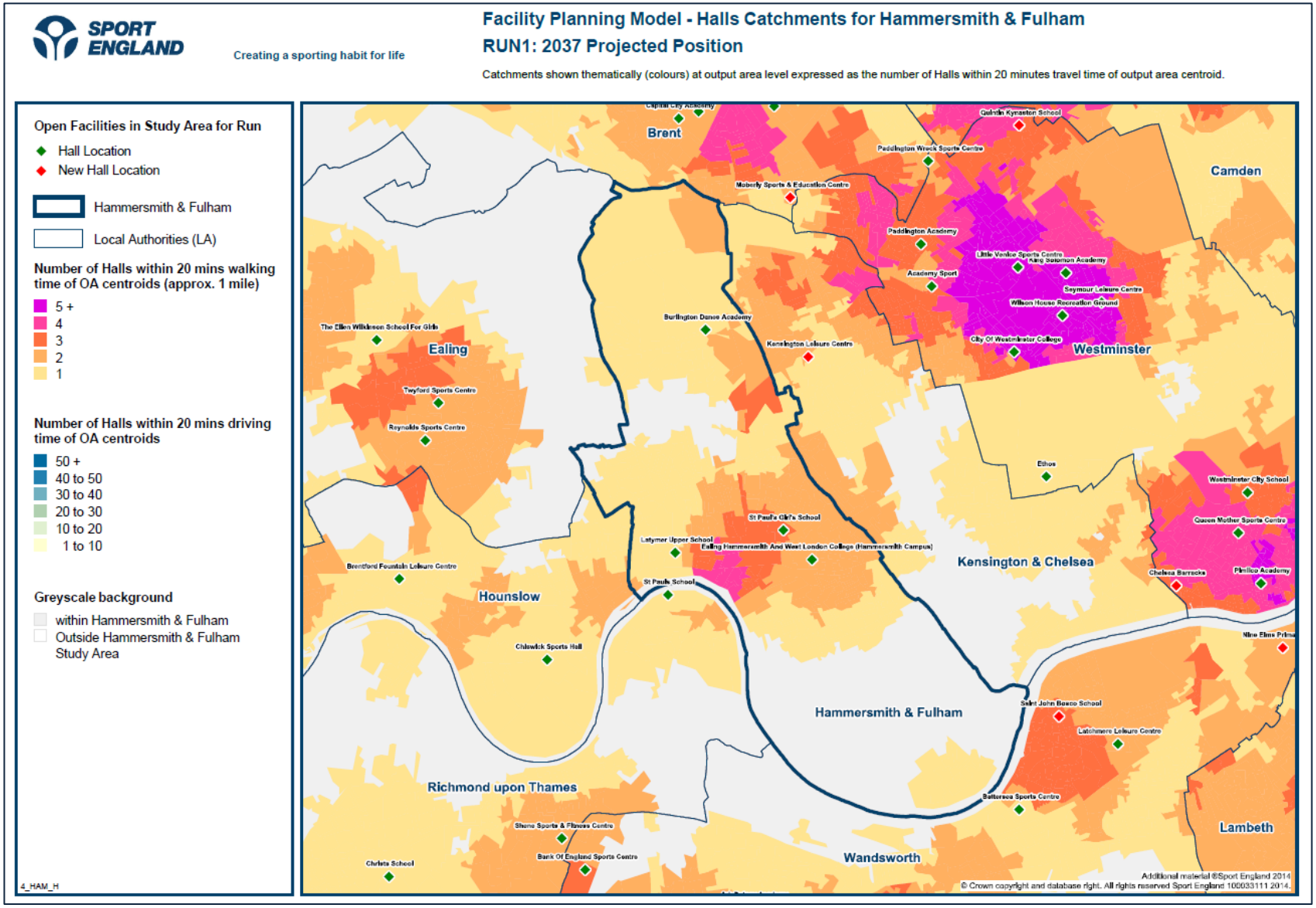
7. Personal/Relative Share - equity share of facilities

Table 7 - Relative Share	London	Hammersmith and Fulham	Ealing	Brent	Hounslow	Kensington and Chelsea	Westminster	Richmond upon Thames	Wandsworth
Score - with 100 = Facilities Planning Model Total (England and also including adjoining Local Authorities in Scotland and Wales)	61	40	58	46	63	40	45	75	51
+/- from Facilities Planning Model Total (England and also including adjoining Local Authorities in Scotland and Wales)	-40	-61	-42	-54	-37	-61	-55	-25	-49

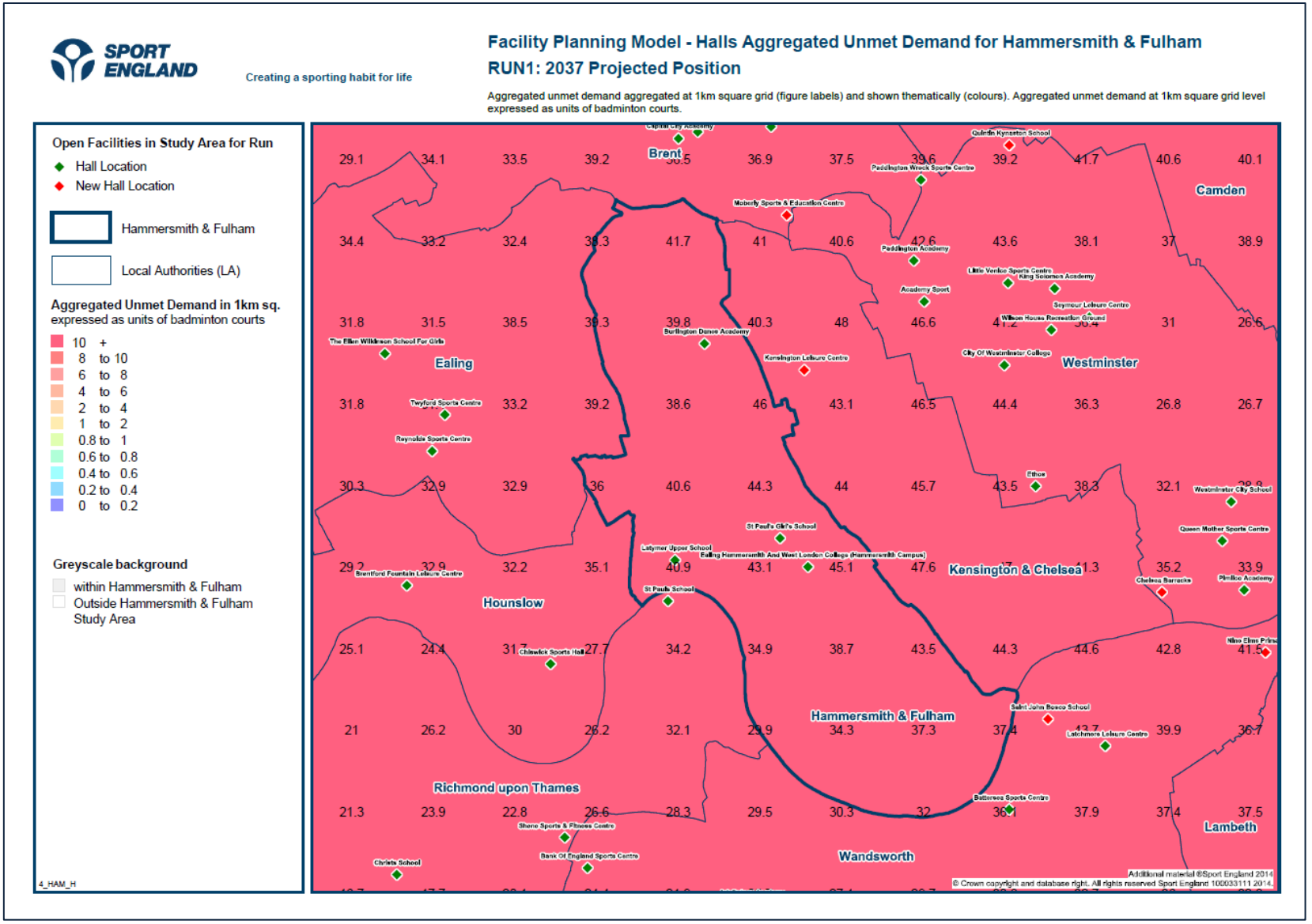
7.1. Relative share helps to show which areas have a better or worse share of sports hall provision. Relative share means that personal share that each individual has in a sports hall. The more people that use a facility, the less of an individual 'share' each of those users will have. Relative share takes into account the size and availability of sports halls as well as travel modes. It helps to establish whether residents within a particular area have less or more share of provision than other areas when compared against a national average figure which is set at 100.

7.2. What this shows is that Hammersmith and Fulham is poorly provided when both the current and 2037 population is considered. London as a whole has a relative share 40 points below the national average. Hammersmith and Fulham has a relative share 61 points below the national average which reflects the small number of accessible sports halls in the borough.

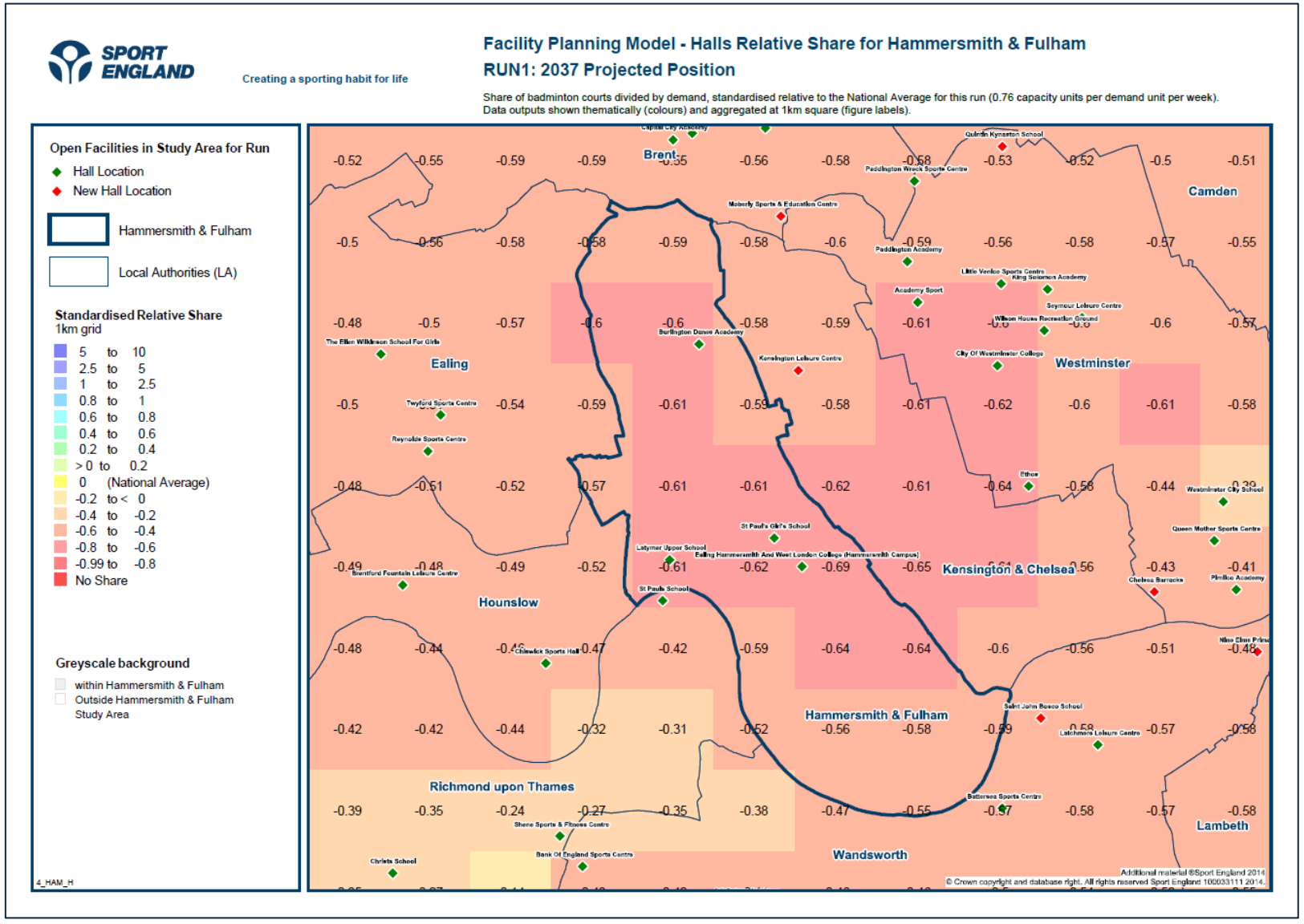
Appendix 1: Location Map



Appendix 2: Unmet Demand and Aggregated Unmet Demand Map



Appendix 3: Relative Share Map



Appendix 4: Sports Halls in the London Borough of Hammersmith and Fulham Included / Excluded

Facilities Included:

Name of facility	Dimensions	FPM Courts	Site Year Built	Site Year Refurbished	Public/ Commercial	Community Hours Available	Facility Capacity – visits per week peak period	% of Capacity used
Burlington Danes Academy	33 x 17	4	2002		Public	39	560	100%
Ealing Hammersmith and West London College (Hammersmith Campus)		3	2008	2013	Public	32	383	100%
Latymer Upper School	33 x 27	6	1976		Public	10	285	100%
St Paul's Girl's School	32 x 17	4	2000		Public	4	80	100%

Facilities Excluded:

The audit excludes facilities that are deemed to be either for private use, too small or there is a lack of information, particularly relating to hours of use. The following facilities were deemed to fall under one or more of these categories and therefore excluded from the modelling:

Site	Type	Reason Excluded
Hammersmith Fitness and Squash Centre	Activity Hall	Too Small.
Charing Cross Sports Club	Activity Hall	Too Small.
Masbro Centre	Activity Hall	Too Small.
Sands End Community Sports Hall (Closed)	Activity Hall	Too Small / Closed.
Phoenix Fitness Centre and Janet Adegoke Swimming Pool	Activity Hall	Too Small.
The Brunswick Club For Young People	Activity Hall	Too Small.
Good Works	Activity Hall	Too Small.
St Etheldredas Church Hall	Activity Hall	Too Small.
Cambridge School	Activity Hall	Too Small / Private Use.
Sacred Heart High School	Activity Hall	Too Small / Private Use.
Lady Margaret Church Of England School For Girls	Activity Hall	Too Small / Private Use.
The London Oratory School	Activity Hall	Too Small / Private Use.
St James Independent School For Girls	Activity Hall	Too Small / Private Use.
The Godolphin And Latymer School	Activity Hall	Too Small / Private Use.
Hurlingham And Chelsea Secondary School	Activity Hall	Too Small.
Hurlingham And Chelsea Secondary School	Activity Hall	Too Small.
Henry Compton Secondary School	Activity Hall	Too Small.
Cambridge School (Closed)	Activity Hall	Too Small / Private Use / Closed.
Fulham Cross Girls School	Main	Private Use.
Woodlane High School	Activity Hall	Too Small / Private Use.
St Michaels And St Georges Church	Activity Hall	Too Small.
St Katherines Vicarage And Community Centre	Activity Hall	Too Small.
Fatima Community Centre	Activity Hall	Too Small.
Hammersmith And Fulham Irish Centre	Activity Hall	Too Small.
Old Oak Centre	Activity Hall	Too Small.

Appendix 5: FPM Model description, Inclusion Criteria and Model Parameters

1. Model Description

Background

1.1. The Facilities Planning Model (FPM) is a computer-based supply/demand model, which has been developed by Edinburgh University in conjunction with Sportscotland and Sport England since the 1980s.

1.2. The model is a tool to help to assess the strategic provision of community sports facilities in an area. It is currently applicable for use in assessing the provision of sports halls, swimming pools, indoor bowls centres and artificial grass pitches.

Use of FPM

1.3. Sport England uses the FPM as one of its principal tools in helping to assess the strategic need for certain community sports facilities. The FPM has been developed as a means of:

- assessing requirements for different types of community sports facilities on a local, regional or national scale;
- helping local authorities to determine an adequate level of sports facility provision to meet their local needs;
- helping to identify strategic gaps in the provision of sports facilities; and
- comparing alternative options for planned provision, taking account of changes in demand and supply. This includes testing the impact of opening, relocating and closing facilities, and the likely impact of population changes on the needs for sports facilities.

1.4. Its current use is limited to those sports facility types for which Sport England holds substantial demand data, i.e. swimming pools, sports halls, indoor bowls and artificial grass pitches.

1.5. The FPM has been used in the assessment of Lottery funding bids for community facilities, and as a principal planning tool to assist local authorities in planning for the provision of community sports facilities. For example, the FPM was used to help assess the impact of a 50m swimming pool development in the London Borough of Hillingdon. The Council invested £22 million in the sports and leisure complex around this pool and received funding of £2,025,000 from the London Development Agency and £1,500,000 from Sport England[1].

[1] Award made in 2007/08 year.

2. How the model works

2.1. In its simplest form, the model seeks to assess whether the capacity of existing facilities for a particular sport is capable of meeting local demand for that sport, taking into account how far people are prepared to travel to such a facility.

2.2. In order to do this, the model compares the number of facilities (supply) within an area, against the demand for that facility (demand) that the local population will produce, similar to other social gravity models.

2.3. To do this, the FPM works by converting both demand (in terms of people), and supply (facilities), into a single comparable unit. This unit is 'visits per week in the peak period' (VISITS PER WEEK IN THE PEAK PERIOD). Once converted, demand and supply can be compared.

2.4. The FPM uses a set of parameters to define how facilities are used and by whom. These parameters are primarily derived from a combination of data including actual user surveys from a range of sites across the country in areas of good supply, together with participation survey data. These surveys provide core information on the profile of users, such as, the age and gender of users, how often they visit, the distance travelled, duration of stay, and on the facilities themselves, such as, programming, peak times of use, and capacity of facilities.

2.5. This survey information is combined with other sources of data to provide a set of model parameters for each facility type. The original core user data for halls and pools comes from the National Halls and Pools survey undertaken in 1996. This data formed the basis for the National Benchmarking Service (NBS). For AGPs, the core data used comes from the user survey of AGPs carried out in 2005/6 jointly with Sportscotland.

2.6. User survey data from the NBS and other appropriate sources are used to update the models parameters on a regular basis. The parameters are set out at the end of the document, and the range of the main source data used by the model includes:

- National Halls and Pools survey data –Sport England
- Benchmarking Service User Survey data –Sport England
- UK 2000 Time Use Survey – ONS
- General Household Survey – ONS
- Scottish Omnibus Surveys – Sport Scotland
- Active People Survey - Sport England
- STP User Survey - Sport England and Sportscotland
- Football participation - The FA
- Young People and Sport in England – Sport England
- Hockey Fixture data - Fixtures Live

Calculating Demand

2.7. This is calculated by applying the user information from the parameters, as referred to above, to the population[2]. This produces the number of visits for that facility that will be demanded by the population.

2.8. Depending on the age and gender make-up of the population, this will affect the number of visits an area will generate. In order to reflect the different population make-up of the country, the FPM calculates demand based on the smallest census groupings. These are Output Areas (OA)[3].

2.9. The use of OA's in the calculation of demand ensures that the FPM is able to reflect and portray differences in demand in areas at the most sensitive level based on available census information. Each OA used is given a demand value in VISITS PER WEEK IN THE PEAK PERIOD by the FPM.

Calculating Supply Capacity

2.10. A facility's capacity varies depending on its size (i.e. size of pool, hall, pitch number), and how many hours the facility is available for use by the community.

2.11. The FPM calculates a facility's capacity by applying each of the capacity factors taken from the model parameters, such as the assumptions made as to how many 'visits' can be accommodated by the particular facility at any one time. Each facility is then given a capacity figure in VISITS PER WEEK IN THE PEAK PERIOD. (See parameters in Section C).

2.12. Based on travel time information4 taken from the user survey, the FPM then calculates how much demand would be met by the particular facility having regard to its capacity and how much demand is within the facility's catchment. The FPM includes an important feature of spatial interaction. This feature takes account of the location and capacity of all the facilities, having regard to their location and the size of demand and assesses whether the facilities are in the right place to meet the demand.

2.13. It is important to note that the FPM does not simply add up the total demand within an area, and compare that to the total supply within the same area. This approach would not take account of the spatial aspect of supply against demand in a particular area. For example, if an area had a total demand for 5 facilities, and there were currently 6 facilities within the area, it would be too simplistic to conclude that there was an oversupply of 1 facility, as this approach would not take account of whether the 5 facilities are in the correct location for local people to use them within that area. It might be that all the facilities were in one part of the borough, leaving other areas under provided. An assessment of this kind would not reflect the true picture of provision. The FPM is able to assess supply and demand within an area based on the needs of the population within that area.

[2] For example, it is estimated that 7.72% of 16-24 year old males will demand to use an AGP, 1.67 times a week. This calculation is done separately for the 12 age/gender groupings.
[3] Census Output Areas (OA) are the smallest grouping of census population data, and provides the population information on which the FPM's demand parameters are applied. A demand figure can then be calculated for each OA based on the population profile. There are over 171,300 OA's across England and Wales. An OA has a target value of 125 households per OA.
[4] To reflect the fact that as distance to a facility increases, fewer visits are made, the FPM uses a travel time distance decay curve, where the majority of users travel up to 20 minutes. The FPM also takes account of the road network when calculating travel times. Car ownership levels, taken from Census data, are also taken into account when calculating how people will travel to facilities.

2.14. In making calculations as to supply and demand, visits made to sports facilities are not artificially restricted or calculated by reference to administrative boundaries, such as local authority areas. Users are generally expected to use their closest facility. The FPM reflects this through analysing the location of demand against the location of facilities, allowing for cross boundary movement of visits. For example, if a facility is on the boundary of a local authority, users will generally be expected to come from the population living close to the facility, but who may be in an adjoining authority

Calculating capacity of Sports Hall – Hall Space in Courts (HSC)

2.15. The capacity of sports halls is calculated in the same way as described above with each sports hall site having a capacity in VISITS PER WEEK IN THE PEAK PERIOD. In order for this capacity to be meaningful, these visits are converted into the equivalent of main hall courts, and referred to as 'Hall Space in Courts' (HSC). This "court" figure is often mistakenly read as being the same as the number of 'marked courts' at the sports halls that are in the Active Places data, but it is not the same. There will usually be a difference between this figure and the number of 'marked courts' that is in Active Places.

2.16. The reason for this, is that the HSC is the 'court' equivalent of the all the main and ancillary halls capacities, this is calculated based on hall size (area), and whether it's the main hall, or a secondary (ancillary) hall. This gives a more accurate reflection of the overall capacity of the halls than simply using the 'marked court' figure. This is due to two reasons:

2.17. In calculating capacity of halls, the model uses a different 'At-One-Time' (AOT) parameter for main halls and for ancillary halls. Ancillary halls have a great AOT capacity than main halls - see below. Marked Courts can sometimes not properly reflect the size of the actual main hall. For example, a hall may be marked out with 4 courts, when it has space for 5 courts. As the model uses the 'courts' as a unit of size, it is important that the hall's capacity is included as a 5 'court unit' rather than a 4 'court unit'

2.18. The model calculates the capacity of the sports hall as 'visits per week in the peak period' (VISITS PER WEEK IN THE PEAK PERIOD), it then uses this unit of capacity to compare with the demand, which is also calculated as VISITS PER WEEK IN THE PEAK PERIOD. It is often difficult to visualise how much hall space is when expressed as visits per week in the peak period. To make things more meaningful this capacity in VISITS PER WEEK IN THE PEAK PERIOD is converted back into 'main hall court equivalents', and is called in the output table 'Hall Space in Courts'.

Facility Attractiveness – for halls and pools only

2.19. Not all facilities are the same and users will find certain facilities more attractive to use than others. The model attempts to reflect this by introducing an attractiveness weighting factor, which effects the way visits are distributed between facilities. Attractiveness however, is very subjective. Currently weightings are only used for hall and pool modelling, with a similar approach for AGPs is being developed.

2.20. Attractiveness weightings are based on the following:

1) Age/refurbishment weighting – pools and halls - the older a facility is, the less attractive it will be to users. It is recognised that this is a general assumption and that there may be examples where older facilities are more attractive than newly built ones due to excellent local management, programming and sports development. Additionally, the date of any significant refurbishment is also included within the weighting factor; however, the attractiveness is set lower than a new build of the same year. It is assumed that a refurbishment that is older than 20 years will have a minimal impact on the facilities attractiveness. The information on year built/refurbished is taken from Active Places. A graduated curve is used to allocate the attractiveness weighting by year. This curve levels off at around 1920 with a 20% weighting. The refurbishment weighting is slightly lower than the new built year equivalent.

2) Management and ownership weighting – halls only - due to the large number of halls being provided by the education sector, an assumption is made that in general, these halls will not provide as balanced a program than halls run by LAs, trusts, etc., with school halls more likely to be used by teams and groups through block booking. A less balanced programme is assumed to be less attractive to a general, pay and play user, than a standard local authority leisure centre sports hall, with a wider range of activities on offer.

2.21. To reflect this, two weightings curves are used for education and non-education halls, a high weighted curve, and a lower weighted curve;

1) High weighted curve - includes Non-education management - better balanced programme, more attractive.

2) Lower weighted curve - includes Educational owned and managed halls, less attractive.

2.22. Commercial facilities – halls and pools - whilst there are relatively few sports halls provided by the commercial sector, an additional weighing factor is incorporated within the model to reflect the cost element often associated with commercial facilities. For each population output area the Indices of Multiple Deprivation (IMD) score is used to limit whether people will use commercial facilities. The assumption is that the higher the IMD score (less affluence) the less likely the population of the OA would choose to go to a commercial facility.

Comfort Factor – halls

2.23. As part of the modelling process, each facility is given a maximum number of visits it can accommodate, based on its size, the number of hours it's available for community use and the 'at one time capacity' figure (pools =1user /6m2 , halls = 5 users /court). This is gives each facility a "theoretical capacity".

2.24. If the facilities were full to their theoretical capacity then there would simply not be the space to undertake the activity comfortably. In addition, there is a need to take account of a range of activities taking place which have different numbers of users, for example, aqua aerobics will have significantly more participants, than lane swimming sessions. Additionally, there may be times and sessions that, whilst being within the peak period, are less busy and so will have fewer users.

2.25. To account of these factors the notion of a 'comfort factor' is applied within the model. For swimming pools, 70% and for sports halls 80% of its theoretical capacity is considered as being the limit where the facility starts to become uncomfortably busy. (Currently, the comfort factor is NOT applied to AGPs due to the fact they are predominantly used by teams, which have a set number of players and so the notion of having 'less busy' pitch is not applicable.)

2.26. The comfort factor is used in two ways;

1) Utilised Capacity - How well used is a facility? 'Utilised capacity' figures for facilities are often seen as being very low, 50-60%, however, this needs to be put into context with 70-80% comfort factor levels for pools and halls. The closer utilised capacity gets to the comfort factor level, the busier the facilities are becoming. You should not aim to have facilities operating at 100% of their theoretical capacity, as this would mean that every session throughout the peak period would be being used to its maximum capacity. This would be both unrealistic in operational terms and unattractive to users.

2) Adequately meeting Unmet Demand – the comfort factor is also used to increase the amount of facilities that are needed to comfortably meet the unmet demand. If this comfort factor is not added, then any facilities provided will be operating at its maximum theoretical capacity, which is not desirable as a set out above.

Utilised Capacity (used capacity)

2.27. Following on from Comfort Factor section, here is more guidance on Utilised Capacity.

2.28. Utilised capacity refers to how much of facilities theoretical capacity is being used. This can, at first, appear to be unrealistically low, with area figures being in the 50-60% region. Without any further explanation, it would appear that facilities are half empty. The key point is not to see a facilities theoretical maximum capacity (100%) as being an optimum position. This, in practise, would mean that a facility would need to be completely full every hour it was open in the peak period. This would be both unrealistic from an operational perspective and undesirable from a user's perspective, as the facility would completely full.

2.29. For example:

A 25m, 4 lane pool has Theoretical capacity of 2260 per week, during 52 hour peak period.

	4-5pm	5-6pm	6-7pm	7-8pm	8-9pm	9-10pm	Total Visits for the evening
Theoretical max capacity	44	44	44	44	44	44	264
Actual Usage	8	30	35	50	15	5	143

2.30. Usage of a pool will vary throughout the evening, with some sessions being busier than others though programming, such as, an aqua-aerobics session between 7-8pm, lane swimming between 8-9pm. Other sessions will be quieter, such as between 9-10pm. This pattern of use would give a total of 143 swims taking place. However, the pool's maximum capacity is 264 visits throughout the evening. In this instance the pools utilised capacity for the evening would be 54%.

2.31. As a guide, 70% utilised capacity is used to indicate that pools are becoming busy, and 80% for sports halls. This should be seen only as a guide to help flag up when facilities are becoming busier, rather than a 'hard threshold'.

Travel times Catchments

2.32. The model use travel times to define facility catchments. These travel times have been derived through national survey work, and so are based on actual travel patterns of users. With the exception of London where DoT travel speeds are used for Inner and Outer London Boroughs, these travel times are used across the country and so do not pick up on any regional differences, of example, longer travel times for remoter rural communities.

2.33. The model includes three different modes of travel, by car, public transport and walking. Car access is also taken into account, in areas of lower access to a car, the model reduces the number of visits made by car, and increases those made on foot.

2.34. Overall, surveys have shown that the majority of visits made to swimming pools, sports halls and AGPs are made by car, with a significant minority of visits to pools and sports halls being made on foot.

Facility	Car	Walking	Public transport
Swimming Pool	76%	15%	9%

Sports Hall	77%	15%	8%
AGP			
Combined	83%	14%	3%
Football	79%	17%	3%
Hockey	96%	2%	2%

2.35. The model includes a distance decay function; where the further a user is from a facility, the less likely they will travel. The set out below is the survey data with the % of visits made within each of the travel times, which shows that almost 90% of all visits, both car borne or walking, are made within 20 minutes. Hence, 20 minutes is often used as a rule of thumb for catchments for sports halls and pools.

	Sport halls		Swimming Pools	
Minutes	Car	Walk	Car	Walk
0-10	62%	61%	58%	57%
10-20	29%	26%	32%	31%
20 -40	8%	11%	9%	11%

2.36. For AGPs, there is a similar pattern to halls and pools, with Hockey users observed as travelling slightly further (89% travel up to 30 minutes). Therefore, a 20 minute travel time can also be used for 'combined' and 'football', and 30 minutes for hockey.

NOTE:

Artificial Grass Pitches						
	Combined		Football		Hockey	
Minutes	Car	Walk	Car	Walk	Car	Walk
0-10	28%	38%	30%	32%	21%	60%
10-20	57%	48%	61%	50%	42%	40%
20 -40	14%	12%	9%	15%	31%	0%

These are approximate figures and should only be used as a guide.

Inclusion Criteria used within analysis

Swimming Pools

The following inclusion criteria were used for this analysis;

- Include all Operational Indoor Pools available for community use i.e. pay and play, membership, Sports Club/Community Association
- Exclude all pools not available for community use i.e. private use
- Exclude all outdoor pools i.e. Lidos
- Exclude all pools where the main pool is less than 20 meters OR is less than 160 square meters.5
- Include all 'planned', 'under construction, and 'temporarily closed' facilities only where all data is available for inclusion.
- Where opening times are missing, availability has been included based on similar facility types.
- Where the year built is missing assume date 1975[6].

Facilities in Wales and the Scottish Borders included, as supplied by sportscotland and Sports Council for Wales. Scottish facilities use a default weighting due to lack of data on facility age.

Sports Halls

The following inclusion criteria were used for this analysis;

- Include all Operational Sports Halls available for community use i.e. pay and play, membership, Sports Club/Community Association
- Exclude all Halls not available for community use i.e. private use
- Exclude all Halls where the main hall is less than 3 Courts in size
- Include all 'planned', 'under construction, and 'temporarily closed' facilities only where all data is available for inclusion.
- Where opening times are missing, availability has been included based on similar facility types.
- Where the year built is missing assume date 1975[7].

Facilities in Wales and the Scottish Borders included, as supplied by sportscotland and Sports Council for Wales. Scottish facilities use a default weighting due to lack of data on facility age.

Artificial Grass Pitch

The following inclusion criteria were used for this analysis:

- Include all outdoor, full size AGPs with a surface type of sand based, sand dressed, water based or rubber crumb – varied by sport specific runs.

[5] 160m is equivalent to a 20m x 8m pool. This assumption will exclude very small pools, such as plunge pools and hotel pools.
[6] Choosing a date in the mid '70s ensures that the facility is included, whilst not overestimating its impact within the run.

[7] Choosing a date in the mid '70s ensures that the facility is included, whilst not overestimating its impact within the run.

- Include all Operational Pitches available for community use i.e. pay and play, membership, Sports Club/Community Association
- Exclude all Pitches not available for community use i.e. private use
- Include all 'planned', 'under construction, and 'temporarily closed' facilities only where all data is available for inclusion.
- Minimum pitch dimension taken from Active Places – 75m x45m.
- Non floodlit pitches exclude from all runs after 1700 on any day.
- Excludes all indoor pitches.
- Excludes 5-a-side commercial football centres and small sided 'pens'.
- Excludes MUGA's, redgra, ash, marked out tarmac areas, etc.
- Carpet types included:
    - Combined Run – all carpet types, using the sport run criteria below.
    - Hockey Run – all water based weekend/weekday, all sand based/sand dresses weekend only.
    - Football Run – all rubber crumb weekend/weekday, sand based/sand dressed weekday.

Facilities in Wales and the Scottish Borders included, as supplied by sportscotland and Sports Council for Wales.

3. Model Parameters used in the Analysis

Halls parameters

<table>
<tr><td>At one Time Capacity</td><td></td><td>20 users per 4-court hall, 8 per 144 square metre of ancillary hall.</td><td></td></tr>
<tr><td>Catchments</td><td></td><td>Car: 20 minutes
Walking: 1.6 km
Public transport: 20 minutes at about half the speed of a car

NOTE: Catchment times are indicative, within the context of a distance decay function of the model.</td><td></td></tr>
<tr><td>Duration</td><td></td><td>60 minutes</td><td></td></tr>
<tr><td>Participation

Frequency (visits per week in the peak period)</td><td></td><td>
<table>
<tr><td>Age</td><td>0-15</td><td>16-24</td><td>25-34</td><td>35-44</td><td>45-59</td><td>60-79</td></tr>
<tr><td>Male</td><td>9.55</td><td>15.04</td><td>14.96</td><td>11.08</td><td>5.68</td><td>5.55</td></tr>
<tr><td>Female</td><td>6.03</td><td>9.31</td><td>11.66</td><td>9.40</td><td>5.40</td><td>4.28</td></tr>
</table>
<table>
<tr><td>Age</td><td>0-15</td><td>16-24</td><td>25-34</td><td>35-44</td><td>45-59</td><td>60-79</td></tr>
<tr><td>Male</td><td>0.85</td><td>0.88</td><td>0.88</td><td>0.90</td><td>0.92</td><td>1.10</td></tr>
<tr><td>Female</td><td>0.99</td><td>0.85</td><td>1.03</td><td>0.90</td><td>1.02</td><td>1.27</td></tr>
</table>
</td><td></td></tr>
<tr><td>Peak Period

Percentage in Peak Period</td><td></td><td>Weekday: 17:00 to 22:00
Saturday: 09:30 to 17:00
Sunday: 09:00 to 14:30, 17:00 to 19:30

Total: 40.5 hours

60%</td><td></td></tr>
</table>

SPORT ENGLAND

Creating a lifelong sporting habit

Strategic Assessment of Need for Swimming Pools in the London Borough of Hammersmith and Fulham

December 2014

CONTENTS

INTRODUCTION

- The London Borough of Hammersmith and Fulham wishes to review the provision of swimming pools across the borough and a wider study area. In particular the Council wishes to understand the scale of provision required to meet the expected population in the borough in 2037. In addition, it wishes to clarify whether the existing swimming pool stock is sufficient to meet both current and future demand. Sport England has been requested to undertake this piece of work.

- This report provides a preliminary overview of the current and future level of provision of Swimming Pools in Hammersmith and Fulham. The assessment uses Sport England's Facilities Planning Model (FPM) and data from the National Facilities Audit as of January 2014, amended by the London Borough of Hammersmith and Fulham to include known changes to provision. The details of the scenario tested have been agreed with the local authority.

- This report, and the data presented in the main outputs and maps, should not be considered in isolation and it is recommended that this analysis should form part of a wider assessment of provision at the local level, using other available information and knowledge particularly from the Council, leisure operator and other local and national stakeholders.

- The principal objective of the study is to overlay the current swimming pool provision with the expected population in 2037 to assess whether the current facilities can meet the demand created by the predicted increase in population size in the borough. To understand this the model considers the position in 2014 with the facilities in their current condition and overlays the additional population size expected in 2037 onto the existing facilities stock.

- The scenario described above used Greater London Authority 2013 Round demographic projections, as agreed with the London Borough of Hammersmith and Fulham.

- The outcome of this study will be to provide the London Borough of Hammersmith and Fulham with a comprehensive understanding of the level of swimming pool provision required to meet the predicted growth in population expected from the Old Oak Common and other developments within the borough.

Framework for the study

- Before setting out the Executive Summary for the report with the key findings, followed by the main report, it is important to set out the framework for the study. This provides some points of explanation as to how the study has been undertaken, thereby providing a context for the report's findings.

The Study area

- Customers for swimming pools do not reflect local authority boundaries and whilst there are management and pricing incentives (and possibly disincentives) for customers to use sports facilities located in the area in which they live, there are some big determinants as to which swimming pools people will choose to use.

- These are based on: how close the swimming pool is to where people live; the age and condition of the facility and inherently its attractiveness; other facilities within/on the site such as a fitness suite; personal and family choice; and reasons for using a particular facility, like clubs are based there or competitions are held at the site.

- Consequently, in determining the "London Borough of Hammersmith and Fulham position" in the supply and demand for swimming pools, it is very important to take full account of the swimming pools in all the neighbouring local authorities to the London Borough of Hammersmith and Fulham. In particular, to assess the impact of overlapping catchment areas of swimming pools around the London Borough of Hammersmith and Fulham. The nearest swimming pool for some London Borough of Hammersmith and Fulham residents may be located outside the authority (known as exported demand) and for some residents of neighbouring authorities their nearest swimming pool is inside the London Borough of Hammersmith and Fulham (known as imported demand).

- Taking account of all these import and export effects is done by establishing a study area which places the London Borough of Hammersmith and Fulham at its heart and assesses the import and export of demand into and out of the London Borough of Hammersmith and Fulham. It also reflects the location, age, condition and size of all the swimming pools in the study area.

- The study area comprises the London Borough of Hammersmith and Fulham and the seven London boroughs (City of Westminster, Wandsworth, Brent, Ealing, Hounslow, Kensington and Chelsea and Richmond upon Thames) which border the London Borough of Hammersmith and Fulham.

What information is produced from this study?

- The information produced by this study contains the findings on the supply and demand for swimming pools.

- This study and report sets out:

  - how accessible swimming pools are based on three travel catchments: drive to; public transport; and walk to;

  - the supply and demand for swimming pools within the London Borough of Hammersmith and Fulham and makes comparisons with other authorities in the study area;

- the level of total demand for swimming pools in the London Borough of Hammersmith and Fulham and how much of this demand is satisfied demand, how much is unmet demand and again with comparisons with other authorities in the study area;

- if there is unmet demand in the London Borough of Hammersmith and Fulham, what is the scale of this unmet demand, expressed in square metres of water (212 square metres of water space equals one 25 metre x 4 lane swimming pool);

- how full the swimming pools are estimated to be and what is the level of used swimming pool capacity (how full are the facilities);

- what is the level of demand for swimming pools from London Borough of Hammersmith and Fulham residents which is met (retained) at swimming pools located in the London Borough of Hammersmith and Fulham;

- how much of London Borough of Hammersmith and Fulham's residents demand for swimming pools is exported to swimming provision in neighbouring authorities, where London Borough of Hammersmith and Fulham's residents live within the catchment area of a swimming pool in a neighbouring authority;

- how much demand is imported into the London Borough of Hammersmith and Fulham from residents in neighbouring local authorities, who live within the catchment area of a swimming pool located in the London Borough of Hammersmith and Fulham; and

- what is the travel profile across the London Borough of Hammersmith and Fulham for example what is the estimated percentage of travel to swimming pools by car, public transport and "walk to"?

Definitions and terms

❖ Before reporting the findings from the study, there are three points to note on definitions and terms. Firstly, is the term for expressing both the demand and supply (supply is also referred to as capacity in this report) for swimming pools is known as "visits per week in the weekly peak period". The weekly peak period for swimming pools is 52 hours per week and it is estimated that 63% of the total weekly swimming throughput occurs in these hours.

❖ Secondly, there is what is known as a "comfort factor" which is applied to the assessment of demand for swimming pools. In essence, if swimming pools were full to their theoretical capacity, then there would simple not be the space to participate comfortably. In addition, there is a need to take account of people changing or even clubs on and clubs off inside the swimming pool itself. To

account for all these factors the capacity of a swimming pool is reduced to 70% of its theoretical capacity and this is the level at which a swimming pool is determined to be full. This 70% full level is referred to as the “comfort factor”.

- Thirdly, all existing indoor swimming pools of at least 120 square metres of water of water space and which are available for community use, for all or part of the weekly peak period, are included in this assessment. All swimming pools which have no access for community use are excluded. Therefore some commercial pools, of sufficient size, are included in this analysis. A full description of the Facilities Planning model is provided in Appendix 2.

1 EXECUTIVE SUMMARY AND CONCLUSIONS

Introduction

The London Borough of Hammersmith and Fulham recognises that there is a need to review the swimming pool provision in the borough as part of a wider assessment of the impact of the increased population expected in the borough in the next 25 years. As one element of this work, the Council has requested that Sport England uses its Facilities Planning model to test the level of swimming provision required to meet the future population size expected to exist in 2037. In discussions with Sport England, the Council has determined the scenario to be tested and the detail of the data to be included.

❖ Sport England's Facilities Planning Model is a robust strategic planning tool that helps local authorities and other leisure providers to better understand the Supply and Demand for a certain facility type for their local area. The model can be used to scenario test different potential levels of provision and can factor in changes to population demographics and sizes. For this piece of work, the Council requested that the model considers the population (using Greater London Authority population projections) for the London Borough of Hammersmith and Fulham and the surrounding area in 2037 and overlays the demand from this population onto the existing swimming pools in the borough and surrounding authorities.

❖ The model has been used by numerous local authorities to help inform their strategic planning of sports facilities. This is currently a particularly pertinent issue for many authorities who are reviewing their facilities stock in light of the financial challenges being experienced by local government alongside planned future housing growth. The use of the model has led to more informed decisions being taken and a better chance of the right facilities being in the right places to meet the current and future needs of the resident population.

❖ This report, and the data presented in the main outputs and maps, should not be considered in isolation and it is recommended that this analysis should form part of a wider assessment of provision at a local level, using other available information and knowledge particularly from the Council, leisure operator, national governing bodies of sport and other local stakeholders.

Scenario Tested

❖ The principal objective of the study is to assess the Supply and Demand for Swimming Pools in the London Borough of Hammersmith and Fulham using the predicted population in 2037.

❖ In essence, the Council is asking the model to consider a number of key questions outlined below:

- Firstly, what is the impact on swimming provision across Hammersmith and Fulham if no action was taken to existing stock and the population continued to grow at the rate predicted?

- Secondly, is the additional demand created by the predicted growth in population size in Hammersmith and Fulham and the surrounding boroughs able to have their swimming needs met?

Summary of Key Findings

❖ The following narrative provides an overview of the key findings of the research and analysis that has been undertaken.

Swimming Pool - Supply

❖ The number of swimming pool sites in Hammersmith and Fulham is significantly above the average for the London boroughs. This is considered important as the number of sites in an authority impacts on the level of choice experienced by residents, especially those that do not have access to a car.

❖ However, when the actual supply in total water space (in visits per week, peak period) is considered the majority of the surrounding boroughs have greater capacity. This infers that although Hammersmith and Fulham have a large number of swimming pools, most of these pools are not big in size.

❖ Of the 13 swimming pool sites in the borough, seven are commercial sites with the remainder being public facilities. When the six public pools are assessed, Fulham Pools provides the most water space, accounting for nearly 25% of the total water space available at these public pools.

❖ When the predicted population in 2037 is considered the models estimates that the vast majority of residents in the borough will live within the walking catchment of a swimming pool. The only exception to this is residents who live in the far north of the borough.

❖ The age of swimming pools in the borough is important to consider as it impacts on the attractiveness of the facilities. In regards to the public pools in Hammersmith and Fulham three pools should be in relatively good condition as they were built since 2000. However the remaining three public pools were all built in the 1970s. This means that the older pools may struggle to deliver a modern customer offer and may cost more to operate. In addition, by 2037 these facilities would be over 60 years old which is likely to have implications on their ability to provide a financially sustainable swimming offer.

Swimming Pool - Demand

❖ The size and profile of a borough's population is important as it impacts on the level of Demand on the sports provision. The level of Demand created by the predicted population of Hammersmith and Fulham in 2037 is estimated to equate to circa 14,500 visits in the weekly peak period. This level of demand is nearly 1,700 visits (in the weekly peak period) more than that generated by the current population.

- In addition, the model also considered the levels of 'access to a car' as this impacts on the number of swimming pools that a resident could travel to. In the London Borough of Hammersmith and Fulham the model estimates that circa 54% of the population have no access to a car which is significantly above the average for the London boroughs of 40%. This means that the majority of Hammersmith and Fulham's residents are reliant on living within a 20 minute walking catchment of a swimming pool if they are to have their swimming needs met. As shown on the walking catchment maps (Appendix 3) a significant proportion of Hammersmith and Fulham residents are within the walking catchment of at least one swimming pool. The only exception to this is residents living in the far north of the borough in the Old Oak Common area.

Satisfied Demand

- This element of the report examines whether the Demand generated by London Borough of Hammersmith and Fulham residents can be met, if the need is met whether it is satisfied at a facility inside the authority or outside the borough and if the need is met how a resident has travelled to a swimming pool.

- The model estimates that that at least 96% of the Demand from the predicted population of Hammersmith and Fulham in 2037 is satisfied, either at a swimming pool within the authority or outside of it. This percentage does not differ significantly from the level of satisfied demand achieved for the current population of the borough.

- The model estimates that the majority of the additional demand generated by the increased population in Hammersmith and Fulham between 2014 and 2037 would be met by swimming pools outside the borough. Of the additional demand that is met within the borough the vast majority would be met by users visiting commercial pools because the public pools are already considered to be full in 2014.

- It is important to note that the public pools, when the demand from both the current and 2037 population sizes are considered, are estimated to be 'uncomfortably busy' which could reduce the customer experience at these sites.

- The model is concluding that the current stock of swimming pools, both inside and outside Hammersmith and Fulham, are in the right location and have sufficient spare capacity to meet the majority of the additional demand created by the population growth predicted in the borough between 2014 and 2037. However, the key issue to consider will be the age of the swimming pools and whether, once they are aged by circa 23 years will they still be able to offer a modern swimming offer. If any of the supply, both inside and outside the borough, changes then this would affect the level of satisfied demand achieved by the borough's residents.

- When the demand from the current population is considered the model estimates that nearly 66% of the need is met at facilities inside the borough. When the 2037 population is reviewed the level of satisfied demand met at swimming pools inside the borough reduces to 60%. This means that if the swimming pool stock in the borough does not change between 2014 and 2037 then the residents of the borough will become increasingly reliant on provision in surrounding boroughs.

- The study identifies that there is currently a deficiency of provision in the north of the borough and that coupled with the rise in population predicted to occur here, there is a need for the provision of new swimming pool provision in this area. The modelling shows that provision of needs here should be based on providing 1sqm of pool space per every 90 residents generated by development.

Unmet Demand

- This section of the report examines the Demand from residents of the London Borough of Hammersmith and Fulham that cannot be met at a swimming pool regardless of whether it is located inside or outside the authority. The model considers two reasons for Unmet Demand being generated: 1) Catchment – that people live outside the catchment of a swimming pool. The size of a catchment is determined by people's own personal circumstances, for instance whether they have access to a car. Secondly, Capacity – this is determined by the size of the swimming pool, its opening hours as well as its management type – for example whether it is a public or private facility.

- The difference in the level of Unmet Demand created by the populations of Hammersmith and Fulham in 2014 and 2037 are minimal. At circa 100 square metres of water space the size of the Unmet Demand equates to almost two lanes of a 25 metre swimming pool. The reason why the difference is minimal is that the vast majority of the additional demand generated by the increased population in 2037 can be met at existing swimming pools, predominantly those located outside of the borough.

- The main reason for the Unmet Demand, regardless of which population size is considered, is due to residents living outside the catchment of a swimming pool rather than there being insufficient capacity at existing swimming pools. Overwhelmingly, this is due to those residents not having access to a car and therefore being restricted in their choice of which swimming pools to try to access.

- The area in Hammersmith and Fulham with the greatest level of Unmet Demand is in the north of the borough. The study recommends that new swimming pool space is provided in this location to meet this unmet demand.

Used Capacity

- This section considers how well used the swimming pools are forecast to be at peak times, taking into account the expected changes in population size. The key point to note is that each of the public pools are considered to be 'uncomfortably busy' when the current population of the borough is reviewed. When the additional demand from the 2037 population is included the model estimates that only one of the public pools has some spare capacity to help to address some of the extra demand.

- Given the position outlined above, the borough is reliant on commercially run swimming pools in the borough and swimming pools outside of the borough to meet the additional demand created by the predicted growth in population between 2014 and 2037.

- The modelling notes the importance of public swimming pool provision and highlights that new pool space provision in the borough should aim to be public provision, to enable the pools to appropriately meet the needs of the full range of the population.

Relative Share

- Another method used to consider the amount of water space in an authority compared to another is to assess the Relative Share of water space experienced by a resident – i.e. do they experience an above or below average share of water space compared to a resident of another authority. The Relative Share 'score' for the London Borough of Hammersmith and Fulham is above the average for the London boroughs regardless of whether the population size in 2014 or 2037 is reviewed.

Conclusions

- The model indicates that the level of swimming provision in 2014 in Hammersmith and Fulham is strong with the vast majority of residents who wish to swim able to do so. This position alters when the additional population growth predicted to occur by 2037 is overlaid onto the existing swimming pool stock, with many pools becoming uncomfortably busy and demands not being met.

- This unmet demand will be particularly pronounced in the north of the borough, where there is current under-provision and where significant increases in the population are projected. To meet this need, it is recommended that new public access swimming pool space is provided.

- This study is based on the assumption that the supply level in the borough and its surrounding authorities does not deteriorate between 2014 and 2037. In reality, the pool stock will change between these years with swimming pools closing, opening and being refurbished. As a minimum elements of the pool stock will age making them less attractive to the consumer and more challenging for them to maintain the same level of swimming offer.

- It is therefore recommended that the Council monitors the level of provision, from both public and commercial providers inside and outside of the borough, to assess whether the current level of supply is at least being maintained. If it is not, then it is considered that the Council should review options for additional / replacement swimming pools to meet the additional demand from the expected growth in population size. As part of this review further assessments of the supply / demand for swimming in the borough and surrounding authorities should be undertaken.

This ends the Executive Summary and Conclusions section.

3 SUPPLY OF POOLS

Table 1 - Supply	LONDON	Hammersmith & Fulham	Brent	Ealing	Hounslow	Kensington & Chelsea	Richmond upon Thames	Wandsworth	Westminster
Number of pools	405	18	9	16	18	9	12	18	20
Number of pool sites	285	13	6	11	11	6	8	14	16
Supply of total water space in square metres	97934	3773	1789	3772	3923	1512	2459	4142	4241
Supply of water space in square metres, scaled by hours available in the peak period	84042	3240	1710	3660	3675	1489	2129	3307	3875
Supply of total water space in Visits per week – peak period (VPWPP)	728364	28084	14819	31720	31848	12905	18454	28662	33583
Water space per 1000 population	9.84	17.59	4.92	9.46	13.67	8.46	12.19	11.01	16.56

- The report will now focus in more detail on the Supply / Demand baseline findings for Swimming Pools for the London Borough of Hammersmith and Fulham and the rest of the study area as well as a more in depth analysis of the impact of the population growth being tested.

Commentary on Supply

- The London Borough of Hammersmith and Fulham has 18 swimming pools on 13 sites in the borough which are available for community use for all or part of the peak period and meets the size threshold set out in Appendix 2. The swimming pools, their size, age, hours that they are available to the community in peak periods and their capacity (in terms of visits per week in the peak period) that are included in the study are listed in Appendix 1.

- Due to their size/type of use a number of swimming pools are excluded from the audit. These pools are also listed in Appendix 1.

- The thirteen swimming pool sites in Hammersmith and Fulham provides a high number of swimming pool sites for a London borough where the average number of sites is between eight and nine. The number of sites in an authority is considered important as it impacts on the level of choice experienced by residents, especially those that do not have access to a car.

- To expand this point further, the number of public swimming pool sites in Hammersmith and Fulham (13) is significantly higher than in Brent, Kensington and Chelsea and Richmond upon Thames. When considering the other authorities in the study area only Wandsworth and the City of Westminster have more swimming pool sites than Hammersmith and Fulham.

- The catchment maps in Appendix 3 show that some residents of Hammersmith and Fulham located in the centre and south of the borough (area shaded purple) are within the walking catchment of at least five swimming pools. The majority of Hammersmith and Fulham residents are within the walking catchment of one swimming pool site. It is only residents living in the far north of the borough who live outside the walking catchment of a swimming pool (areas shaded in white).

- The level of choice for a resident can also be considered another way through comparing the total supply of water space in visits per week available at the public swimming pools across the different authorities. This comparison is shown in the table below:

Local Authority	Supply of total water space in visits per week in the peak period (public pools only)	Difference compared to Hammersmith and Fulham
Hammersmith and Fulham	11,739 visits	
Brent	12,947 visits	+1,208
City of Westminster	25,981 visits	+14,242
Ealing	19,894 visits	+ 8,155
Wandsworth	23,582 visits	+11,843
Hounslow	20,590 visits	+8,851
Kensington & Chelsea	7,479 visits	-4,260
Richmond upon Thames	12,982 visits	+ 1,243

- The table above demonstrates that despite Hammersmith and Fulham having more swimming pools than Brent, Ealing, Kensington and Chelsea and Richmond upon Thames these authorities have more water space available at their public swimming pools when compared against Hammersmith and Fulham. One explanation for this is that ten of the eighteen swimming pools in Hammersmith and Fulham are commercial pools. In visits per week in the peak period, the commercial swimming pools account for 58% of the total provision in the borough. This percentage of capacity accounted for by commercial pools is higher than in Brent (13%), City of Westminster (23%), Ealing (37%), Wandsworth (18%), Hounslow (35%), Kensington and Chelsea (42%) and Richmond upon Thames (30%). This shows the reliance placed of commercial providers to meet the swimming needs of a significant proportion of the residents of Hammersmith and Fulham.

- In terms of total swimming pool capacity, when considering both the public and commercial provision, the 18 pools in Hammersmith and Fulham provide circa 3,200 square metres of total water space at peak times. This amount of water space is significantly higher than that found in Brent, Kensington and Chelsea and Richmond upon Thames, roughly the same as in Wandsworth and significantly below that found in the City of Westminster, Hounslow and Ealing.

- The 518 square metres of water space at the Harbour Club (Chelsea) is the largest amount of water space at any one site in Hammersmith and Fulham. In regard to public pools the most water space at any site in the borough can be found at Fulham Pools (452 square metres). This site accounts for nearly 25% of the total water space available at the public pools in the borough. The second most important public pool in the borough, in terms of amount of water space, is the Phoenix Fitness Centre and Janet Adegoke Swimming Pool which has 396 square metres.

- In terms of addressing some of the relatively small amount of Unmet Demand highlighted below in Section 7, there are two issues for an authority to consider. Firstly, can the opening hours at the existing pools be extended (especially at peak times) to generate additional capacity. Alternatively or alongside extending the hours, can any new provision be provided either through building new / extended sites or via opening up existing provision that may not be currently available to the public.

- For Hammersmith and Fulham, there are three public pool sites that are not currently considered to be available for the full amount in the peak period. These are Latymer Upper School, Phoenix Fitness Centre and Janet Adegoke Swimming Pool and St Paul's Girls School which are open to the public at peak times for ten, forty eight and nineteen hours respectively. Therefore, to address the Unmet Demand identified in Section 7, the Council need to consider whether they can work with these partners to make their swimming provision available to the public for longer at peak times.

- The age of the swimming pools in the borough is important to consider as it impacts on the attractiveness of the venue and in turn the likelihood of it being used. In regards to the public stock in the London Borough of Hammersmith and Fulham, three of the six public pools are considered to be in relatively good condition with each of them being built since 2000. In contrast, the remaining three public pools were all built in the 1970s and are at least 38 years old. Of the commercial pools, five of the seven sites have also been built since 2000. This means that the majority of the swimming pools should currently be in a fairly good condition.

- A further way to look at supply is to consider the amount of water space in an authority per 1,000 residents. As outlined in the table below Hammersmith and Fulham has the highest amount of all the authorities in the study area and is significantly above the average for the London boroughs.

Local Authority	Water space per 1,000 population (in square metres)
Hammersmith and Fulham	17.59
London average	9.84

Brent	4.92
Ealing	9.46
Hounslow	13.67
Kensington & Chelsea	8.46
Richmond upon Thames	12.19
Wandsworth	11.01
City of Westminster	16.56

- It should be noted that the figures above do not take into account spatial distribution, age and attractiveness of swimming pools or swimming pools in neighbouring authorities.

4 DEMAND FOR POOLS

Table 2 - Demand	LONDON	Hammersmith & Fulham	Brent	Ealing	Hounslow	Kensington & Chelsea	Richmond upon Thames	Wandsworth	Westminster
Population	9949845	214475	363821	398959	287019	178697	201702	376106	256133
Swims demanded – visits per week (peak period)	653972	14478	23657	25984	18720	11487	12793	25592	16796
Equivalent in water space – with comfort factor included	107798	2386	3899	4283	3086	1893	2109	4218	2769
% of population without access to a car	40	54.3	40.6	34.2	30.5	54.6	23.6	44.3	62.1

- The size and profile of a borough's population is important as it impacts on the level of Demand on the sports provision. The predicted population for the London Borough of Hammersmith and Fulham for 2037 has been derived from Greater London Authority population projections and is estimated to be circa 214,500. This is circa 28,000 more than the estimated population of the borough in 2014.

- Therefore this element of the report focuses on how the demand generated from the population of the London Borough of Hammersmith and Fulham compares to the surrounding authorities.

- Dealing with population size first, the population of 'Hammersmith and Fulham' is one of the lowest in the study area at a level that is considerably less than the figures for Brent, Ealing, Hounslow, Wandsworth and the City of Westminster. Only Kensington and Chelsea and Richmond upon Thames are estimated to have smaller population sizes. This is shown in the table above.

- The demand for swimming pool provision from Hammersmith and Fulham residents is estimated to equate to circa 14,500 visits per week in the peak period and is the equivalent to 2,400 square metres of water space (based on SportEngland guidance of providing 1sqm of pool space per 90 residents). This takes into account a 'comfort factor'. This figure, shown in the table above, is lower than all the surrounding authorities except Kensington and Chelsea and Richmond upon Thames.

- The level of demand created by the '2037 population of the borough' is estimated to be circa 1,700 extra visits per week (peak period) when compared to the current population. This additional demand equates to an estimated 280 square metres of water space.

- The next important factor to consider when reviewing 'Demand' is how much choice residents have in accessing a swimming pool. One of the key determinants in this is whether residents have access to a car as if they do it obviously makes a significant difference to their ability to access a swimming pool.

- In Hammersmith and Fulham 54.3% of the population has no access to a car compared with the London average of 40%. This percentage for Hammersmith and Fulham residents is higher than each of its neighbours except the City of Westminster (62.1%) and Kensington and Chelsea (54.6%). Despite this low level of access to a car the vast majority of residents do live within the walking catchment of at least one swimming pool due to the high number of swimming pool sites in the borough.

- In regards to driving catchments, all residents of Hammersmith and Fulham with access to a car are estimated to live within the catchment of at least 25 swimming pools.

- The Demand map shown in Appendix 4 indicates that the highest levels of demand in the borough are located near to Fulham Pools and the Phoenix Fitness Centre and Janet Adegoke Swimming Pool which suggests that these pools are in the right location to capture demand.

- The lowest levels of demand can be found in the far north of the borough on the border with Brent.

5 SUPPLY & DEMAND BALANCE

Table 3 - Supply/Demand Balance	LONDON	Hammersmith & Fulham	Brent	Ealing	Hounslow	Kensington & Chelsea	Richmond upon Thames	Wandsworth	Westminster
Supply - Swimming pool provision (square metres) scaled to take account of hours available for community use	84042	3240.5	1710	3660	3675	1489	2129	3307	3875
Demand - Swimming pool provision (square metres) taking into account a 'comfort' factor	107798	2386.5	3899.5	4283	3086	1893.5	2109	4218	2769
Supply / Demand balance - Variation in square metres of provision available compared to the minimum required to meet demand.	-23756	854	-2189.5	-623	589	-404.5	20	-911	1106

Commentary on the supply and demand balance

- Note: This section only provides a 'global' view of provision and does not take account of the location, nature and quality of swimming pools in relation to demand; how accessible the swimming pools are to the resident population (by car and on foot); nor does it take account of swimming pools in adjoining boroughs. These are covered in the more detailed modelling set out in the following sections (Satisfied Demand, Unmet Demand and Personal/Relative Share). Therefore more emphasis is placed in the report on Sections 6 to 9 as they consider matters spatially whereas this section does not.

- At this very high level of assessment, the model estimates that there is a positive supply demand balance. Please note that the Supply / Demand balance referenced on this page takes no account of the geographical distribution of Demand and, to reiterate the point made earlier, far greater consideration should be given in this report to the 'Satisfied Demand', 'Unmet Demand' and 'Used Capacity' sections of the report as they consider the data in a much more detailed spatial manner.

6 SATISFIED DEMAND

Table 4 - Satisfied Demand	LONDON	Hammersmith & Fulham	Brent	Ealing	Hounslow	Kensington & Chelsea	Richmond upon Thames	Wandsworth	Westminster
Total number of visits which are met	590559	13892	20166	24010	17420	11016	12439	24624	16178
% of total demand satisfied	90.3	96	85.2	92.4	93.1	95.9	97.2	96.2	96.3
% of demand satisfied who travelled by car	59.2	40.04	66.32	65.54	68.95	40.31	70.75	49.38	32.6
% of demand satisfied who travelled by foot	26.9	48.29	16.21	20.12	18.19	47.3	21.42	39.89	58.85
% of demand satisfied who travelled by public transport	13.9	11.67	17.47	14.34	12.86	12.39	7.83	10.73	8.55
Demand Retained	563011	8311	8042	14447	9850	4610	5324	14668	10574
Demand Retained -as a % of Satisfied Demand	95.3	59.8	39.9	60.2	56.5	41.8	42.8	59.6	65.4
Demand Exported	27547	5581	12123	9563	7570	6407	7115	9956	5604
Demand Exported -as a % of Satisfied Demand	4.7	40.2	60.1	39.8	43.5	58.2	57.2	40.4	34.6

- The report will now consider the level of Satisfied Demand achieved by London Borough of Hammersmith and Fulham residents, the throughput at the sites and whether the demand is met at swimming pools inside or outside the borough.

Commentary on Satisfied Demand

- The model estimates that the provision of swimming pools (both inside and outside the borough) satisfies 96% of the demand from Hammersmith and Fulham residents. This figure is significantly above the current average for the London boroughs (90.3%).

- The figure is also slightly higher than the 95.7% achieved by the current population. In number terms of the extra 1,685 visits per week in the peak period generated by the additional population size considered for the borough in 2037 (circa 28,000), the model is estimating that 1,648 of these visits can be met. In terms of where this additional demand is met, this is explored further in the Used Capacity section.

- The current provision unaltered and the demand from the predicted population in 2037 overlaid the model is indicating that the vast majority of residents of Hammersmith and Fulham who wish to swim are able to do so, except for residents in the far north of the borough (see section 7). This is reflective of the high number of swimming pools / sites considered and the ability of the residents to access commercial provision.

- The model also estimates that of the demand from Hammersmith and Fulham residents that is met (96%), 40% is derived from those travelling by car, 48% by those travelling on foot with the balance met by those travelling by public transport. The table below outlines how this compares to certain surrounding authorities:

Region / Local Authority	% of demand satisfied who travelled by car	% of demand satisfied who travelled by foot	% of demand satisfied who travelled by public transport
London	59.2	26.9	13.9
Hammersmith and Fulham	40	48	12
Brent	66	16	18
Ealing	65	20	15
Wandsworth	49	40	11
City of Westminster	32	59	9

- As can be seen from the table above, there are vast differences in terms of how the model calculates residents of different London boroughs have their swimming needs met.

- When the London Borough of Hammersmith and Fulham is compared against the London average, as a percentage, there are significantly more Hammersmith and Fulham residents having their swimming needs met by travelling to a swimming pool on foot. As expected the figure for Hammersmith and Fulham residents having their swimming needs met by travelling to a facility by car is significantly below the London average given the below average access to a car experienced in the borough and that for many residents a swimming pool is within their walking catchment.

- The next factor to consider in terms of swimming provision is whether Hammersmith and Fulham residents are having their swimming needs met at swimming pools inside the authority or in another authority. The model estimates that nearly 60% of demand from Hammersmith and Fulham residents that is met is achieved through swimming in pools located in the borough. This figure is comparable to the position in Ealing and Wandsworth, below the figure for the City of Westminster, but is significantly above the figures for Brent, Kensington and Chelsea and Richmond upon Thames.

- Table 4 above shows that the vast majority of Hammersmith and Fulham residents who wish to swim are able to and that most of this demand is met at pools located in the borough. This means that despite the low levels of car ownership experienced by the borough's residents, the high number of sites in Hammersmith and Fulham ensures that most residents can walk to a swimming pool should they wish to do so.

7 UNMET DEMAND

Table 5 - Unmet Demand	LONDON	Hammersmith & Fulham	Brent	Ealing	Hounslow	Kensington & Chelsea	Richmond upon Thames	Wandsworth	Westminster
Total number of visits in the peak, not currently being met	63414	586	3491	1974	1301	471	355	968	619
Unmet demand as a % of total demand	9.7	4	14.8	7.6	6.9	4.1	2.8	3.8	3.7
Equivalent in Water space (square metres) - with comfort factor	10452.81	96.54	575.5	325.31	214.41	77.61	58.46	159.5	101.99
% of Unmet Demand due to ;									
Lack of Capacity -	45.2	34.1	33.9	25.5	5.9	39.4	1.2	31.4	39.0
Outside Catchment -	54.8	65.9	66.1	74.5	94.1	60.6	98.8	68.6	61.0
Outside Catchment;	54.8	65.9	66.1	74.5	94.1	60.6	98.8	68.6	61.0
% Unmet demand who do not have access to a car	52.26	63.48	63.64	71.07	89.05	58.32	90.06	65.37	58.19
% of Unmet demand who have access to a car	2.51	2.37	2.48	3.41	5.03	2.23	8.79	3.23	2.84
Lack of Capacity;	45.2	34.1	33.9	25.5	5.9	39.4	1.2	31.4	39.0
% Unmet demand who do not have access to a car	37.8	32.7	30.0	23.4	5.4	37.6	1.0	29.1	36.8
% of Unmet demand who have access to a car	7.4	1.5	3.9	2.2	0.6	1.8	0.1	2.4	2.2

Commentary on Unmet Demand

- The model estimates that there is a relatively small amount of Unmet Demand generated by residents of Hammersmith and Fulham. The scale of the Unmet Demand is calculated to equate to circa 100 square metres of water space across the whole borough (with a comfort factor included). This figure equates to slightly less than two lanes of a 25 metre swimming pool.

- This figure is marginally higher than the level of unmet demand that is estimated to exist in 2014 as a result of the current population size. In number terms the model estimates that of the additional 1,685 visits demanded from the 2037 population only about 40 cannot be met at existing swimming pools either inside or outside the borough.

- The deficit of circa 100 square metres of water space across the whole borough is significantly smaller than for the majority of London boroughs where the average deficit in provision is calculated to be over 300 square metres of water.

- The amount of Unmet Demand is calculated from those Hammersmith and Fulham residents who wish to swim but are unable to do so due to either catchment or capacity issues. The model estimates that only four in every one hundred Hammersmith and Fulham residents who want to use a swimming pool are unable to.

- Now that the scale of Unmet Demand in Hammersmith and Fulham is understood it is important to consider why the Unmet Demand exists and where the greatest levels of Unmet Demand are located within Hammersmith and Fulham. The model considers that there are two reasons why Unmet Demand exists. The first is 'lack of capacity' which means that there is simply insufficient supply (both inside and outside the authority) to meet the demand from Hammersmith and Fulham residents. The second reason for Unmet Demand is that residents live outside the catchment of a swimming pool. The size of a catchment area is determined by an individual's own circumstances, particularly if they have access to a car.

- The model estimates that for Hammersmith and Fulham residents the reasons for Unmet Demand are split circa 34% due to insufficient capacity and circa 66% due to residents living outside the catchment of a swimming pool. Two of the public swimming pools (Latymer Upper School and Phoenix Fitness Centre and Janet Adegoke Swimming Pool) are not open for the whole peak period. Therefore additional capacity could be generated at these sites through opening the pools for the full peak period. This would help to address some of the unmet demand that exists in the areas around these swimming pools.

- The model shows that there is significant unprovision in the far north of the borough in Old Oak.

- As indicated above, the model suggests that the main reason for the Unmet Demand in Hammersmith and Fulham is that some of its residents who wish to swim are unable to do so because they live outside the catchment of a swimming pool. The overwhelming reason for this is caused by residents who do not have access to a car.

- That a significant proportion of the Unmet Demand results from residents living outside the catchment of a swimming pool is unsurprising when over 54% of Hammersmith and Fulham residents are considered not to have access to a car.

- Where the Unmet Demand is located is an important consideration to help inform where any new provision should be provided to have the greatest impact on meeting the identified need. For Hammersmith and Fulham there is Unmet Demand throughout the borough. However, the greatest area of Unmet Demand is in the north of the borough. This is shown in the Aggregated Unmet Demand map in Appendix 5. Here, there are no pools within 20 minutes walking distance. SportEngland is aware of the regeneration plans for the area. In spite of their being sufficient capacity across Hammersmith and Fulham's pools to meet needs resulting from growth in Hammersmith and Fulham, given the deficiency of access to provision in this area, the unmet demands identified for Ealing and Brent (which border Hammersmith and Fulham here) and the projected population, there is a need to consider the provision of swimming pool space here. Provision should be based on the 1sqm per 90 residents standard.

8 USED CAPACITY

Table 6 - Used Capacity	LONDON	Hammersmith & Fulham	Brent	Ealing	Hounslow	Kensington & Chelsea	Richmond upon Thames	Wandsworth	Westminster
Total number of visits used of current capacity	580523	16829	13775	24346	20998	9909	10331	22516	22074
% of overall capacity of pools used	79.7	59.9	93	76.8	65.9	76.8	56	78.6	65.7
% of visits made to pools by walkers	27.3	41.2	31	20	18.5	42	19.5	42.6	45.9
% of visits made to pools by road	72.7	58.8	69	80	81.5	58	80.5	57.4	54.1
Visits Imported;									
Number of visits imported	17512	8518	5733	9899	11147	5299	5008	7848	11500
As a % of used capacity	3	50.6	41.6	40.7	53.1	53.5	48.5	34.9	52.1
Visits Retained:									
Number of Visits retained	563011	8311	8042	14447	9850	4610	5324	14668	10574
As a % of used capacity	97	49.4	58.4	59.3	46.9	46.5	51.5	65.1	47.9

Commentary on Used Capacity

- In Hammersmith and Fulham the key point to note in regards to Used Capacity is that all of the public swimming pools, except Charing Cross Sports Club, are considered to be at 100% of capacity at peak times. A site at 100% of capacity is considered to be 'uncomfortably busy' which could affect the quality of the experience for the user of the facility. The pool at Charing Cross Sports Club is still considered to be very busy at 93% of capacity at peak times.

- That the public swimming pools in Hammersmith and Fulham are full demonstrates the level of demand from both Hammersmith and Fulham residents and residents of neighbouring authorities where in each case the level of supply cannot meet the level of demand.

- The model estimates that with the '2037 population' in the borough that the swimming pools would on average be at 59.9% of Used Capacity. This is slightly higher than the 57.7% estimated level of Used Capacity when the current population size is considered. The table below sets out where the additional capacity is met:

Name of facility	Public / Commercial Pool	% of Capacity Used – 2014 Population	% of Capacity Used – 2037 Population	Additional Visits Met (Peak Period) with Demand from 2037 Population size
CHARING CROSS SPORTS CLUB	Public	88%	93%	101 visits
DAVID LLOYD CLUB (FULHAM)	Commercial	30%	33%	61 visits
FULHAM FITNESS & WELLBEING CENTRE	Public	100%	100%	-
FULHAM POOLS	Public	100%	100%	-
HARBOUR CLUB (CHELSEA)	Commercial	24%	29%	206 visits
HURLINGHAM CLUB	Commercial	26%	30%	97 visits
LATYMER UPPER SCHOOL	Public	100%	100%	-
PHOENIX FITNESS CENTRE & JANET ADEGOKE SWIMMING POOL	Public	100%	100%	-
ST PAUL'S GIRL'S SCHOOL	Public	100%	100%	-
THE CHELSEA CLUB	Commercial	29%	32%	69 visits
THIRTY SEVEN DEGREES (OLYMPIA)	Commercial	37%	38%	11 visits
VIRGIN ACTIVE CLUB (FULHAM POOLS)	Commercial	30%	32%	61 visits
VIRGIN ACTIVE CLUB (HAMMERSMITH)	Commercial	37%	39%	23 visits

- The table above shows that as all but one of the public swimming pools are at 100% capacity from the demand existing in 2014 when the additional demand from the predicted population in 2037 is considered the only public pool that is able to cater for additional visits is the Charing Cross Sports Club. The model is indicating that this public pool would be able to cater for an additional 101 visits in the peak period.

- In 2014 all of the commercial swimming pools in Hammersmith and Fulham are estimated to have spare capacity. It is therefore not surprising that when the additional demand from the 2037 population is considered that the usage levels at the commercial pools increases. The model is suggesting that of the 1,685 extra visits demanded from the population in 2037, circa 530 of these visits can be met at existing commercial swimming pools in the borough.

- The above modelling shows the popularity of public pools. When delivering new pool space in the borough, the priority should be to ensure there is appropriate public access to new pool space to ensure that the needs of all ages and all incomes can be met.

- The model is indicating that of the 1,685 extra visits demanded by the borough's population in 2037, 629 of these visits can be met at swimming pools in the borough with the vast majority of these visits occurring at commercial sites. However, importantly, the model estimates that nearly 1,020 of the additional visits sought by the 2037 population can be met at swimming pools outside the borough. This infers that the vast majority of the additional demand generated by the predicted population growth in the borough in 2037 can be met, but that the majority of these visits would be met by existing facilities outside the borough.

- In terms of how users travel to the swimming pools in Hammersmith and Fulham, the model estimates that circa 59% travel by road with the balance travelling on foot.

- The final point to consider in this section is where the users come from who use the swimming pools in Hammersmith and Fulham. The model suggests that slightly more than 50% of visits to swimming pools in the borough originate from users from outside the authority with the highest numbers coming from Kensington and Chelsea and Wandsworth residents.

9 PERSONAL/RELATIVE SHARE

Table 7 - Relative Share	LONDON	Hammersmith & Fulham	Brent	Ealing	Hounslow	Kensington & Chelsea	Richmond upon Thames	Wandsworth	Westminster
Score - with 100 = Facilities Planning Model Total (England and also including adjoining Local Authorities in Scotland and Wales)	87	98	68	87	95	119	146	91	128
+/- from Facilities Planning Model Total (England and also including adjoining Local Authorities in Scotland and Wales)	-13	-2	-32	-13	-5	19	46	-9	28

- Note – this helps to show which areas have a better or worse share of facility provision. It takes into account the size and availability of facilities as well as travel modes. It helps to establish whether residents within a particular area have less or more share of provision than other areas when compared against a national average figure which is set at 100.

- This planning tool is similar to the 'facilities per 10,000 population', but also factors in facility capacity and travel modes to give a comparative estimate of provision in an equity way, i.e. how much share of facilities people have in comparison to each other. The figure is always given as a comparison to the national average, which is calculated at 100%.

Commentary on Relative Share

- The model is suggesting that Hammersmith and Fulham is only slightly below the national average for Relative Share of space of a swimming pool. This position is considered better than that experienced by residents of Brent, Ealing, Hounslow and Wandsworth, but inferior to the position in Kensington and Chelsea, Richmond upon Thames and the City of Westminster.

- The Relative Share maps in Appendix 6 illustrates that in the central and northern parts of the borough the 'relative share score' is below the national average whereas in the south of the borough it is slightly above the national average.

This ends the main report.

Appendix 1: Swimming Pools in the London Borough of Hammersmith & Fulham Included / Excluded

Facilities Included:

Name of facility	Type	AREA (square metres)	SITE YEAR BUILT	SITE YEAR REFURBISHED	PUBLIC / COMMERCIAL	HOURS in PEAK PERIOD	TOTAL WEEKLY COMMNTY HOURS AVAILABLE	FACILITY CAPACITY (visits per week – peak period
CHARING CROSS SPORTS CLUB	Main/General	250	1973		P	52	103	2,167
DAVID LLOYD CLUB (FULHAM)	Main/General	200	2002		C	52	110	1,837
DAVID LLOYD CLUB (FULHAM)	Learner/Teaching	12				52	110	
FULHAM FITNESS & WELLBEING CENTRE	Main/General	160	2000		P	52	102	1,387
FULHAM POOLS	Main/General	375	2002		P	51.5	105	3,880
FULHAM POOLS	Learner/Teaching	77				51.5	105	
HARBOUR CLUB (CHELSEA)	Main/General	250	2007		C	52	115	4,489
HARBOUR CLUB (CHELSEA)	Leisure Pool	168				52	115	
HARBOUR CLUB (CHELSEA)	Main/General	100				52	115	
HURLINGHAM CLUB	Main/General	300	1994		C	52	94	2,600
LATYMER UPPER SCHOOL	Main/General	300	1970		P	10	10	500
PHOENIX FITNESS CENTRE & JANET ADEGOKE SWIMMING POOL	Main/General	300	2006		P	48	90	2,776
PHOENIX FITNESS CENTRE & JANET ADEGOKE SWIMMING POOL	Learner/Teaching	96				23.5	26	
ST PAUL'S GIRL'S SCHOOL	Main/General	325	1976		P	19	19	1,029
THE CHELSEA CLUB	Main/General	250	2001		C	52	97	2,167
THIRTYSEVENDEGREES (OLYMPIA)	Main/General	200	2007	2012	C	52	102	1,733

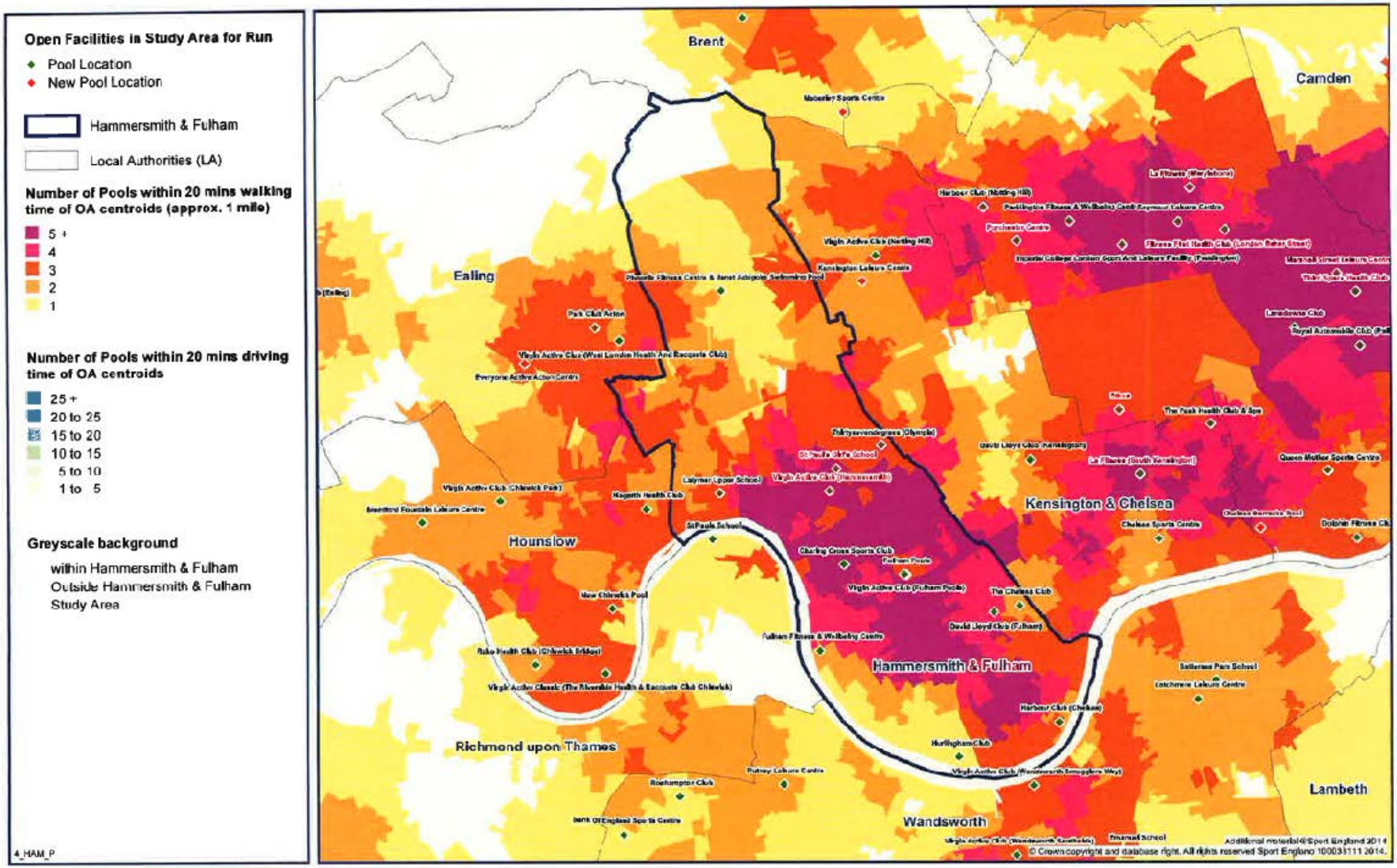
VIRGIN ACTIVE CLUB (FULHAM POOLS)	Main/General	250	2002		C	51.5	105	2,146
VIRGIN ACTIVE CLUB (HAMMERSMITH)	Main/General	160	1998	2007	C	51.5	111	1,373

Facilities Excluded

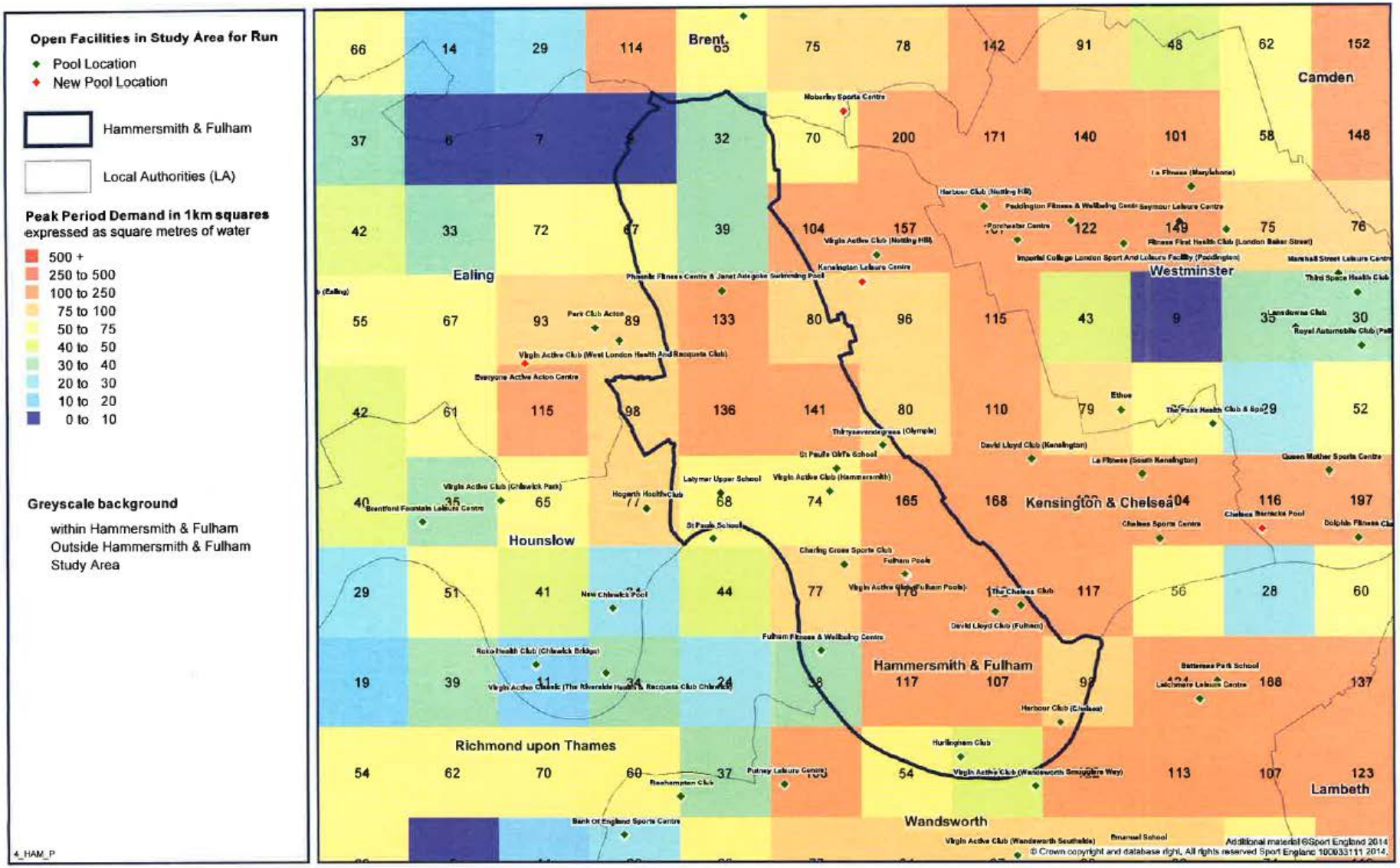
The audit excludes facilities that are deemed to be either for private use, too small or there is a lack of information, particularly relating to hours of use. The following facilities were deemed to fall under one or more of these categories and therefore excluded from the modelling:

Site	Reason
VIRGIN ACTIVE CLUB (CHELSEA)	Too small
BODYWORKS WEST AT LAMBTON PLACE	Too small
EMOTION LEISURE	Too small
AQUILLA HEALTH & FITNESS CENTRE	Too small
LONDON MARRIOTT HOTEL KENSINGTON	Too small
VIRGIN ACTIVE CLASSIC (THE KENSINGTON CLUB)	Too small
HOLLAND PARK SCHOOL	Private

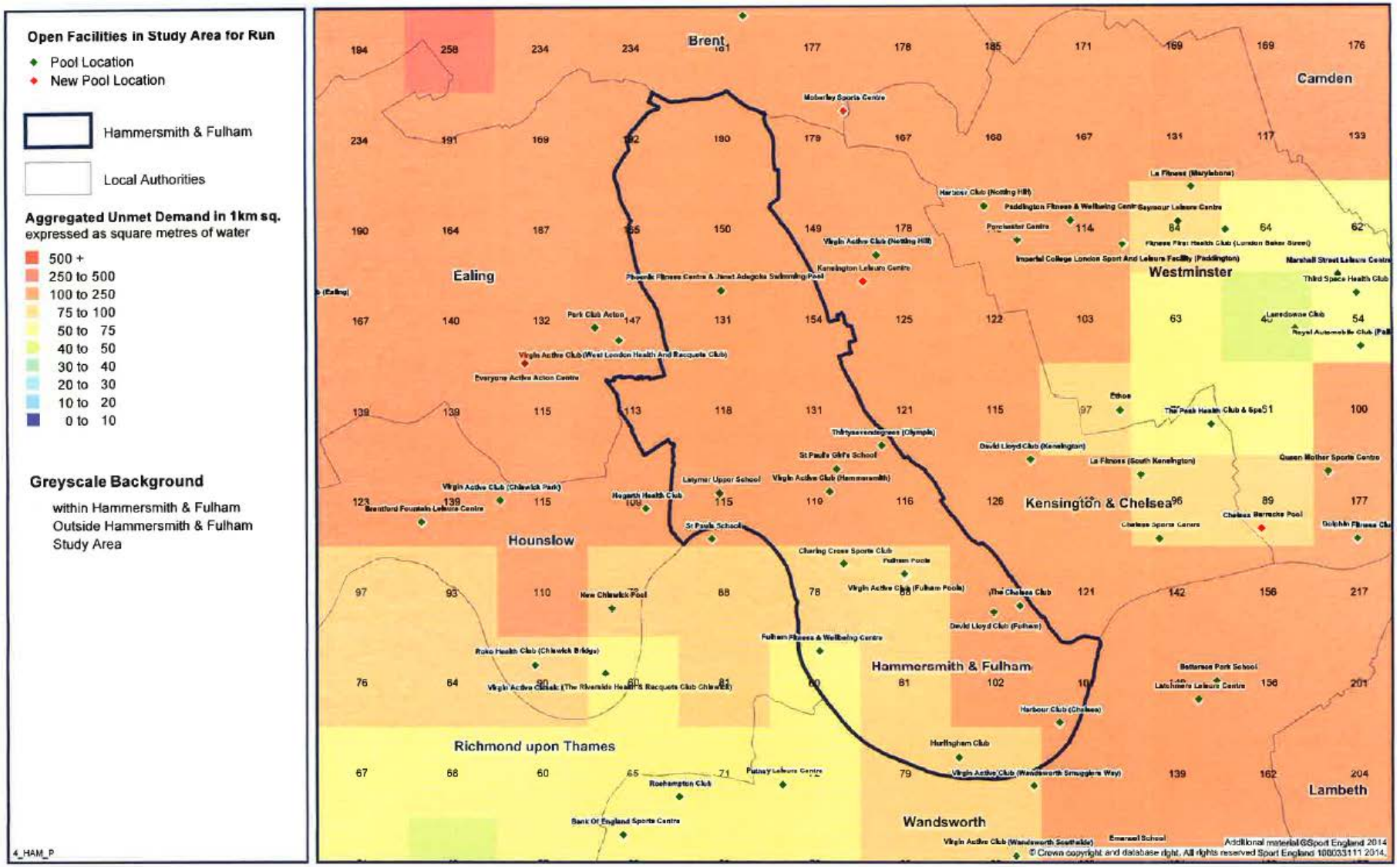
Appendix 2: Swimming Pools walking distance catchment map



Appendix 3: Swimming Pools Demand Map



Appendix 4: Swimming Pools Aggregated Unmet Demand Map



Appendix 5: Swimming Pools Relative Share Map