GENESIS Strategic Management Consultants

London Borough of Harrow

Provision for Swimming Report

Final Report January 2009

INTRODUCTION AND PROJECT BRIEF

1. The London Borough of Harrow (LBH) wishes to review the provision for swimming pools across the authority. LBH wish to assess the extent to which the supply of swimming pools is meeting current demand based on the current levels of population. LBH also wish to consider the impact of projected changes in swimming pool supply in Harrow and some of the surrounding boroughs. In addition LBH wish to consider what impact the projected changes in population, up to 2018, all have on the demand and supply for swimming pools across the authority.

2. This report presents the findings from an analysis of the supply and demand for swimming pools in Harrow and across the wider area of local authorities which border Harrow, so as to meet LBH's overall objectives from this study.

3. The report is based upon an analysis applying the Sport England facilities planning model to meet the LBH objectives.

4. The output from this swimming pool analysis and this report will be used by LBH as supporting evidence in the preparation of Harrow's Local Development Framework (LDF).

5. In order to provide this output and meet LBH's objectives requires undertaking a number of different pieces of analysis, so as to build up the picture of change. This is based on two 2 separate scenarios (known as runs). These runs are:

    - **Run 1** the baseline position of supply and demand for swimming in Harrow and the surrounding local authorities in 2008. This is based on the current levels of swimming participation and frequency, the 2008 population estimate and the current supply of swimming pools in Harrow and the surrounding local authorities. **The output from Run 1 provides the baseline position of the current supply and demand for swimming in 2008.**

    - **Run 2** is the projected demand for swimming in 2018, with the projected changes in population 2008 – 2018 also included. Plus the changes in the supply and location of swimming pools across the study area are included. In run 2, some 6 swimming pool sites included in run 1 are now excluded and 7 new or replacement swimming pools are included.

      Based on the projected changes, run 2 provides the strategic assessment of how well supply and demand for

swimming are in balance across Harrow in 2018 and at key locations.

6. The full study brief for the swimming fpm analysis together with the parameters for the study are set out in Appendix 1 to this report.

Framework For The Study

7. 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

8. The 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 swimming pool and inherently its attractiveness; other facilities within/on the site such as a fitness suite; personal and family choice; and reasons for swimming like for exercise or family activity.

9. Consequently, in determining the "Harrow 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 Harrow and some beyond. In particular to assess the impact of overlapping catchment areas of swimming pools around Harrow. The nearest swimming pool for some Harrow residents is located outside the authority (known as exported demand) and for some residents of neighbouring authorities their nearest swimming pool is inside Harrow (known as imported demand).

10. Taking account of all these import and export effects is done by establishing a study area which places Harrow at the heart of the study and assesses the import and export of demand into and out of Harrow and reflects the location, age, condition and content of all swimming pools.

11. The study area comprises Harrow and the 6 local authorities which border Harrow (plus the Watford Council area). A map of the study area is set out below

The Study Area

What Information Is Produced From This Study?

12. The information produced by this study analyses contains the findings on the supply and demand for swimming for the base year of 2008. Then the projected demand for swimming in 2018 based on projected changes in population between the two years; closure of some existing pools and opening of some new/upgraded pools by 2018.

13. This study and report sets out what is:

- the supply and demand for swimming within Harrow and makes comparisons with other authorities in the study area;
- the level of total demand for swimming in Harrow 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 Harrow, what is the scale of this unmet demand, (expressed in, for example, sq metres of water and how this level of unmet demand relates to the size of a 25metres x 4 lane swimming pool);
- how full the swimming pools are estimated to be and what is the level of used and unused swimming pool capacity;
- what is the level of demand for swimming pools from Harrow residents which is met (retained) at swimming pools located in Harrow;
- how much of Harrow's residents demand for swimming is exported to facilities in neighbouring authorities, where LBH residents live within the catchment area of a swimming pool in a neighbouring authority;
- how much demand is imported into Harrow from residents in neighbouring local authorities, who live within the catchment area of a swimming pool located in Harrow;

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

Definitions and terms

14. 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 is known as "visits per week in the weekly peak period". The weekly peak period is 52 hours per week and it is estimated that 63% of the total weekly swimming throughput occurs in these hours. To save endless repetition of this lengthy term it is expressed simply as visits, or, visits per week from now on in the report.

15. **Secondly,** there is what is known as a "comfort factor" which is applied to the assessment of demand for swimming. In essence, if swimming pools were full to their theoretical capacity, then there would simple not be the space to swim comfortably. In addition, there is a need to take account of people circulating around the pool and/or changing. To account for all these factors therefore the capacity of a swimming pool is reduced to 70% of its theoretical capacity and this is the level at which a pool is determined to be full. This 70% full level is referred to as the "comfort factor".

16. **Thirdly,** all existing indoor swimming pools of at least 20m in length or minimum 160m² (this is a 20m x 8m pool) and which are available for community use, for all or part of the weekly peak period, are included in this assessment. If there is an individual pool which is less than 160m, for example a learner pool but which is part of a larger complex of pools, then this is included. All outdoor pools and those indoor pools which have no access for community use are excluded.

EXECUTIVE SUMMARY FROM THE SWIMMING POOL ASSESSMENT

17. This is the Executive Summary report for swimming pools. It is presented by setting out and then answering the key headline questions which arise from the analysis of each of the two runs.

18. By taking this question and answer approach, it focuses on presenting the key findings from a particular run. It also tries to do this by way of a commentary and leaves the technical description of findings to the main report, which also contains the full findings.

What did Run 1 assess?

19. Run 1 sets the baseline position for what is the supply and demand for swimming across Harrow and the 6 other local authorities which border Harrow, plus Watford.

20. Run 1 is based on the current levels of swimming participation and frequency, the 2008 population estimate and the current supply of swimming pools in Harrow and the surrounding local authorities. Run 1 assumes closure of Northolt Swimarama for later replacement), excludes Grove Park School (Brent) for reasons of pool size and community access, and reflects the recent replacement of Watford Central Baths, with a new pool at the same site.

What is the position on the supply of swimming pools in Harrow in 2008 and how accessible are the pools?

21. In run 1 there are 8 swimming pool sites in Harrow. The capacity of the 8 Harrow sites is 2,639 sq metres of water. If this was all to be supplied as the standard 25metre x 4 lane swimming pools, this equates to just under 12. 59 swimming pools each of 25 metres x 4 lanes (Note: a 25m x 4 lane pool is 212 sq metres of water). In short, the average size of the swimming pools sites in Harrow is above the standard size of swimming pools and Harrow has a predominance of big pools.

22. The 8 Harrow sites represent some 11.4% of the total 58 sites/swimming pool capacity across the 8 authorities in the study area.

23. Ealing and Barnet have the highest number of pool sites and capacity in the study area. Both have 11 swimming pool sites and this represents some 20.2% of the total swimming pool capacity in each authority across the study area. Watford has only 3 sites which is some 7.1% of the swimming pool capacity in the study area.

24. The most important catchment area in terms of accessibility to swimming pools in Harrow is the 20 minute/1 mile walk to catchment area. This is because ALL the population in the Harrow area has access to at least 2 swimming pool sites based on the 20 minute drive time catchment area. So there is good accessibility based on the drive to catchment and levels of car access/ownership in Harrow.

25. In Harrow, it is estimated that some 16.8% of all visits to swimming pools are by walking. The areas of the borough (see Map 1 attached separately) which are outside the 20 minute/1 mile walk to catchment area of any swimming pool are the areas to the NE and E of Hatch End extending across to the west of the Aspire and Canons pools.

26. All of the Harrow pools, based on the 20 minute walk to catchment area are very much contained to Harrow and do not extensively overlap the borders of neighbouring authorities. The exception to this is Heathfield pool, which is right on the Harrow/Hillingdon border with 50% of its catchment extending into Hillingdon.

27. In terms of the 20 minute drive time catchment area of pools, the analysis is identifying that all of the Harrow population have access to 2 or more

swimming pools. In fact ALL of the population, across the whole study area, have access to 2 or more swimming pools based on this 20 minute drive time catchment area.

28. If accessibility to swimming pools based on the 20 minute drive time catchment is a suitable measure of accessibility for LBH, then there are no strategic planning, or, facility provision of swimming pools issues to consider. In short, there is an excellent location and coverage of swimming pools across the complete study area. By way of context it is estimated that around 78.4% of all visits to swimming pools in Harrow are by car.

What is the overall picture on supply and demand for swimming in Harrow in 2008?

29. In 2008 total capacity for swimming in Harrow at its 8 swimming pool sites is 15,508 visits, whilst total demand is 12,674 visits.

30. So total capacity for swimming in Harrow in 2008, is estimated to exceed total demand by some 2,834 visits per week. Put another way, total demand for swimming in Harrow in 2008 represents some 81.7% of total swimming pool capacity.

How much of this demand can be satisfied?

31. The model estimates that of the total demand of 12,674 visits, some 12,195 visits is satisfied demand, so satisfied demand is 96.2% of total demand. This is a very very high level of satisfied demand and is reporting that some 96% of the total Harrow demand for swimming can be met and is located within the catchment area of a swimming pool.

Is there any unmet demand for swimming in Harrow in 2008?

32. Unmet demand for swimming pools in Harrow is estimated to be 479 visits per week, or, put another way some 3.8% of the total demand.

33. To put his unmet demand into context, 479 visits equates to the equivalent of providing around 59 sq metres of water (a 25 metres x 4 lane swimming pool is 212 sq metres of water). (Note: it might appear contradictory to say there is unmet demand, when total supply is greater than total demand in Harrow. Some demand is located outside the catchment area of a swimming pool and, as already reported, is outside the 20 minute/1 mile walk to catchment area. If there is demand for swimming and it is located outside the catchment area of a swimming pool then this is termed as unmet demand).

34. However, it is important to reiterate that the total level of unmet demand for swimming in the base year of 2008, across Harrow, is estimated to be only 59 sq metres of water and, also to repeat, a 25 metre x 4 lane swimming pool is 212 sq metres of water. So it is not a high level of unmet demand.

How do people travel to Harrow's swimming pools ?

35. As already reported accessibility to swimming pools is of increasing strategic, locational, environmental and development planning importance to local authorities – in short to increase access to public community facilities.

36. It is estimated that around 83.2% of the visits to pools in Harrow are made by road. With 78% made by car and 5% made by public transport. The public transport mode of travel is a low in comparison to the England national average, of around 10% of all visits to pools by public transport.

37. The car borne percentage at 78.4% is also a bit higher in Harrow than the national average of around 73% of all trips to pools by car.

38. It is estimated that some17% of all visits to swimming pools in Harrow are made on foot.

39. Some 21.6% of all visits to swimming pools are by a combination of "on foot", or, by public transport.

40. The Harrow travel patterns are in line with the averages for the study area which are: by car 77%, by public transport 7% and on foot 17%.

How much of the demand for swimming in Harrow from Harrow residents is retained in the borough?

41. Harrow retains only some 2,918 visits, which is 25% of satisfied demand from Harrow residents at Harrow's pools.

Why is the level of retained demand so low ?

42. This is because:

- there is extensive choice and accessibility to some 58 swimming pools across the whole study area.

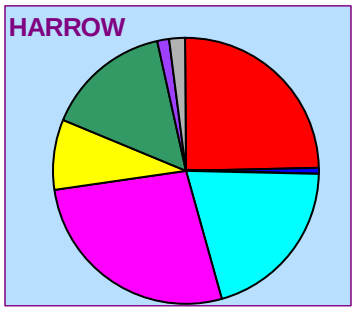
- Based on the 20 minute drive time catchment area then ALL of the population ACROSS the whole study area have access to 2 or more swimming pools. There is extensive overlap of the catchment areas and a very high choice of pools within this drive time catchment area definition.

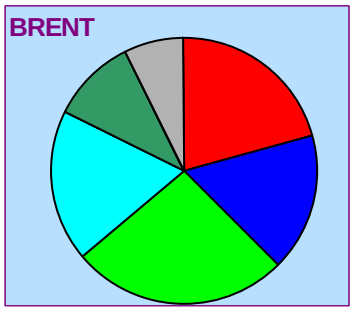
- Across the study area it is estimated that some 77% of all visits to swimming pools are by car.

43. By way of illustrating this point further, there are 3 pie charts below which set out the level of retained and exported demand for Harrow, Brent and

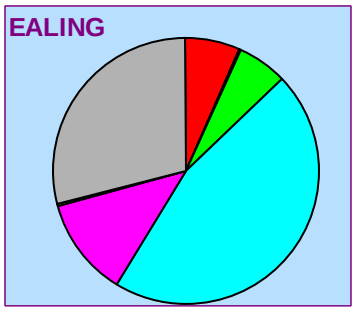
Ealing together with a map of the study area. These pie charts illustrate that the Harrow pattern is repeated in these other two boroughs.

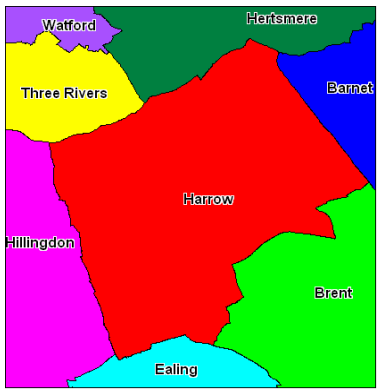
Chart 1: Harrow, Brent and Ealing , Retained Demand and Export of Swimming Demand





Study Area





How much of Harrow's demand is exported and where to ?

44. Harrow exports some 1% (112 visits) of satisfied demand to Barnet, 20% (2,,443 visits) to Ealing, 27% (3,291visits) to Hillingdon, 8% (1,029 visits) are exported to Three Rivers, 16% (1,915 visits) are exported to Hertsmere, 1% (119 visits) to Watford and others accounts for 2% (246 visits)..

How much demand is imported into Harrow and where does it come from?

45. Of the demand which is imported into Harrow from residents in neighbouring authorities and is satisfied at Harrow's pools, some 6% (463 visits) of satisfied demand is from Barnet, a very high 40% (3,112 visits) of the satisfied demand at Harrow's pools is estimated to be from Brent and some 15% (1,180 visits) are imported from Ealing. The reminder is retained demand by Harrow.

46. In essence, Harrow is importing a considerable amount of demand from residents in neighbouring authorities. This is because of choice and accessibility to a high number of pools. To repeat, in all local authorities across the whole study area, all the population in the 20 minutes drive time catchment area have access to 2 or more swimming pools.

How full are Harrow's pools in comparison with the other authorities?

47. The model estimates that around 50.2% of the total capacity of all the pools in Harrow is currently being used at peak times. This is some 20% below the "pools full level" of 70% (based on the comfort factor as described in paragraph 15).

48. Across the study area the average level of pool usage is 63.1%, Harrow is therefore well below the study area average. The highest level of pool usage is estimated to be in Brent at 74.9% and the lowest is at Three Rivers at 60%. The estimated pools usage level in each of the local authorities is :

- Barnet 72%
- Brent 74.9%
- Ealing 59.1%
- Hillingdon 60.3%
- Three Rivers 60%
- Hertsmere 64.2%
- Watford 67.3%

Given this overall finding, that in 2008 the Harrow pools are estimated to have considerable spare capacity, does this mean there is an opportunity to rationalise swimming pool provision?

49. Not necessarily because **Run1 is providing the baseline position** for supply and demand for swimming in 2008 – based on the current supply of swimming pools (with 3 changes but none in Harrow itself) and the demand for swimming.

50. The answer to the question posed, is best assessed by considering the changes in demand and supply for swimming pools set by run 2. This is because this is assessing the impact of population change between 2008 – 2018 and extensive changes in the existing swimming pool supply of new or replacement pools in Harrow and across the study area.

RUN 2

What did Run 2 assess and what are the findings?

51. The major changes to assess between runs 1 and 2 are the impacts of

- the impact of the projected change in the population between 2008 and 2018 and
- the projected closures of existing pools, plus a combination of replacement pools on the same site and new swimming pools.

What impact does the change in population in Harrow between 2008 – 2018 have

52. The estimated total population in Harrow in 2008 was 215,350 people. By 2018 this is estimated to have increased to 215,850 people. **There is a projected increase in Harrow of only 500 people between 2008 and 2018.** Harrow had 13.1% of the total population across the study area in run 1 and by 2018 it is projected to have declined to 12.5%.

53. Across the study area the population is projected to increase from 1,641,150 people in 2008 to 1,726,000 people by 2018. There is a projected increase across the study area of 84,850 people, or, put another way a projected 5.1% increase between 2008 and 2018.

What impacts does the change in the number of swimming pools and their locations have on accessibility in run 2?

54. The changes in the number and location of swimming pools in run 2 does NOT change the finding from run 1 that, based on the 20 minute drive time catchment area, there is universal geographical coverage across the study area. All the population in every local authority have access to 2+ swimming pools based on this drive time catchment definition.

What differences are created in accessibility by the new Harrow Leisure centre and Hatch End swimming pools?

55. There are no accessibility impacts because the new/replacement pools at Hatch End and the Harrow Leisure Centre pool are on the same sites and so catchment area/accessibility is unaffected. As in run 1 the areas to the NE and E of the Hatch End pool up to the Aspire and Canons pools catchment area remain outside the catchment area of any swimming pool based on the 20 minute/1 mile walk to catchment area.

56. Also and as in run 1, if accessibility to swimming pools, based on the 20 minute drive time is a suitable measure of accessibility for LBH, then there are NO strategic planning, or, facility provision of swimming pools issues to consider.

57. By way of context, it is estimated that in run 2, some 77.8% of all visits to swimming pools are made by car. In run 1 the estimate was 78.4%.

What impacts do the new swimming pools in the surrounding boroughs have on Harrow?

58. The 3 new swimming pools in Hillingdon – Botwell Green, Harefield Academy and the 50m pool (no name) do not extend into Harrow based on the 20 minute/1 mile walk to catchment area for these pools and so do not have an impact. However, they do have a significant impact based on the 20 minute drive time catchment area and this is reported on later, under the "How full are the Pools" heading and the import/export of swimming demand.

59. In run 2 it is estimated that some 17.6% of all visits to swimming pools in Harrow are on foot. In run1 the percentage was 16.8%.

What is the overall picture on supply and demand for swimming in Harrow in 2018 and how does this compare with 2008?

60. In Harrow in run 2 there is a decrease in swimming pool capacity from 15,508 visits in run 1 to 5,159 visits in run 2. The reason for the decrease is whilst the new Hatch End swimming pool is increased to 325 sq metres, up from 230 sq metres in run 1; the new Harrow Leisure Centre is 565 sq metres of water, down from 752 sq metres of water in the existing centre.

61. In run 2 there is also a decrease in total demand for swimming from 12,674 visits in run 1 to12, 561 visits in run 2. The reason for the reduction in total demand is because the Harrow population only increases by 500 people between runs 1 and 2. Also the age structure of the total Harrow population will be changing between 2008 – 2018. It could be that in 2018 as compared with 2008 there are less people in the main age group for swimming which is 12 – 39 for both sexes - hence a reduction in total demand.

How much of the total demand is satisfied demand in 2018?

62. Satisfied demand in 2018 represents some 96.5% of total demand, which is virtually unchanged from run 1 at 96.2%. This is a very very high level of satisfied demand and is reporting that some 96% of the total Harrow demand for swimming can be met and is located within the catchment area of a swimming pool.

Is there any unmet demand for swimming in Harrow in 2018?

63. Unmet demand in 2018 is estimated to be 435 visits, down by some 44 visits on the run 1 figure of 479 visits per week. Unmet demand in 2018 is some 3.5% of total demand.

64. Unmet demand of 435 visits equates to around 54 sq metres of water (a 25 metres x 4 lane swimming pool is 212 sq metres of water).

65. As in run 1 and, as reported earlier under the accessibility findings, some demand is located outside the catchment area of the 20 minute/1 mile walk to catchment area of a swimming pool and is defined as unmet. The

areas are to the NE and E of the Hatch End pool up to the Aspire and Canons pools catchment area.

66. However to reiterate, the total levels of unmet demand across the whole borough in run 2 is only 54 sq metres of water and is not therefore significant.

In run 2 there are lots of changes in swimming pool supply across the study area, with 3 more pools than in run 1 excluded, or, redeveloped on the same site. Also, there is the inclusion of 6 new pools or redevelopment of existing pools on the same site.

What are the impacts of all these changes in terms of how much of the demand for swimming in Harrow from Harrow residents is retained in the borough?

67. This is the biggest finding under run 2 and the biggest shift from run 1. As set out there is a very significant shift in pool supply between runs 1 and 2. The total number of sites across the study area increases from 58 sites in 2008, to 61 sites in 2018, with 9 changes in total.

68. In effect, this scale of change is causing a big re-distribution of swimming demand across the whole study area and changes in retained, imported and exported demand – most notably in Harrow.

So what is the level of retained demand for swimming in Harrow from Harrow residents in 2018?

69. The level of retained demand for swimming from Harrow residents at Harrow's pools in 2018 is 5,277 visits, some 43% of satisfied demand. In run 1 it was only 2,918 visits, which was 25% of satisfied demand.

70. In part, the reason for the big increase is because of the increase in size of the new Hatch End pool but the much more significant reason is because of the scale of changes in the swimming pool supply in the surrounding boroughs. This scale of change is causing the whole pattern of supply and location to change – across the whole study area.

71. As reported earlier ALL residents in the whole study area have access to 2 or more swimming pools based on the 20 minute DRIVE time catchment area.

72. In run 2 there are 9 changes in swimming pool supply and total supply increases from 135,622 visits in run 1, to 152, 095 visits in run 2, this is a 12.1% increase in swimming pool supply between 2008 – 2018.

73. Given this scale of change and increase in supply it is going to create a major re-distribution of where demand goes – across the study area and this is leading to ALL boroughs retaining more of their own demand at their

own pools. At Harrow's pools in 2018, some 43% of Harrow resident's satisfied demand is retained. In run 1 it was only 25% of satisfied demand retained at Harrow's pools.

What are the changes in the amount of Harrow's demand for swimming which is exported in 2018 compared with 2008 and where does it go to?

74. More demand is being exported to some boroughs, notably Ealing and less to others, notably Hillingdon. In 2018, some 24 % (2,881 visits) of Harrow's demand is exported to Ealing, in 2008, it was 20%.

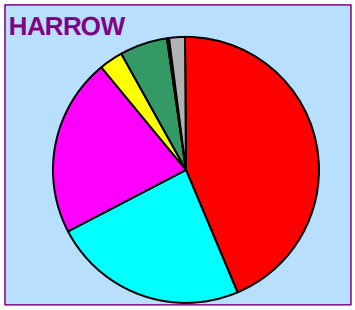
75. Some 22% (2,655 visits) are exported to Hillingdon in 2018 and in 2008 it was 27% 3,291visits). Some 3% (333 visits) are exported to Three Rivers in 2018, whilst in 2008 it was 8% (1,029 visits).

76. Some 6% (703 visits) are exported to Hertsmere in 2018 and in 2008 it was 1,915 visits.

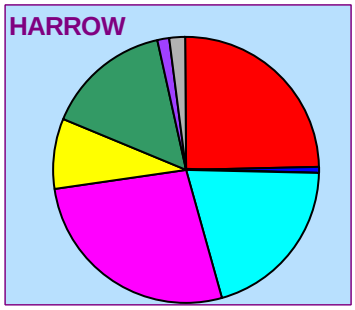
77. The pie chart below illustrates the Harrow satisfied demand for swimming retained at Harrow's swimming pools in 2018 and the amount exported to other authorities. The equivalent pie chart for run 1 is alongside and the study map is also set out.

Harrow, Retained Demand and Export of Swimming Demand from Harrow

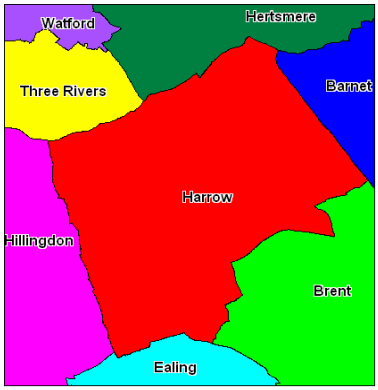
Run 2



Run 1



Study Area



How much swimming demand is imported into Harrow's pools in 2018 compared with 2008 and where does it come from ?

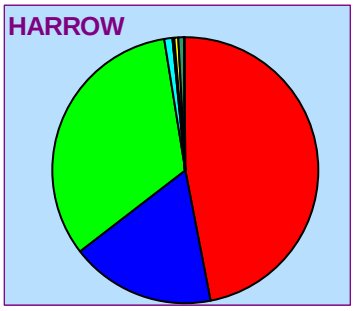
78. As with export of demand, there are some big shifts in imported demand which is met at Harrow's pools in 2018, notably from Barnet and Brent. In 2018, some 18% (1,971 visits) are imported from Barnet and in 2008 it is 6% (463 visits), so an increase of 12% between the two years.

79. Some 33%, (3,740 visits) are imported from Brent and in 2008, it was 40% (3,112 visits) so a reduction of 7%.

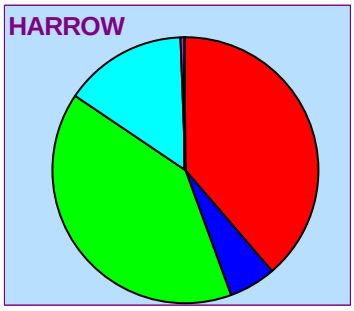
80. Again, set out below is a pie chart for both 2018 and 2008, illustrating the demand for swimming imported into Harrow from residents in neighbouring boroughs who live within the catchment area of a swimming pool located in Harrow.

Import of Swimming Demand into Harrow

Run 2



Run 1



Study Area

So after all these changes in swimming pool supply and location in 2018, how full are Harrow's pools in comparison with the other authorities?

81. This is the other significant finding from run 2 and again it reflects the scale of the changes in swimming pools supply between 2008 and 2018.

82. It is estimated that in 2018 around 74.3% of the total capacity of all the pools in Harrow will be used in run 2. This is a considerable increase on the run 1 figure for used capacity of 50.2%. In run 2, the pools are estimated to be above the "pools full level" of 70% of their total capacity based on the comfort factor, explained in paragraph 15 of this report).

83. The reasons for the significant increase in pool usage in Harrow is a combination of factors:

- the total NET swimming pool capacity across Harrow has been reduced between runs 1 and 2 by a new and smaller Harrow Leisure Centre swimming pool, it is down from 752 sq metres of water in run 1 to 565 sq metres of water in run 2, (although the new Hatch End pool increases by a net 95 sq metres of water).These changes increase the level of used capacity at the Harrow swimming pool sites.

- As reported there are significant changes in the swimming pool supply in run 2. In effect, of the total 61 swimming pool sites in 2018 there are changes at 9 swimming pool sites, either closures of existing or opening of new pools. Whilst the Harrow swimming pool locations remain unchanged between runs 1 and 2 this is not the case in the other boroughs, where there are locational changes.

- In short, this magnitude of change is going to lead to a very big shift in the pattern of swimming pool supply and where the demand is satisfied. This appears to have most impact in

Harrow which has the second highest level of estimated usage at 74.3% across the study area. (Brent highest at 77.6%).

So how full are the swimming pools estimated to be in the other boroughs?

84. Across the study area the average level of pool usage in 2018 is 66.2%, this is up from 63.1% in 2008 and now getting close to the pools full level of 70%.

85. The highest level of pool usage in run 2 is estimated to be in Brent at 77.6%, it was 74.9% in Brent in run 1.

86. The estimated pools usage level in 2018 in each of the other authorities with the 2008 figure in brackets is:

- Barnet 68.6% (72%)
- Brent 77.6% (74.9%)
- Ealing 58.8% (59.1%)
- Hillingdon 68.7% (60.3%)
- Three Rivers 53.2% (60%)
- Hertsmere 59.4% (64.2%)
- Watford 73.6% (67.3%)

So after all these changes it looks as if the Harrow swimming pools are going to be full in 2018 and, if so, does this mean there is a need for more swimming pools?

87. The answer to this question appears to be yes – based on the parameters set for run 2 and the whole scale changes in swimming pools supply between runs 1 and 2 – across the study area. However, it is important to also assess whether ALL THE projected changes in supply in the neighbouring boroughs will actually happen. If this not the case, then some smaller scale of change is going to reduce the level of used capacity at Harrow's pools.

88. If it is the case that the projected changes in swimming pool supply will happen then and assuming NO projected increase in swimming participation them it does look as if Harrow does need to increase its swimming pool capacity but perhaps NOT through additional NEW provision of pools.

89. Some other options are:

- Increase the size of the projected new Harrow Leisure Centre pool back to the existing 750 sq metres of water not the proposed 565 sq metres.

- Increase access to any existing school based swimming pool where currently there is not full public access.

- As a long shot try to negotiate some public access on a pay as you swim basis to any new commercial sector swimming pool provision.

90. The full set of findings from both runs 1 and 2 which have been summarised here in this question and answer Executive Summary, are now set out.

RUN 1: HARROW SWIMMING POOLS ASSESSMENT:

1) CURRENT SUPPLY OF SWIMMING POOLS IN 2008 AND POOLS WEIGHTED BY AGE AND CONDITION

2) EXCLUDE: NORTHOLT SWIMARAMA; GROVE PARK SCHOOL; WATFORD CENTRAL BATHS

3) INCLUDE: REPLACEMENT OF WATFORD CENTRAL BATHS WITH NEW POOL ON THE SAME SITE

4) BASED ON 2008 POPULATION ESTIMATES

5) CURRENT SWIMMING PARTICIPATION AND FREQUENCY RATES

91. The key findings from run 1 with a commentary are:

Population levels and total demand

- The estimated total population in Harrow in 2008 is 215,350 people and the total estimated demand for swimming is 12,650 visits.
- Harrow has 13.1% of the total population across the study area.
- Barnet has the largest percentage of the population in the study area at 19.8%.
- The population totals in each authority in the study area is set out in Table 1 below.

Table 1: 2008 Population in Each Local Authority in the Study Area

District	Population
Harrow	**215,350**
Barnet	326,350
Brent	277,550
Ealing	314,200

Hillingdon	243,750
Three Rivers	87,700
Hertsmere	96,100
Watford	80,100
STUDY AREA	**1,641,150**

Location and Catchment Areas of Swimming Pools

- **Map 1** (attached separately) shows the location of the swimming pools in Harrow in run 1, for the 1 mile/20 minute walk to catchment area. The reason for selecting the 20 minute/1mile walk to catchment area are:

    - because it is the more sensitive of the catchment areas. As will be shown later in the report, the 20 minute drive time catchment area provides almost universal geographical coverage based on this catchment and the population which has access to a car (also set out later for Harrow).

    - Accessibility to sports and other community facilities is becoming more important for reasons of strategic and locational planning to meet planning policies of increasing accessibility; decreasing car borne travel; measures of accessibility to sports facilities under Local Authority performance measures by Central Government and; health objectives of encouraging amore active population.

    - In Harrow it is estimated that some 16.8% of all visits to swimming pools are by walking. So measuring accessibility to swimming pools, based on the 20 minute/1 mile walk to catchment area is important.

- The striking features to note from the 20 minute/I mile walk to catchment map are:

    - There is extensive coverage of the borough based on this catchment with very few areas of the borough which is outside the catchment area of any swimming pool. The exceptions being the area to the NE and E of the Hatch End pool up to the Aspire and Canons pools catchment area.

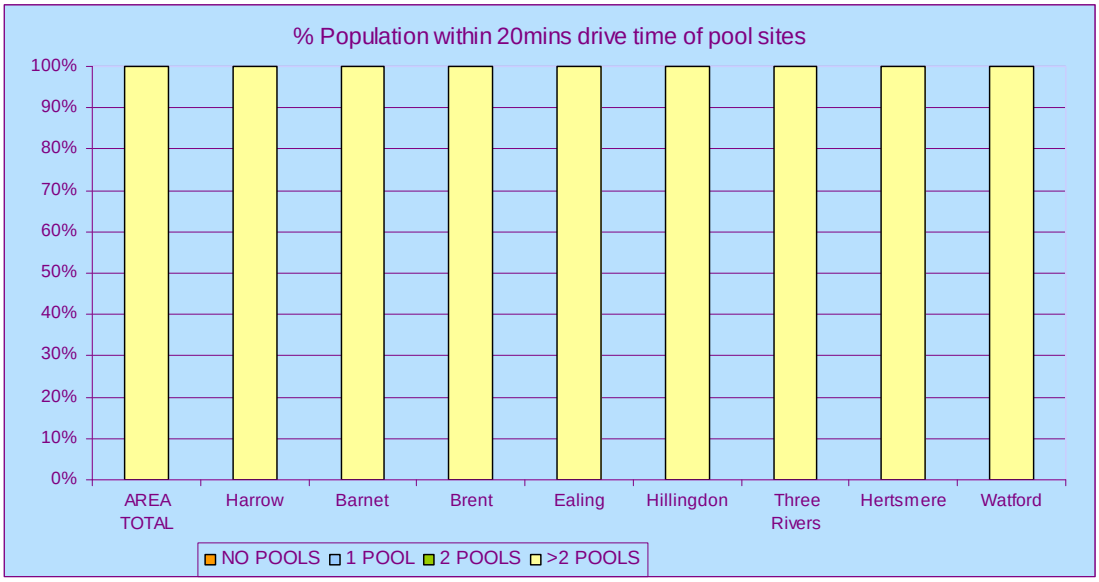
    - All of the Harrow pools, based on the 20 minute walk to catchment area are self contained to Harrow and do not extensively overlaps the borders of neighbouring authorities. The exceptions to this are Heathfield pool, which is right on the Harrow/Hillingdon border with 50% of its catchment extending into Hillingdon.

- In terms of accessibility to swimming pools the analysis is identifying that **all of the Harrow population have access to 2 or more swimming pools based on the 20 minute drive time to a swimming pool. In fact all of the population across the whole study area have access to 2 or more swimming pools based on this 20 minute drive time catchment area.** This is set out in Table 2 below.

  This is the highest level of accessibility to swimming pools by the car borne catchment area possible. If accessibility to swimming pools be 20 minute drive time is a suitable measure of accessibility for LBH, then there is no strategic planning or facility provision of swimming pools issues to consider. In short, there is an excellent location and coverage of swimming pools across the complete study area.

  By way of context it is estimated that around 78.4% of all visits to swimming pools in Harrow are by car.

Table 2: Percentage of the Study Area Population by Local Authority with Access to a Swimming Pool Based on the 20 Minute Drive Time Catchment Area of a Swimming Pool



- However it is important to also consider the levels of accessibility to swimming pools based on the 20 minute/1 mile walk to catchment area of swimming pools, before concluding that accessibility to swimming pools in Harrow in run 1 is not an issue.

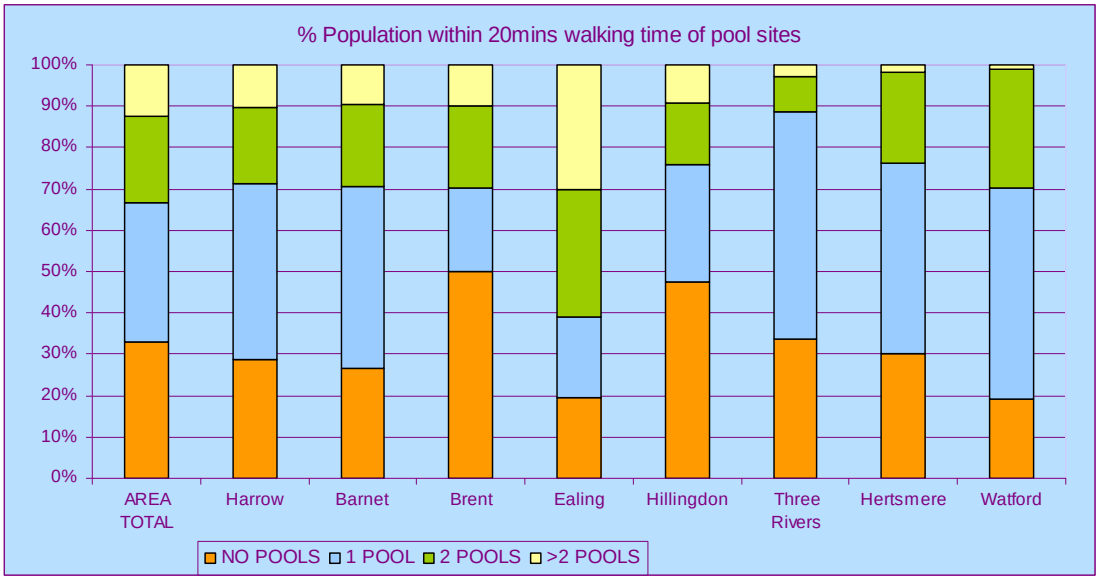
- By this catchment area definition the analysis shows that just under **30% of the Harrow population do not have access to**

any swimming pool and around **40% of the Harrow population have access to one swimming pool** and around **18% of the population have access to two swimming pools** with around **10% having access to two or more swimming pools.** Harrow is broadly in line with the average for the study area.

- Brent has the lowest level of accessibility based on the 20 minute/1 mile walk to catchment area, with around 50% of the Brent population living outside the 20 minute/1 mile walk to catchment area of any swimming pool. Ealing has the highest level of accessibility across the study area.

  This is all illustrated in Table 3 below.

Table 3: Percentage of the Study Area Population by Local Authority with Access to a Swimming Pool Based on the 20 Minute/1 Mile Walk To Catchment Area of a Swimming Pool



- Based on **accessibility to swimming pools on foot** then there is a **significant percentage of the Harrow population (30%) without access to any pool and around 40% who only have access to one swimming pool**. It is a matter for LBH's sports and planning polices, as to whether this level of accessibility to public services is of significance, in meeting Harrow's strategic planning objectives and how it relates to the CPA measures of accessibility to sports facilities.

- In terms of this study, the significance of these findings are considered further under the travel patterns to swimming pools and what percentage of swimming demand is on foot and how much by car. A high travel pattern to swimming pools on foot means the accessibility topic is of significant importance.

Location of Swimming Pools with Overlapping Catchment Areas

- Based on the Number of Accessible Pools Map 2 (attached separately) there is extensive overlap of pools in the central/south spine of the borough. Within the 20 minute/1 mile walk to catchment area of Harrow Leisure Centre, Golds Gym, Harrow School and John Lyon School, there is a minimum of the catchment area of 2 pools overlapping and in some areas it is the catchment area of 3 pools overlapping.

Number of Swimming Pool Sites and Total Capacity

- In run 1 there are 8 **swimming pool sites** in **Harrow** These 8 sites **have a total capacity (or supply) of 15,508 visits per week,** available for community use for all or part of the weekly peak period.

- The capacity of the 8 Harrow sites **is 1,909 sq metres of water.** Harrow has **8 of the total 58 swimming pool sites** across the 8 authorities in the study area. The **8 Harrow sites represent some 11.4% of the total swimming pool capacity** across the 8 authorities in the study area

- **Ealing and Barnet have** the highest number of pool sites and capacity in the study area. Both have **11 swimming pool sites** and this **represents some 20.2% of the total swimming pool capacity in each authority across the study area**. **Brent and Watford** have the **lowest** with **3 sites** which is some **6.1% of the swimming pool capacity in Brent and 7.1% in Watford.**

Capacity /Satisfied demand / Unmet demand

- **Total capacity for swimming in Harrow** at its 8 swimming pool sites **is 15,508 visits,** whilst **total demand is 12,674 visits**. So **total capacity for swimming in Harrow in 2008 is estimated to exceed total demand by some 2,834 visits per week.** Put another way **total demand for swimming in Harrow in 2008 r**epresents some **81.7% of total swimming pool capacity.**

  A point to note about the comparison of supply and demand is that total demand is some 81.7% of total capacity. This is NOT saying the pools are estimated to be full (pools are determined to be full when they reach around 70% of their capacity) because the impact of export and import of swimming demand has not yet been reported and this will also determine how full the pools are.

  It is saying that the Harrow finding, is that the total capacity for swimming in Harrow is greater than the total demand for swimming by Harrow residents by some 2,834 visits per week.

- The model estimates that of **the total demand of 12,674 visits, some 12,195 visits are satisfied demand. So satisfied demand represents some 96.2% of total demand.** This is a very very high level of satisfied demand and is reporting that some 96% of the total Harrow demand for swimming can be met and is located within the catchment area of a swimming pool.

- **Unmet demand** for swimming pools in Harrow is estimated to be **479 visits** per week, or, put another way **some 3.8% of the total demand for swimming by Harrow residents.** To put his unmet demand into context, **479 visits equates to the equivalent of providing around 59 sq metres of water (**a 25 metres x 4 lane swimming pool is 212 sq metres of water).

  Note: it might appear contradictory to say there is unmet demand when total supply is greater than total demand in Harrow. There are two reasons for there being unmet demand. (1) is because some demand is located outside the catchment area of a swimming pool and, as already reported, is outside the 20 minute/1 mile walk to catchment area of a swimming pool. If there is demand for swimming and it is located outside the catchment area of a swimming pool then this is termed as unmet demand. (2) if the demand for swimming is greater than supply in any one area and the pools within the catchment area of that location cannot absorb the total demand, then some demand is unmet.

- The locations of unmet demand and the amount of unmet demand are illustrated in **Map 3** "Aggregated Unmet Demand" run 1 (attached separately) which shows the in 1km grid squares the amount of unmet demand in that area expressed in terms of sq metres of water. The squares with the highest values of unmet demand in Harrow are to the immediate east of the John Lyon swimming pool.

- However, it is important to reiterate that the total level of unmet demand for swimming in the base year of 2008 across Harrow is estimated to be 59 sq metres of water and, also to repeat, a 25 metre x 4 lane swimming pool is 212 sq metres of water. So it is not a high level of unmet demand.

Pool usage (how full are the swimming pools?)

- The model estimates that around **50.2%** of the total **capacity** of **all the pools** in Harrow is currently being **used at peak times.**

  (Note; There is what is known as a "comfort factor" which is applied to the assessment of demand for swimming. In essence, if swimming pools are full to their theoretical capacity of 100% then there would simply not be the space to swim. Therefore the capacity of a swimming pool is reduced to 70% of its theoretical capacity and this is the level at which a pool is determined to be full. This 70% full

level is referred to as the “comfort factor”.) So, in effect the estimate is that across Harrow and taking into account the import and export of swimming demand, the pools are well within the pools full level of 70% and there is considerable scope to increase pool usage.

- Across the **study area** the **average level of pool usage** is **63.1% and Harrow** is therefore **well below** the **study area average.** The **highest level of pool usage is estimated to be in Brent at 74.9% and the lowest is in Harrow**

- The estimated pools usage level in each of the other authorities is :

  - **Barnet 72%**
  - **Brent 74.9%**
  - **Ealing 59.1%**
  - **Hillingdon 60.3%**
  - **Three Rivers 60%**
  - **Hertsmere 64.2%**
  - **Watford 67.3%**

Travel Patterns to Swimming Pools

- Around **83.2%** of the **visits to pools in Harrow are made by road**. With **78%** made **by car** and **5%** made **by public transport.**
  The **public transport** mode of **travel** is a low in comparison to the national average of around 10% of all visits to pools by public transport.

  The **car borne** percentage at **78.4%** is also a bit higher in Harrow than the **national average** of around **73%** of all trips to pools by car.

- It is estimated that **17%** of all visits to swimming pools in **Harrow** are **made on foot**. This is in line with national figures and the point to consider here is the importance of accessibility to sports facilities to meet CPA performance measures and whether there are Harrow planning policies about increasing accessibility to services/facilities by walking and public transport. Some **21.6%** of all **visits to swimming pools are either by foot or by public transport.**

- The Harrow travel patterns are in line with the **averages** for the **study area** which are**:** by **car 77%,** by **public transport 7%** and **on foot 17%.**

- The full range of travel patterns to swimming pools by al travel modes is set out in table 4 below.

Table 4: Travel Patterns to Swimming Pools for each Local Authority by Car, Public Transport and On Foot

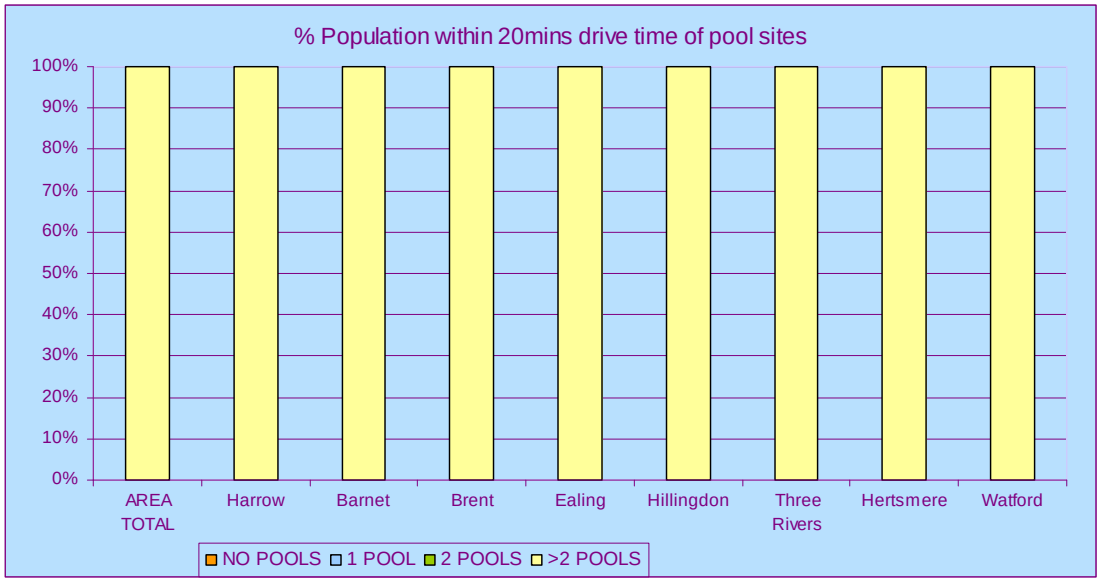
District	Satisfied demand	As %age of peak period demand	Modal split As %age		
			By car	By public transport	On Foot
Harrow	**12,200**	**96**	**78**	**5**	**17**
Barnet	18,000	93	77	7	16
Brent	14,850	88	69	11	20
Ealing	17,700	93	71	9	21
Hillingdon	13,150	92	85	5	10
Three Rivers	4,800	97	85	3	12
Hertsmere	5,300	97	83	4	13
Watford	4,600	97	78	4	18
STUDY AREA	**90,600**	**93**	**77**	**7**	**17**

Accessibility to Swimming Pools

- As mentioned under the location and catchment area of swimming pools, accessibility to sports facilities is of increasing importance in terms of transportation times/costs and the carbon costs of car travel. In addition, meeting the ease of local access to sport facilities, then the "walk to" and public transport accessibility to sports facilities is becoming a more important location topic.

- To provide some overall context on how the location and catchment area of swimming pools relates to the Harrow population and across the study area (note: population NOT swimming demand) repeated below are the two bar charts in Tables 2 and 3. These show what percentage of the population, in each local authority in the study area, has access to a range of zero to 2 or more swimming pools based on
  - the 20 minute drive time catchment area of a swimming pool and
  - the 20 minute "walk to" catchment area.

Table 2 (Repeat): Percentage of the Study Area Population with Access to a Swimming Pool Based on the 20 Minute Drive Time Catchment Area of a Swimming Pool



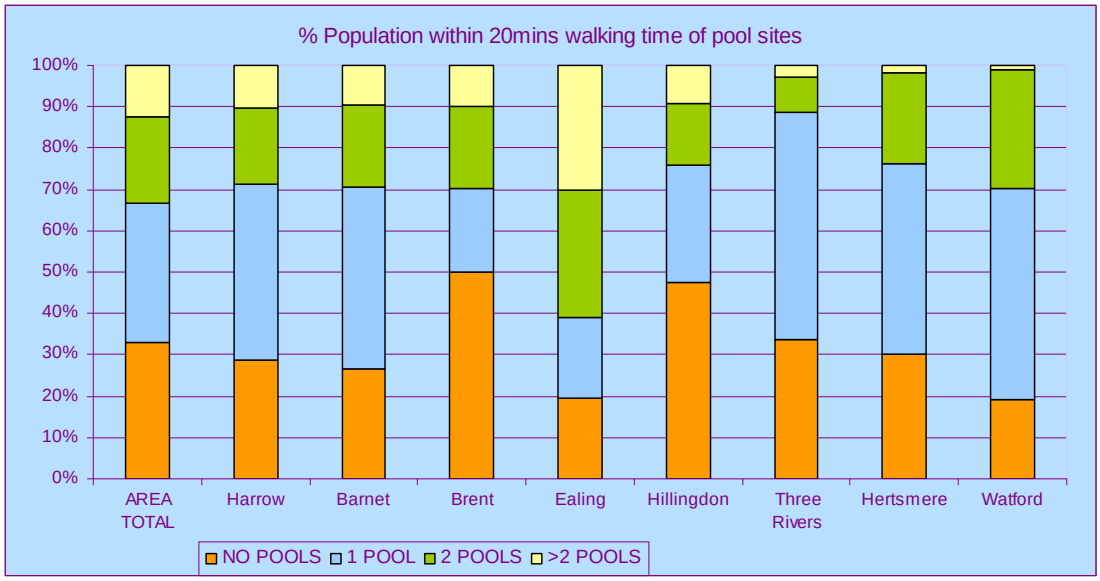
- These significant features of the bar charts in terms of the 20 minute drive time are:

    - **In ALL of the eight authorities, ALL the population in the study area are within the 20 minute drive time of 2 or more swimming pools.**

    - So accessibility to swimming pools by car across ALL of the eight authorities in the study area is not a location, strategic planning or provision of swimming pools issue.

- In terms of the 20 minute "walk to" catchment area, the findings are quite different, as set out in the repeat of Table 3.

Table 3 (Repeat): Percentage of the Study Area Population with Access to a Swimming Pool Based on the 20 Minute/1 Mile Walk To Catchment Area of a Swimming Pool



- In **all authorities, a minimum of 20% of the population do not live within 20 minutes/1 mile walk to** catchment area of a swimming pool. Whilst in Hillingdon and Brent it is around **50%** of the **population** not living within 20 minutes/1 mile walk to of a swimming pool. Just under **30%** of the **Harrow population** are outside the **20 minute/I mile walk to catchment area of any swimming pool. This is in line with the study area average of 40%.**

Annual throughput

- The model estimates that the total **annual throughput** across the 58 swimming pool sites in the study area is **6.46m annual visits**.

- The estimated **annual throughput** for the 8 swimming pool sites in Harrow is **497,808 visits** (Note: the model estimates the throughput for each centre based on the capacity of each centre and the total demand which lives within the catchment area. The model "sends" this demand to the nearest swimming pool location. The model's estimate of throughput is therefore calculated on this basis and it is a theoretical throughput).

- Throughput at individual facilities in Harrow is estimated to be:

  - Aspire 126,653 visits
  - Cannons Sports Centre 27,045 visits
  - Golds Gym 59,480 visits
  - Harrow Leisure Centre 127,582 visits
  - Harrow School 11,726 visits
  - Hatch End Swimming Pool 16,998 visits
  - Heathfield School 38,528 visits
  - John Lyon School 89,797 visits

Retained, Exported and Imported Swimming Demand

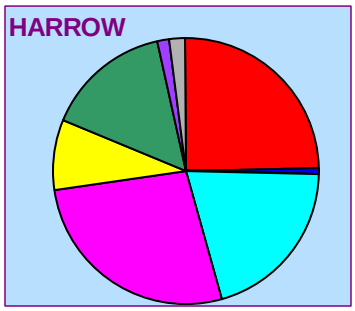
- It is important to set out how much of the demand for swimming
    - from Harrow residents is **retained at Harrow's swimming** pools
    - is **exported to pools in neighbouring authorities**. This is based on the nearest swimming pool to some Harrow residents is located in a neighbouring borough.
    - **is imported into Harrow's pools from residents in neighbouring authorities**. This is based on their nearest swimming pool being located in Harrow
- Of the **satisfied demand** for swimming in run 1 which is **from Harrow residents** and is **retained at Harrow's swimming pools, it is only 2,918 visits, which is only some 25% of satisfied demand.** This is a very low level of retained demand and suggests that based on the 20 minute drive time catchment area of swimming pools there is extensive overlap in the catchment areas and a very high choice of pools within this catchment area.

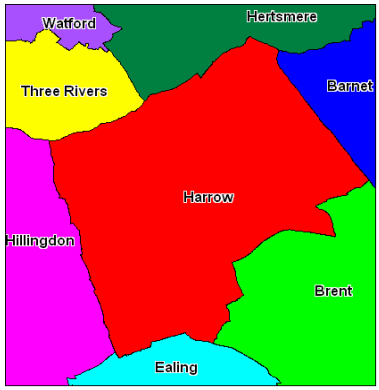
  As already recorded there is for ALL the population in EVERY local authority a choice of at least 2 swimming pools based on the 20 minute drive time catchment area of a swimming pool.
- **Harrow exports extensive** demand from Harrow residents who live within the catchment area of a swimming pool located in a neighbouring authority. Some **1% (112 visits)** of satisfied demand are **exported to Barnet,** some **20% (2,,443 visits)** are exported to **Ealing,** some **27% (3,291visits)** are exported to **Hillingdon, some 8% (1,029 visits)** are exported to Three Rivers, some **16% (1,915 visits)** are exported to **Hertsmere,** some **1% (119 visits)** is exported to **Watford and** others accounts for **2% (246 visits).**

  Chart 1 below is a pie chart which illustrates the Harrow satisfied demand for swimming retained at Harrow's swimming pools and the amount exported to other authorities. The study area map is also alongside.

Chart 1: Harrow, Retained Demand and Export of Swimming Demand from Harrow

Run 1 **Study Area**

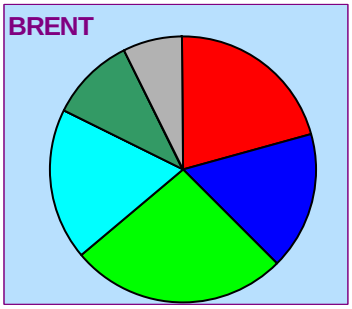




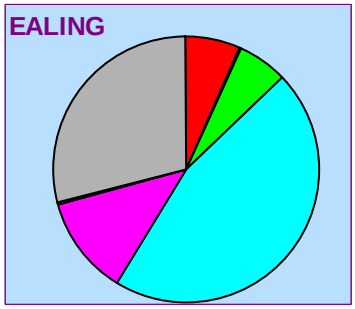
- To illustrate the point further that the level of retained demand is low because of choice and accessibility to a high number of pools based on the 20 minute drive time catchment – across the whole study area, the pie charts for Brent and Ealing are set out below. These also show a low level of retained demand by the "host authority" and a high level of exported demand to several authorities. Again the map of the study area is also set out.

Chart 2: Brent and Ealing Retained Demand and Export of Swimming Demand from Each Authority

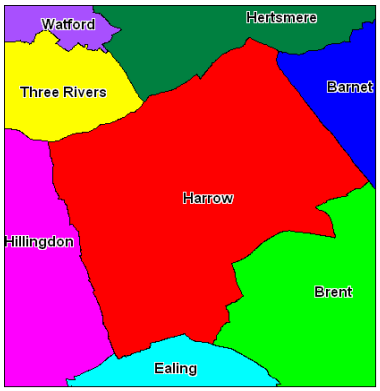
Run 1



Run 1



Study Area



- Harrow also imports demand from residents in neighbouring boroughs, who live within the catchment area of a swimming pool located in Harrow.

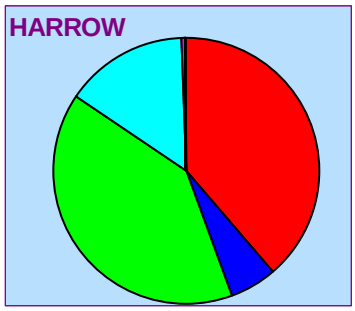
- Of the demand which is **imported into Harrow** from residents in neighbouring authorities and is satisfied at Harrow's pools, some **6% (463 visits)** of satisfied demand are imported from **Barnet** some **40% (3,112)** are imported from **Brent** and some **15% (1,180 visits)** are imported from **Ealing.**

- In essence, Harrow is importing a considerable amount of demand from residents in neighbouring authorities. This is for the same reasons of choice and accessibility to a high number of pools in all local authorities across the study area in the 20 minutes drive time catchment area.

- Again, set out below is a pie chart illustrating the demand for swimming imported into Harrow from residents in neighbouring boroughs who live within the catchment area of a swimming pool located in Harrow.

Chart 3 Import of Swimming Demand into Harrow

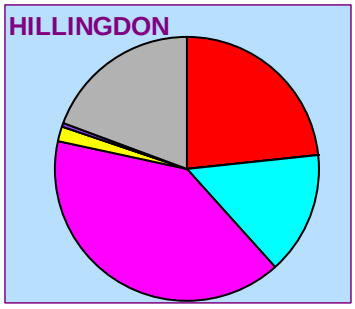
Run 1 **Study Area**

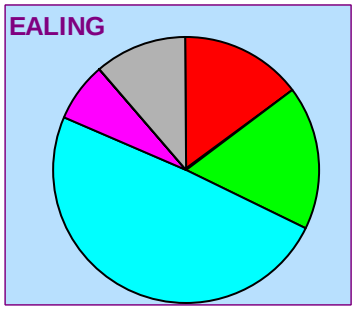


- Again to underline the choice and accessibility finding and its impact on imported demand, the pie charts for imported demand for Hillingdon and Ealing are set out below. As can be seen and like Harrow, these two authorities import a very high level of demand to their swimming pools.

Chart 4 Import of Swimming Demand into Hillingdon and Ealing

Run 1 **Run 1**





Study Area

Representation of all types of demand and capacity

- It is possible to illustrate and summarise all the findings described so far on all the types of demand: total; satisfied; unmet; as well as total capacity and utilised capacity (defined as how full the pools are) in one table. This is set out in Table 4 below and does provide comparative context for the findings reported for Harrow in comparison with and as well as part of the rest of the study area.

- The main findings to report from this table are:

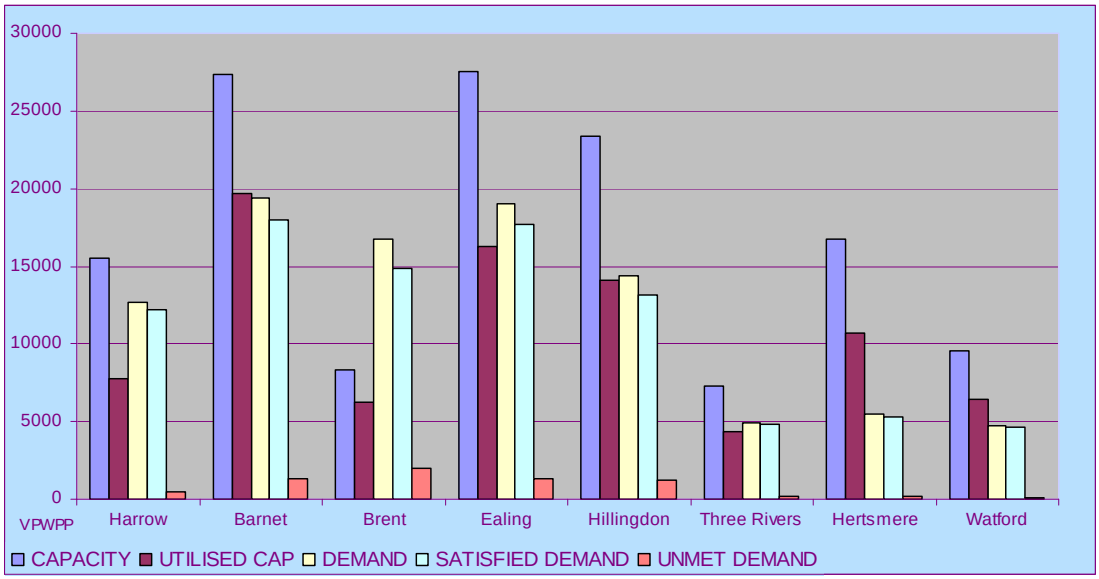
  - Total capacity (indigo colour column) is greater than total demand (cream colour column) in all authorities

  - Unmet demand (terracotta colour column) is very low in all authorities and virtually zero in Three rivers, Hertsmere, and Watford

  - Total demand (cream colour column) is very close to satisfied demand (light blue colour column) in all authorities.

  - Used capacity (purple colour column) is much lower than total capacity (indigo colour column) in all authorities and significantly lower in Harrow, Hillingdon, Ealing and Hertsmere – there is a lot of unused swimming pool capacity in these authorities.

Table 4:(Run 1) Total Capacity, Utilised Capacity, Total Demand, Satisfied Demand and Unmet Demand Across the Study Area - In Terms Of Weekly Visits In The Normal Peak Period



RUN 2: HARROW SWIMMING POOLS ASSESSMENT:

1) BASED ON PROJECTED POPULATION IN 2018 ACROSS THE STUDY AREA.

2) EXCLUSIONS OF: HARROW LEISURE CENTRE POOL; HATCH END POOL; NORTHOLT SWIMARAMA (as run 1); GROVE PARK SCHOOL (as run 1); HAYES POOL; WATFORD CENTRAL BATHS (as run 1)

3) INCLUSIONS OF REPLACEMENT HARROW LEISURE CENTRE POOL; REPLACEMENT HATCH END POOL; NEW BOTWELL GREEN LEISURE CENTRE (Hillingdon); REPLACEMENT NORTHOLT SWIMARAMA; NEW 50 METRE POOL AT UXBRIDGE; REPLACEMENT WATFORD CENTRAL BATHS; NEW HAREFIELD ACADEMY (Hillingdon).

92. The major changes to assess between runs1 and 2 are:

- the impacts of the projected change in the population between 2008 and 2018 and

- the projected closures of existing pools, plus a combination of replacement pools on the same site and new swimming pools.

93. Consequently, the findings reported under run 2 are focused on the impact of these projected changes. Where there are NO changes to the findings already reported under run 1 they are not repeated.

Changes in the total population 2008 - 2018

- The estimated total population in Harrow in run 1 in 2008 was 215,350 people. By 2018 this is estimated to have increased to 215,850 people. **There is only a projected increase in Harrow of 500 people between 2008 and 2018.**

- The estimated total population across the study area in run 1 in 2008 was 1,641,150 people. By 2018 this is estimated to have increased to 1,726,000 people. **There is a projected increase across the study area of 84,850 people, or, a projected 5.1% increase between 2008 and 2018.**

- Harrow had 13.1% of the total population across the study area in run 1 and by 2018 it is projected to have declined to 12.5%.

- Barnet had the largest percentage of the population in the study area at 19.8% in run 1 and by run 2, in 2018, it has increased to 21.5% of the population.

- The population totals in each authority in the study area in 2018 is set out in table 5 below, with the 2008 population table alongside.

Table 5: 2018 and 2008 Population and Total Demand in Each Local Authority in the Study Area

2018 Population

District	Population
Harrow	**215,850**
Barnet	371,150
Brent	286,800
Ealing	329,800
Hillingdon	244,250
Three Rivers	94,300
Hertsmere	101,200
Watford	82,600
STUDY AREA	**1,726,000**

2008 Population

District	Population
Harrow	**215,350**
Barnet	326,350
Brent	277,550
Ealing	314,200
Hillingdon	243,750
Three Rivers	87,700
Hertsmere	96,100
Watford	80,100
STUDY AREA	**1,641,150**

Location and Catchment Areas of Swimming Pools

- **Map 5** (attached separately) shows the location of the swimming pools in Harrow in run 2 for the 1 mile/20 minute walk to catchment area. The reason for selecting the 20 minute/1mile walk to catchment area are set out in run 1 but briefly they are:

    - because it is the more sensitive of the catchment areas. Based on the 20 minute drive time catchment area there is universal geographical coverage with all the population in every local authority having access to 2+ swimming pools based on this catchment

    - In **Harrow i**t is estimated that in **run 2** some **17.6%** of all visits to swimming pools **are on foot**. In run 1 it was some 16.8% of all visits to swimming pools are by walking.

- The striking features to note from the 20 minute/I mile walk to catchment map in run 2 are:

    - There is effectively no change from run 1 because the new/replacement pools at Hatch End and the Harrow Leisure Centre pool are on the same sites. So there is NO change in location or access. The changes are in the size of the pools, with Hatch End being a bigger pool and the Harrow Leisure centre being a smaller pool – not changes in location.

      So the findings in run 1 concerning the geographical areas of the borough which are outside the catchment area of any swimming pool is very small and these remain as the areas to the NE and E of the Hatch End pool up to the Aspire and Canons pool's catchment area.

      Also the 3 new swimming pools in Hillingdon – Botwell Green, Harefield Academy and the 50m pool (no name) do not extend into Harrow based on the 20 minute/1 mile walk to catchment area for these pools and so do not impact. (they will impact based on the 20 minute drive time catchment).

- In terms of accessibility to swimming pools the analysis is identifying that the finding in run 1 that **all of the Harrow population have access to 2 or more swimming pools based on the 20 minute drive time to a swimming pool remains unchanged. This is also the same across the whole study area, where all the population have access to 2 or more swimming pools based on this 20 minute drive time catchment area.**

So the extensive changes in swimming pool supply across the study area are maintaining the same very high level of accessibility to swimming pools based on this car borne catchment.

The point from run 1 remains, namely that if accessibility to swimming pools, based on the 20 minute drive time, is a suitable measure of accessibility for LBH, then there are no strategic planning, or, facility provision of swimming pools issues to consider. In short, there is an excellent location and coverage of swimming pools across the complete study area.

By way of context, it is estimated that in run 2 some 77.8% of all visits to swimming pools are made by car. In run 1 the estimate was 78.4%.

Accessibility to swimming pools based on the 20 minute/1 mile walk to catchment area

- Based on accessibility to swimming pools in the 20 minute/1 mile walk to catchment area of swimming pools, there is a shift in run 2 and with some contrasting findings.

- This catchment area becomes more important in run 2 because it is estimated that some 17.6% of all visits to swimming pools in Harrow are on foot. In run1 the percentage was 16.8%.

- The changes in swimming pool supply and locations inside and outside of Harrow means that in run 2 some **23% of the Harrow population do not have access to any swimming pool** (29% in run 1). So the pool changes and locations are decreasing the number of Harrow residents with no access to a swimming pool.

  However in run 2 now some 47% **of the Harrow population have access to one swimming pool** and it was 40% in run 1. So the pool changes and locations are increasing the number of Harrow residents with access to only one pool.

  Regarding access to two swimming pools in the 20 minute/1 mile walk to catchment this remains unchanged from run 1, with some **18% of the Harrow population having access to two swimming pools.**

  The position also remains unchanged for accessibility to more than two swimming pools with some **10% of the Harrow population having access to two or more swimming pools.**

- As in run 1 **Brent has the lowest level of accessibility** based on the 20 minute/1 mile walk to catchment area, with still **around 50% of the Brent population living outside the 20 minute/1 mile walk to catchment area of any swimming pool.**

- **Ealing's** position of **having the best accessibility to swimming pools** in run 1 has improved in run 2. In run 2 only **some 15% of the Ealing population do not have access to any swimming pool in the 20 minute/1mile walk to catchment area.** In **run 1** it **was 19%** of the Ealing population without this accessibility.

  The overall findings for all authorities across the study area for the 20 minute/1 mile walk to catchment area are set out below. For comparison the findings for this catchment area for run 1, in Table 3 are also repeated after it.

Table 6 Run 2: Percentage of the Study Area Population by Local Authority with Access to a Swimming Pool, Based on the 20 Minute/1 Mile Walk To Catchment Area of a Swimming Pool

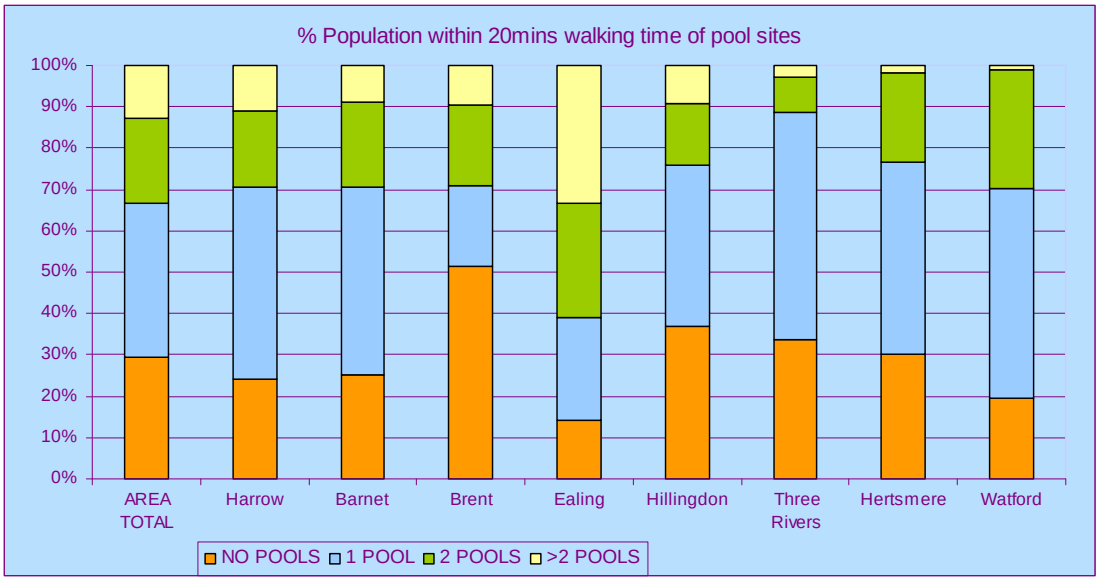
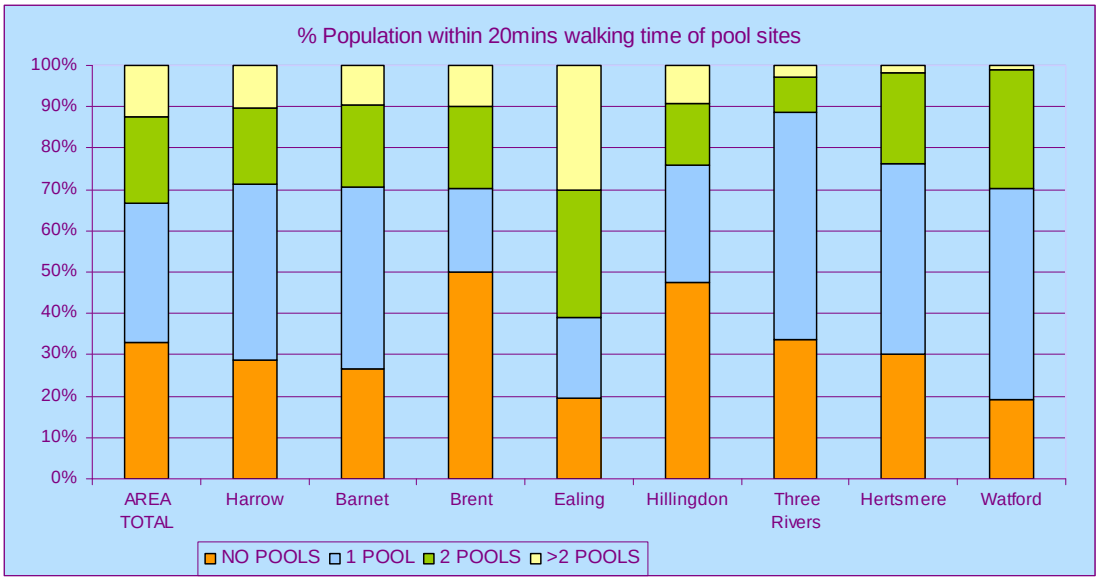


Table 3 **(Run 1 Repeat):** Percentage of the Study Area Population by Local Authority with Access to a Swimming Pool Based on the 20 Minute/1 Mile Walk To Catchment Area of a Swimming Pool



Location of Swimming Pools with Overlapping Catchment Areas

- In terms of changes in run 2 on **overlapping catchment areas of swimming pools in the 20 minute/1 mile walk to catchment** there are **no changes between runs 1 and 2** because the new swimming pools in run 2 in Harrow are not at different locations, there are changes in swimming pool supply at the same locations. Hatch End pool becomes bigger and Harrow Leisure Centre becomes smaller.

- The other findings from run 1 remain unchanged, namely, there is extensive overlap of pools in the central/south spine of the borough. Within the 20 minute/1 mile walk to catchment area of Harrow Leisure Centre, Golds Gym, Harrow School and John Lyon School, there is a minimum of the catchment area of 2 pools overlapping and in some areas it is the catchment area of 3 pools overlapping.

Number of Swimming Pool Sites and Total Capacity

- In run 2 there are 8 **swimming pool sites** in **Harrow the same as in run 1**. These 8 sites **have a total capacity (or supply) of 15,159 visits, which is a REDUCTION of some 349 visits over run 1, which was 15,508 visits per week,** available for community use for all or part of the weekly peak period.

  The reason for the reduction in capacity in Harrow is because there is a reduction in total water space of 92 sq metres of water across the 8 sites. Whilst the new Hatch End swimming pool is increased to 325 sq metres, up from 230 sq metres in the existing pool. The new Harrow Leisure Centre is 565 sq metres of water, down from 752 sq metres of water in the existing centre.

- The capacity of the 8 Harrow sites **in run 2 is 1,866 sq metres of water.**

- Harrow has **8 of the total 61 swimming pool sites** across the 8 authorities in the study area. In run 1 Harrow had 8 of the 58 swimming pools sites across the study area, so there is a net increase of 3 sites.

  The **8 Harrow sites** of 1,866 sq metres of water, **represent some 9.9% of the total water area of 18,719 sq metres of water across the study area in run 1. I**n run 1 Harrow had 11.4% of the total swimming pool capacity across the 8 authorities in the study area, in run 2 this has decreased to 10% of the total swimming pool capacity across the study area.

- **Ealing and Hillingdon h**ave the highest number of pool sites and capacity in the study area. Both have **12 swimming pool sites** and this **represents in Ealing some 21.4% of the total swimming pool capacity across the study area and 23.1% in Hillingdon.** Hillingdon's total share of the swimming pool capacity in the study area is up from 17.2% in run 1 and this is because of the inclusion of the new 50 metre swimming pool complex in Hillingdon in run 2.

- **Brent and Watford** as in run 1, have the **lowest** capacity with **3 sites** which are some 6.3% (6.1% in run 1) **of the swimming pool capacity in Watford** and 5.4% in **Brent** (6.1% in run 1).

Capacity /Satisfied demand /Unmet demand

Total capacity for swimming in Harrow at its 8 swimming pool sites **is 15,159 visits in run 2 and this is DOWN from a capacity of 15,508 visits in run 1.** The reason for the reduction is, because as already set out, that whilst the new Hatch End swimming pool is increased to 325 sq metres, up from 230 sq metres in the existing pool in run 1, the new Harrow Leisure Centre is 565 sq metres of water, down from 752 sq metres of water in the existing centre.

- **Total demand for swimming in Harrow in run 2 is 12,561 visits this is DOWN from 12,674 visits in run 1.** The reason for the reduction in total demand is because the Harrow population only increases by 500 people between runs 1 and 2. Also the age structure of the total Harrow population will be changing between 2008 – 2018. It could be that in 2018 there are less people in the main age groups for swimming which are 12 – 39 for both sexes than in 2008 age, hence a reduction in demand.

- So **total capacity for swimming in Harrow in 2018, is estimated to exceed total demand by some 2,598 visits, which are some 236 visits less than in run 1 when it was 2,834 visits per week.** Put another way, **total demand for swimming in Harrow in 2018**

represents some 82.8% **of total swimming pool capacity, up from 81.7% in run 1.**

- The model estimates that of **the total demand of 12,561 visits, some 12,126 visits are satisfied demand. So satisfied demand represents some 96.5% 96.2% of total demand, which is virtually unchanged from run 1 at 96.2%.**

- This is a very very high level of satisfied demand and is reporting that some 96% of the total Harrow demand for swimming can be met and is located within the catchment area of a swimming pool.

- **Unmet demand** for swimming pools in Harrow is estimated to be **435 visits in run 2, down by some 44 visits on the run 1 figure of 479 visits** per week. Unmet demand in run 2 is 3.5% of total demand, down from 3.8% in run 1.

- To put his unmet demand into context, **435 visits equates to the equivalent of providing around 54 sq metres of water (**a 25 metres x 4 lane swimming pool is 212 sq metres of water).

  Note: it might appear contradictory to say there is unmet demand when total supply is greater than total demand in Harrow. There are two reasons for there being unmet demand. (1) is because some demand is located outside the catchment area of a swimming pool and, as already reported, is outside the 20 minute/1 mile walk to catchment area of a swimming pool. If there is demand for swimming and it is located outside the catchment area of a swimming pool then this is termed as unmet demand. (2) if the demand for swimming is greater than supply in any one area and the pools within the catchment area of that location cannot absorb the total demand, then some demand is unmet.

- The locations of unmet demand and the amount of unmet demand are illustrated in **Map 6** “Aggregated Unmet Demand” run 2 (attached separately) which shows in 1km grid squares the amount of unmet demand in that area expressed in terms of sq metres of water. There is a slight shift from run 1 where squares with the highest values of unmet demand in Harrow are to the immediate east of the John Lyon swimming pool. In run 2 the highest levels of unmet demand has shifted slightly more to the east and runs from the centre of the borough to the south and south west.

  However to reiterate, the total levels of unmet demand across the whole borough in run 2 is only 54 sq metres of water and is not therefore significant.

Pool usage (how full are the swimming pools?)

- The model estimates that around **74.3%** of the total **capacity** of **all the pools** in Harrow will be used in run 2. This is a considerable **increase** on the **run 1** figure for used capacity of **50.2%.**

  In run 2, the pools are estimated to be above the "pools full level" of 70% of their total capacity based on the comfort factor, explained in paragraph 15 of this report). The reasons for the significant increase in pool usage is a combination of factors:

  - the total swimming pool capacity across Harrow has been reduced between runs 1 and 2 by a new and smaller Harrow Leisure Centre swimming pool it is down from 752 sq metres of water in run 1 to 565 sq metres of water in run 2.Thereby increasing the level of used capacity at this and the other Harrow swimming pool sites.

  - There are significant changes in the swimming pool supply in run 2. In total, there are 6 exclusions and 7 inclusions in the swimming pool supply (details in Appendix 1 to this report listing all the exclusions and inclusions) between runs 1 and 2. In effect, of the total 61 swimming pool sites in run 2 there is changes in 13 swimming pool sites, either closures of existing or opening of new pools. This is a 21.3% change in the swimming pool supply in one way or another between runs 1 ands 2. Whilst the Harrow swimming pool locations remain unchanged between runs 1 and 2 and the difference is in pool size this is not the case in the other boroughs.

    In short, a change of 21% of the swimming pool supply between runs 1 and 2 across the whole study area is going to lead to a very big shift in the pattern of swimming pool supply and where the demand is satisfied. This appears to have most impact in Harrow which has the highest level of estimated usage at 74. 3% across the study area.

    This will mean big shifts in the levels of retained, exported and imported demand between runs 1 and 2 in Harrow and the other boroughs, given there is a 21% change in swimming pool sites between runs 1 and 2, across the study area. This is reported on under the retained, exported and imported demand section.

- Across the **study area** the **average level of pool usage in run 2 is 66.2%** this is up from **63.1% in run 1** and now getting close to the pools full level of 70% The **highest level of pool usage in run 2 is estimated to be in Brent at 77.6%,** it was **74.9% in Brent in run 1.**

- The estimated pools usage level in each of the other authorities with the 2008 figure in brackets is :

  - **Barnet 68.6%** (72%)
  - **Brent 77.6%** (74.9%)
  - **Ealing 58.8%** (59.1%)
  - **Hillingdon 68.7%** (60.3%)
  - **Three Rivers 53.2%** (60%)
  - **Hertsmere** 59.4% (64.2%)
  - **Watford 73.6%** (67.3%)

Travel Patterns to Swimming Pools

- In run 2 around **82.4%** of the **visits to pools in Harrow are made by road,** in run 1 it was 83.2%. With 77.8% made by car (78% in run 1) and **4.6%** made **by public transport.** (5% I run 1.)
  The **public transport** mode of **travel** is a low in comparison to the national average of around 10% of all visits to pools by public transport.

  The **car borne** percentage at 77.8% is a bit higher in Harrow than the **national average** of around **73%** of all trips to pools by car.

- It is estimated that in run 2 some **17.6%** of all visits to swimming pools in **Harrow** are **made on foot**. (17% in run 1). This is in line with national figures of around 18%.

- The Harrow travel patterns are in line with the **averages** for the **study area** which are**:** by **car 76%** (77% in run 1), by **public transport 6.8%** (no change from run 1 and **on foot 17.%** (16.5% in run 1).

- The full range of travel patterns to swimming pools by all travel modes is set out in table 4 below.

Table 7: Run 2 Travel Patterns to Swimming Pools for each Local Authority by Car, Public Transport and On Foot

District	Satisfied demand	As %age of peak period demand	Modal split As %age		
			By car	By public transport	On Foot
Harrow	**12,150**	**97**	**78**	**5**	**18**
Barnet	20,300	93	77	8	16

Brent	14,950	88	70	11	20
Ealing	18,500	94	69	8	23
Hillingdon	13,300	94	83	5	12
Three Rivers	5,100	97	85	3	12
Hertsmere	5,500	97	83	4	13
Watford	4,650	97	78	4	18
STUDY AREA	**94,450**	**94**	**76**	**7**	**17**

Annual throughput

- The model estimates that the total **annual throughput** across the 61 swimming pool sites in the study area in **run 2 is 7.66m annual visits**. In run 1 it was **6.46m annual visits.**

- The estimated **annual throughput** for the 8 swimming pool sites in Harrow is **801,817 annual visits**, considerably up from the projected **497,808 visits in run 1.** (Note: the model estimates the throughput for each centre based on the capacity of each centre and the total demand which lives within the catchment area. The model "sends" this demand to the nearest swimming pool location. The models estimate of throughput is therefore calculated on this basis and it is a theoretical throughput).

- Throughput at individual facilities in Harrow in run 2 is set out below, with the run 1 throughput in brackets. The big increases are at Harrow Leisure Centre and Hatch End Swimming Pool.

  - Aspire 102 ,915 annual visits (126,653 annual visits)
  - Cannons Sports Centre 25,937 annual visits (27,045 annual visits)
  - Golds Gym 63,035 annual visits (59,480 annual visits)
  - **Harrow Leisure Centre 317,056 annual visits (127,582 visits)**
  - Harrow School 9,042 annual visits (11,726 annual visits)
  - **Hatch End Swimming Pool 160,291 annual visits (16,998 annual visits)**
  - Heathfield School 37,122 annual visits (38,528 annual visits)
  - John Lyon School 86,418 annual visits (89,797 annual visits)

Retained, Exported and Imported Swimming Demand

- As reported earlier, a significant reason for the increase in the used capacity of the Harrow pools is because of the scale of changes in pool provision across the study area between runs 1 and 2. As set out earlier, there are 13 changes in the pool provision between runs 1 and 2, which is a 21.3% change in the total swimming pool supply of the 61 sites in run 2.

In effect, this scale of change is causing a big re-distribution of swimming demand across the whole study area and changes in retained, imported and exported demand – most notably in Harrow. Therefore it is important to consider the amount of these types of demand:

- from Harrow residents is **retained at Harrow's swimming** pools

- is **exported to pools in neighbouring authorities**. This is based on the nearest swimming pool to some Harrow residents is located in a neighbouring borough.

- **is imported into Harrow's pools from residents in neighbouring authorities**. This is based on their nearest swimming pool is located in Harrow

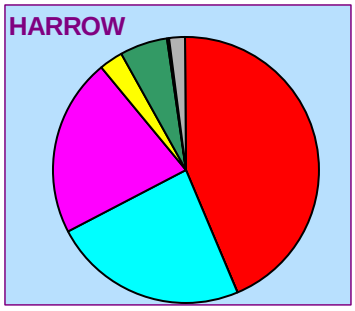
- Of the **satisfied demand** for swimming in run 2 which is **from Harrow residents** and is **retained at Harrow's swimming pools, it is 5,277 visits, some 43% of satisfied demand.** In run 1 it was only 2,918 visits, which is only some 25% of satisfied demand. There is a big increase in retained demand from Harrow residents in run 2 and this is predominantly created by the new pools at Harrow Leisure Centre and Hatch End, which will be new pools and therefore more attractive than the other ageing pools in Harrow and the wider catchment area.

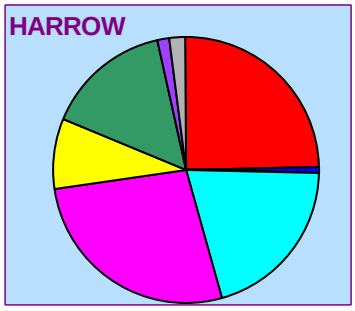
- **Harrow exports extensive** demand from Harrow residents who live within the catchment area of a swimming pool located in a neighbouring authority. Some **24 % (2,881 visits**) are exported to **Ealing** (in run1 it was 20% 2,,443 visits**),** some **22% (2,655 visits)** are exported to **Hillingdon** (in run 1 it was 27% 3,291visits) some **3% (333 visits)** are exported to **Three Rivers** (in run 1 it was 8% (1,029 visits), some **6% (703 visits)** are exported to **Hertsmere,** (in run 1 it was 1915 visits) and some **2% (233 visits**) is accounted for by others. (in run 1 it was 2% 246 visits).

  Chart 5 below is a pie chart which illustrates the Harrow satisfied demand for swimming retained at Harrow's swimming pools and the amount exported to other authorities. The equivalent pie chart for run 1 is alongside and the study map is also set out.

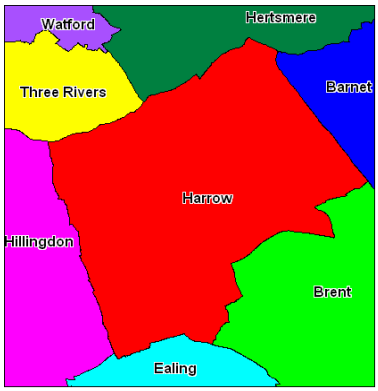
Chart 5: Harrow, Retained Demand and Export of Swimming Demand from Harrow

Run 2 **Run 1**





Study Area



- Harrow also imports demand from residents in neighbouring boroughs, who live within the catchment area of a swimming pool located in Harrow.

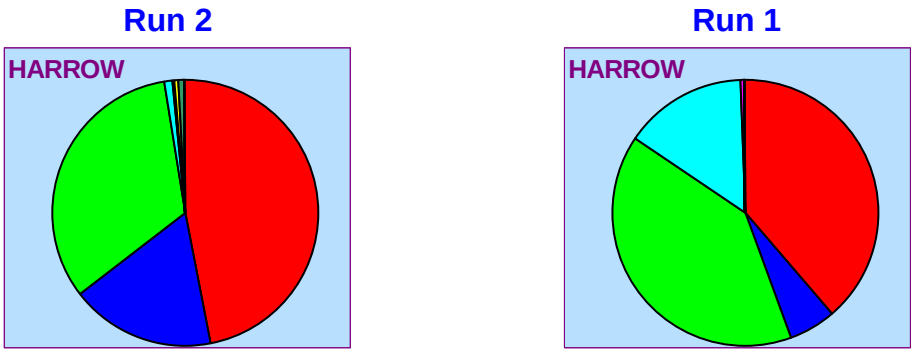
- Of the demand which is **imported into Harrow** from residents in neighbouring authorities and is satisfied at Harrow's pools in run 2, **some 18% (1,971 visits**) are imported from **Barnet** (in run 1 it was 6% 463 visits), some **33%, 3,740 visits** are imported from **Brent** (in run 1 it was 40% 3,112 visits) some **0.9% 106 visits** are imported from Ealing (in run 1 it was 15% 1,180 visits) and some **1%** is also imported from **Hertsmere**, (none in run 1).

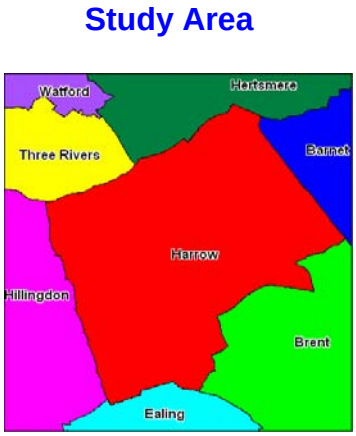
- In essence, Harrow is still importing a considerable amount of demand from neighbouring boroughs but this is less than in run 1, notably Brent where it is down by some 7%.

  Again, set out below is a pie chart illustrating the demand for swimming imported into Harrow from residents in neighbouring

boroughs who live within the catchment area of a swimming pool located in Harrow.

Chart 6: Import of Swimming Demand into Harrow





Representation of all types of demand and capacity

- As in run 1 it is possible to illustrate and summarise all the findings described so far on run 2 on all the types of demand: total; satisfied; unmet; as well as total capacity and utilised capacity (defined as how full the pools are) in one table. This is set out in Table 8 below and does provide comparative context for the findings reported for Harrow in comparison with and as well as part of the rest of the study area.

- The main findings to report from this table are:

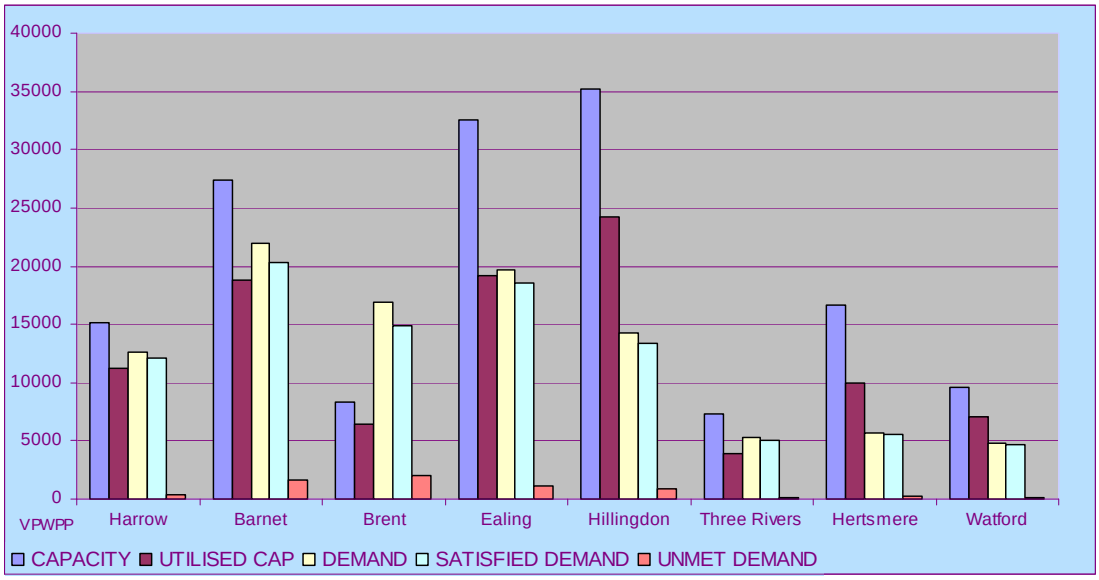
  - As in run 1 there is the same position in run 2 of total capacity (indigo colour column) being greater than total demand (cream colour column) in all authorities

  - The same finding in run 1 on unmet demand (terracotta colour column) it is very low in all authorities and virtually zero in Three Rivers, Hertsmere, and Watford

  - Used capacity (purple colour column) increases significantly in Harrow, up from 7,786 visits in run 1 to 11,261 visits in run 2 in

Harrow and in Hillingdon it is up from 14,098 visits in run 1 to 24,185 visits in run 2. However in Barnet used capacity goes DOWN between runs I and 2, from 19,696 visits in run 1 to 18,756 visits in run 2.

Table 8 Run 2 :Total Capacity, Utilised Capacity, Total Demand, Satisfied Demand and Unmet Demand Across the Study Area - In Terms Of Weekly Visits In The Normal Peak Period



NEXT STEPS AND WAY FORWARD

94. The aim of this report is to set out the findings from the analysis of two sets of runs on the current and potential future provision for swimming in Harrow over the period 2008 – 2018.

95. This is based on making change to the swimming pool provision in Harrow and the surrounding study area over the 2008 – 2018 period by the potential closure of pools and the inclusion of potential new pools in Harrow and the surrounding area.

96. In addition, the analysis assessed in the second run the impact of the projected changes in population, between 2008 – 2018 across the study area.

97. The outcome of this work and report is not to SET the strategic context for future provision for swimming but to INFORM it. In particular to

- set out views on how well the demand for swimming is being met by Harrow's swimming pool provision and the projected changes in swimming pool supply;

- assess the impact the projected changes in population have on the supply and demand for swimming;

- assess the location and scale of any unmet demand for swimming; and

- assess how the location of swimming pool supply and demand in authorities which neighbour Harrow influences both the import of demand from residents in neighbouring authorities into Harrow and the export of Harrow's swimming demand to pools in neighbouring authorities.

98. The report has attempted to provide the baseline position in run 1 with the key findings. Then to identify the most significant findings, related to the specific changes in run 2.

99. It is hoped this study and report has achieved those outputs and does assist in providing an evidence base for the future strategic planning on the provision for swimming across Harrow.

David Payne

Genesis Consulting

19 October2008

Appendix 1

LONDON BOROUGH OF HARROW

BRIEF FOR STRATEGIC PLANNING ASSESSMENT FOR SWIMMING POOLS

Assessment based on application of Sport England's Facilities Planning Model (FPM)

September 2008

Brief Description of Project

To assess the future demand and provision of swimming pools in Harrow, particularly in terms of the projected increase in population and as support evidence in the preparation of Harrow's Local Development Framework (LDF).

Alongside Harrow, the study area will also include the London Boroughs of Barnet, Brent, Ealing and Hillingdon as well as the Three Rivers, Hertsmere and Watford.

Assessment of the current demand and supply for swimming pools in the study area will be carried out for 2008 utilising the GLA population projections for the London Boroughs and the Office of National Statistics (ONS) population projections for the non London Councils.

Assessment of the future demand and supply for swimming pools in the study area for 2018 will include all known commitments and closures (detailed below) and utilising the GLA population projections for the London Boroughs and the Office of National Statistics (ONS) population projections for the non London Councils.

Appendix 1 Details of new pools and amendments not included in the Active Places database to be included in the analysis

Swimming Pools

Rule filter to be applied to all runs –

- Include all operational swimming pools available for community use i.e. pay and play, membership, sports club/community association.
- Exclude all swimming pools that are identified as private use only and have no public access.
- Exclude all pools where the main tank is less than 20m in length or is less than 160 sqm[1].

[1] 160sqm is equivalent to a 20m x 8m pool. This assumption will exclude small pools such as plunge and hotel pools.

- Exclude all outdoor pools (lidos)
- Include national default weightings for swimming pools
- Include commitments for new build, refurbishments or known closures of existing pools where there is an increase or decrease in the existing water space in Harrow or the surrounding study area.
- Include IMD score of output areas to be used to limit attractiveness of commercial pools.
- Include GLA population data for London Boroughs and ONS population data for non London Councils.

Run 1 Swimming Pools – 2008 operational pools

This run is to establish the baseline data, current demand and supply, current areas of unmet demand and assist Harrow's future plans to address potential priority locations for future development. This run is to establish the baseline i.e. what is happening now.

Exclude -
- Northolt Swimarama (Ealing) facility ID 2010898 – closed for rebuild
- Grove Park School (Brent) facility ID 2206550 – too small and no community access
- Watford Central Baths facility IDs 2011761 and 2011762 - closed

Include –
- Replacement Watford Central Baths facility IDs 9999057 and 9999058 - open
- All swimming pools in the study area, which meet the criteria, set out under run assumptions above.

Run 2 Swimming Pools – 2018 operational pools

This run is to establish the overall, satisfied and unmet demand for 2018 and is to include all known commitments and closures. This run is to establish the future needs within and surrounding Harrow.

Exclude -
- Existing Harrow LC pool facility IDs 2010841 and 2021889
- Existing Hatch End pool facility ID 2010844
- Northholt Swimarama facility ID 2010898
- Grove Park School facility ID 2206550 – too small and no community access
- Hayes Pool facility IDs 2010845, 2010846 and 2010847
- Watford Central Baths facility IDs 2011761 and 2011762 - closed

Include -
- Replacement Harrow LC pool - Harrow
- Replacement Hatch End pool on same site - Harrow
- New Botwell Green Leisure Centre pool – Hillingdon
- Replacement Northolt Swimarama pool on same site - Ealing
- New 50m Uxbridge Pool – Hillingdon

- Replacement Watford Central Baths facility IDs 9999057 and 9999058
- New Harefield Academy Pool– Hillingdon ID 2081266
- All swimming pools in the study area, which meet the criteria, set out under run assumptions above.

Details of new pools and halls and amendments not included in the Active Places database to be included in the analysis

Swimming Pools

Swimming Pool	X and Y co-ords	Dimensions	Area	Opening Hours	Community Use Peak Hrs	Notes
Replacement Harrow LC ▪ Main pool ▪ Teaching pool	X 515945 Y 189526	25m x 17m 20m x 7m	425sqm 140sqm	M-F 7am-11pm S/S 8am-8pm	52 hrs	Added to Tech Spec in blue
Replacement Hatch End ▪ Main pool	X 513400 Y 191200	25m x 13m	325sqm	M-F 7am-9pm S/S 8am-5.30pm	52 hrs	Added to Tech Spec in blue
New Botwell Green LC ▪ Main pool ▪ Teaching pool	X 509746 Y 180080	25m x 16m 13m x 7m	400sqm 91sqm	M-F 7am-10pm S/S 8am-6.30pm	52 hrs	Already in Tech Spec
Replacement Northolt Swimarama ▪ Main pool ▪ Teaching pool	X 513196 Y 184603	25m x 17m 16m x 12m	425sqm 192sqm	M-F 6am-10pm S/S 8am-6pm	52 hrs	Already in Tech Spec
New Uxbridge Pool ▪ Main pool ▪ Leisure water	X 506398 Y 184686	50mx20.5m 11m x 7m	1025sqm 77sqm	M-F 7am-10pm S/S 8am-6.30pm	52 hrs	Already in Tech Spec
Replacement Watford Central Baths	X 510382 Y 196909	25mx12.5	313sqm	80hrs	52 hrs	Already in Tech Spec

▪ Main Pool ▪ Teaching pool			100sqm			
New Harefield Academy	X 505755 Y 190957	25m x 13m	325m	M-F 6pm-10pm S/S 9am-5pm	33hrs	Already in Tech Spec