

Strategic Assessment for Provision of Swimming Pools

Nuneaton and Bedworth Borough Council

**Sport England Facilities Planning
Model Report**

**Date of report
March 2020**

Contents

1. Introduction.....	1
2. Swimming Pool Supply	5
3. Demand for Swimming Pools.....	111
4. Supply and Demand Balance	17
5. Satisfied Demand for Swimming.....	200
6. Unmet Demand for Swimming	26
7. Used Capacity (how full are the pools?)	3636
8. Local Share of Facilities.....	41
9. Executive Summary of key findings	45
Appendix 1: Swimming pools in the study area included in the assessment. Runs 1 – 4	56
Appendix 2: Model description, Inclusion Criteria and Model Parameters	57

1. Introduction

1.1 Nuneaton and Bedworth Borough Council is reviewing the current provision of swimming pools and assessing the future provision required up to 2034 and beyond.

1.2 The Council has commissioned a Sport England facility planning model (fpm) local assessment to develop an evidence base for swimming pool provision. The evidence base will also inform the Council's strategic planning for the future provision of swimming pools.

1.3 The overall aims of the fpm work are to:

- Assess the extent to which the existing supply of swimming pools meets current levels of demand in 2019 across the Council area and a wider study area;
- Assess the extent to which the existing supply of swimming pools would meet future demand and its distribution, taking into account population increases across the Council area and a wider study area up to 2034; and
- Assess the impact on supply, demand and access to swimming pools, from options to close Bedworth Leisure Centre and Pingles Leisure Centre. Then open a new Bedworth Leisure Centre in 2024 and Pingles Leisure Centre in 2025.

1.4 The fpm work has four assessments (known as runs) and these include the swimming pool provision and population in the neighbouring authorities to Nuneaton and Bedworth Borough. The assessment is catchment area based across local authority boundaries.

1.5 This report set out the findings from the fpm assessments. The fpm separate modelling runs are:

- **Run 1** – supply, demand and access to swimming pools, in 2019. This run provides a baseline assessment of current provision and from which to measure change. Run 1 also includes the Coventry Wave pool site which opened in 2019;
- **Run 2** – supply, demand and access to swimming pools in 2034, based on the impact the projected growth in population 2019 – 2034 across Nuneaton and Bedworth Borough and the neighbouring authorities on the future demand for swimming and its distribution. Run 2 also includes the new 50m swimming pool site in Coventry, which is scheduled to open in 2020 and replace the Coventry Sports and Leisure Centre swimming pool site.

- **Run 3** – is based on run 2, and also includes the option to close the existing Bedworth Leisure Centre and Pingles Leisure Centre
- Run 4 is as run 3, and also includes the option to open a new Bedworth Leisure Centre in 2024, with a 25m x 8 lane main pool and a 17m x 10m teaching/learner pool. Run 4 also includes the option to open a new Pingles Leisure Centre in 2025 to include (1) a 25m x 8 lane main pool, (2) a 25m x 6 lane main pool and (3) a teaching/learner pool of 17m x 10m

The Study Area

- 1.6 Customers of swimming pools do not reflect local authority boundaries. Whilst there are management and possibly pricing incentives for customers to use sports facilities located in the local authority area in which they live, there are influences on which swimming pools people will choose to use.
- 1.7 These are based on: how close the venue is to where people live; other facilities on the same site; such as a gym or studio, the programming of the pool with swimming activities that appeal and are available at times which fit with the lifestyle of residents; the age and condition of the facility and inherently its attractiveness. Increasingly, the quality of the swimming pools and the swimming offer are of more importance to residents.
- 1.8 Consequently, in determining the position across the Nuneaton and Bedworth Borough Council area, it is important to take full account of the swimming pools in the neighbouring local authorities. In particular, to assess the impact of overlapping catchment areas from facilities located outside Nuneaton and Bedworth Borough but where the catchment area extends into the Borough and vice versa.
- 1.9 The nearest facility for some Nuneaton and Bedworth residents may be outside the authority (known as exported demand), whilst for residents of neighbouring authorities, their nearest swimming pool maybe inside the Borough (known as imported demand).
- 1.10 To take account of these impacts, a study area is established which places Nuneaton and Bedworth Borough at the centre of the study and includes the neighbouring local authorities. A map of the study area is set out below at Map 1.1.

Map 1.1: Study Area Map for the Nuneaton and Bedworth Borough Swimming Pools Assessment



Report Structure, Content and Sequence

- 1.11 The findings for Nuneaton and Bedworth Borough are set out in a series of tables for each of the four runs. This allows a “read across” to see the specific impact of changes between runs 1 - 4 and it builds up the picture of change.
- 1.12 The headings for each table are: total supply; total demand; supply and demand balance; satisfied demand; unmet demand; used capacity (how full the facilities are); and local share. The definition of each heading is set out at the start of the report of findings.
- 1.13 Maps to support the findings, on swimming pool locations, total demand, unmet demand, the driving and walking catchment area of the swimming pools, public transport access to swimming pools and local share of access to swimming pools are also included.

- 1.14 Where valid to do so, the findings for the neighbouring authorities to Nuneaton and Bedworth Borough are also set out. A commentary is provided on these comparable findings. For example, some local authorities like to know how their findings on, water space per 1,000 population, compares with neighbouring authorities
- 1.15 An executive summary of key findings is set out at the end of the full report.
- 1.16 Appendix 1 includes the swimming pools in the assessment, and Appendix 2 is a description of the facility planning model and its parameters.

2. Swimming Pool Supply

Total Supply

Table 2.1: Swimming Pools Supply Nuneaton and Bedworth Borough 2019 – 2034

Nuneaton & Bedworth	RUN 1	RUN 2	RUN 3	RUN 4
Total Supply	2019	2034	2034	2034
Number of pools	5.	5.	1.	6.
Number of pool sites	3.	3.	1.	3.
Supply of total water space in sq m	1,154.	1,154.	160.	1,675.
Supply of water space in sqm, scaled by hours available in the peak period	1,130.	1,130.	157.	1,599.
Supply of total water space in visits per week peak period	9,794.	9,794.	1,360.	13,867.
Water space per 1,000 population	9.	7.	1.	11.

- 2.1 **Definition of supply** – this is the supply or capacity of the swimming pools which are available for public and club use in the weekly peak period. The supply is expressed in number of visits that a pool can accommodate in the weekly peak period and in sq metres of water.
- 2.2 In runs 1 and 2 there are 3 swimming pool sites and 5 individual swimming pools located in Nuneaton and Bedworth Borough. This reduces to 1 site and 1 pool in run 3, with the option to close the existing Bedworth Leisure Centre and Pingles Leisure Centre. The pool site which remains open is Nuffield Health (Nuneaton) which has 20m x 8m 4 lane pool. Run 1 includes the new pool site in Coventry, The Wave Coventry leisure pool site, which opened in 2019
- 2.3 .In run 3 the existing Bedworth Leisure centre and Pingles Leisure Centre sites are closed and just the Nuffield Health (Nuneaton) site remains open.
- 2.4 Run 4 includes the option to open a new Bedworth Leisure Centre in 2024 with (1) a 25m x 8 lane main pool and (2) a teaching/learner pool of 17m x 10m. Plus a new Pingles Leisure Centre in 2025 with (1) a 25m x 8 lane main pool, (2) a 25m x 6 lane main pool and (3) a teaching/learner pool of 17m x 10m
- 2.5 Run 1 is in effect the current position on supply and demand for swimming pools before any changes. Then run 2 assesses the impact the projected increase in population 2019 – 2034 has on the demand for swimming with no pool changes.
- 2.6 Run 3 is the option to close both the Bedworth and Pingles pool sites and assess the impact this has on demand for swimming across the Borough in 2034.

- 2.7 Run 4 includes the two new Bedworth and Pingles Leisure Centre sites with both sites having larger individual pools.
- 2.8 Runs 1 and 4 seem the most important, in comparing the current position in 2019, with the projected change in demand for swimming pools up to 2034, and with the provision of 2 new and larger pool sites at Bedworth and Pingles.
- 2.9 A summary description of the swimming pool sites in Nuneaton and Bedworth Borough, including the changes over the four runs is set out in Table 2.2.

Table 2.2: Swimming Pool Supply Nuneaton and Bedworth Borough Runs 1 – 4

Name of Site	Type	Dimensions	Area	Site Year Built	Site Year Refurb	Public/Commercial	Car % Demand	Public Tran % Demand	Walk % Demand
Nuneaton & Bedworth							80%	9%	11%
BEDWORTH LEISURE CENTRE (Runs 1 and 2)	Main/General	25 x 13	313	1975	2000	P	71%	10%	19%
BEDWORTH LEISURE CENTRE	Learner/Teaching/Training	10 x 7	70						
NEW BEDWORTH LEISURE CENTRE (Run 4)	Main/General	25 x 17	425	2024		P			
NEW BEDWORTH LEISURE CENTRE	Learner/Teaching/Training	17 x 10	170						
NUFFIELD HEALTH (NUNEATON) (All runs)	Main/General	20 x 8	160	2001		C	91%	6%	3%
PINGLES LEISURE CENTRE (Runs 1 and 2)	Main/General	25 x 17	413	2003		P	83%	9%	9%
PINGLES LEISURE CENTRE	Leisure Pool	25 x 8	200						
NEW PINGLES LEISURE CENTRE (Run 4)	Main/General	25 x 17	425	2025		P	90%	6%	4%
NEW PINGLES LEISURE CENTRE	Main/General	25 x 13	325						
NEW PINGLES LEISURE CENTRE	Learner/Teaching/Training	17 x 10	170						

- 2.10 The total amount of water space in the Borough in runs 1 and 2 available for community use in 2019 is 1,130 sq metres of water. In run 3 this decreases to just 157 sq metres of water with the closure of both the Bedworth and Pingles sites. Then in run 4, the water space available for community use increases to 1,599 sq metres of water, with the new Bedworth and Pingles Leisure Centres.
- 2.11 The difference in the water space available for community use, with the existing Bedworth and Pingles centres, compared with the new centres is an increase of 469 sq metres of water, a 41% increase.

- 2.12 The average age of all the pool sites in 2019, including Nuffield Health, is 26 years, the oldest pool site is Bedworth Leisure Centre which opened in 1975 and was modernised in 2000. The Pingles Leisure Centre opened in 2003 and is the most recent centre to open, the Nuffield Health swimming pool site opened in 2001
- 2.13 The scale of the public swimming pools sites is very extensive with the Bedworth Centre having both a main pool and a separate dedicated learner/teaching pool. Whilst the Pingles centre includes both a main pool and a separate leisure pool.
- 2.14 This means both public leisure centre sites, can provide for all the swimming activities of, developing confidence in water, learn to swim; public recreational swimming, lane and fitness swimming and swimming development through clubs. Whilst at the Pingles Centre there is also the leisure pool, that provides for developing confidence in water and fun based activities.

Comparative measure of provision

- 2.15 A comparative measure of swimming pool provision is water space per 1,000 population and Nuneaton and Bedworth Borough has 9 sq. metres of water per 1,000 population in run 1 in 2019 (rounded), increasing to 11 sq metres of water by run 4. (Rounded).
- 2.16 In comparison to the neighbouring authorities, Nuneaton and Bedworth has the lowest supply in 2019, along with Hinckley and Bosworth. The highest supply is in Rugby which has 14.9 sq metres of water per 1,000 population.
- 2.17 The findings for West Midlands Region and England wide in 2019 are 10 and 12 sq metres of water per 1,000 population respectively.
- 2.18 The findings on water space per 1,000 population are set out, because some local authorities like to compare their quantitative provision with elsewhere, it is not setting a standard of provision. The supply and demand for swimming pools in Nuneaton and Bedworth is based on the findings from all seven headings analysed in the report.

Table 2.3: Water space per 1,000 population for all authorities 2019 – 2034

Water space per 1,000 population	RUN 1	RUN 2	RUN 3	RUN 4
	2019	2034	2034	2034
Nuneaton & Bedworth	8.9	7.5	1.0	10.9
Hinckley & Bosworth	8.9	8.1	8.1	8.1
Coventry	10.3	8.2	8.2	8.2
North Warwickshire	12.6	12.0	12.0	12.0
Rugby	14.9	13.7	13.7	13.7

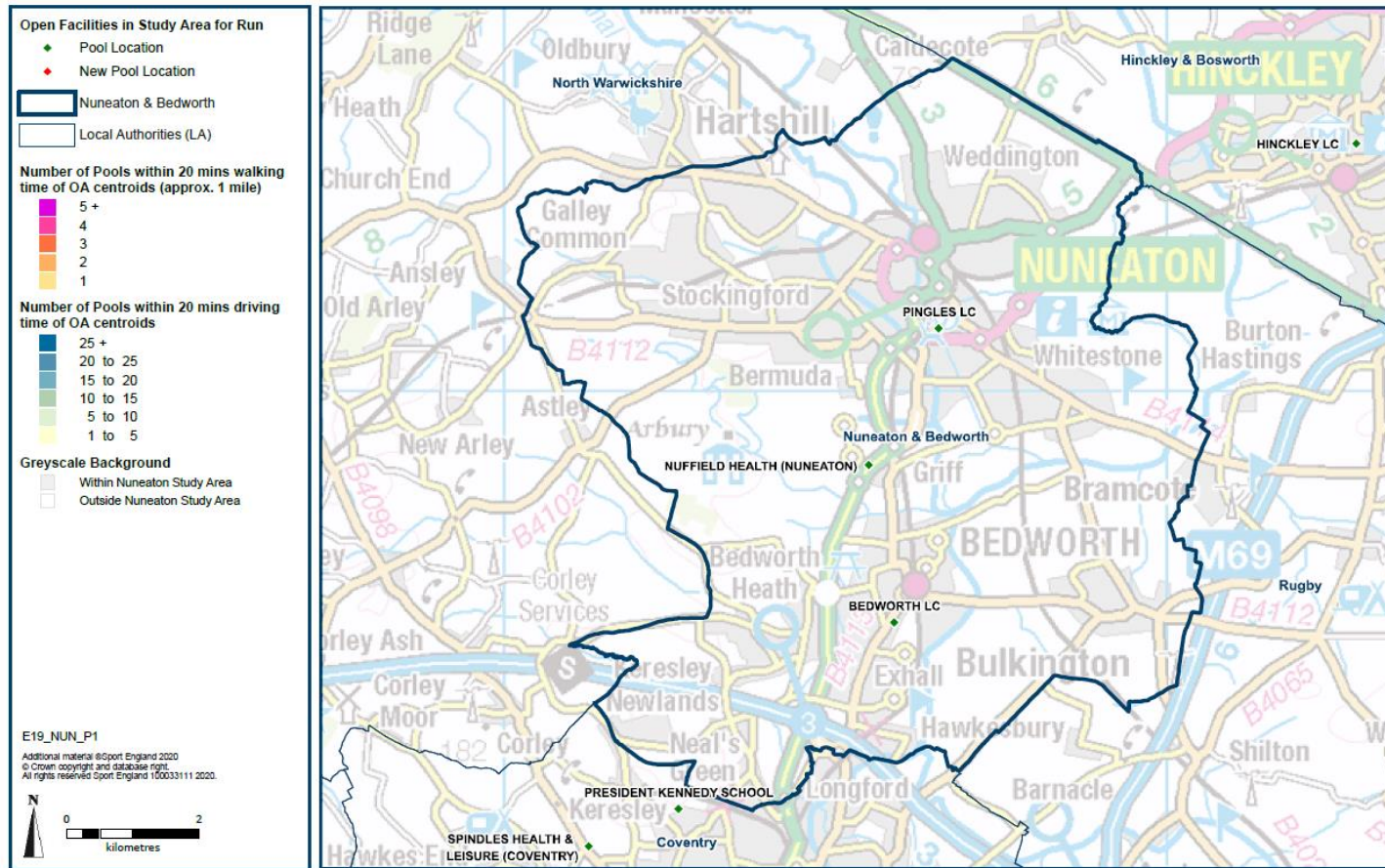
Pool locations

2.19 Maps 2.1 and 2.2 overleaf show the location of swimming pools across Nuneaton and Bedworth in runs 1 and 4. The findings on the swimming pool catchment areas in relation to, total demand, unmet demand and local share, are set out under subsequent headings.

Map 2.1: Run 1 Location of Swimming Pool Sites Nuneaton and Bedworth Borough 2019

Facility Planning Model - Pools Catchments for Nuneaton & Bedworth
Run 1: Existing Position (2019)

Catchments shown thematically (colours) at output area level expressed as the number of Pools within 20 minutes travel time of output area centroid.

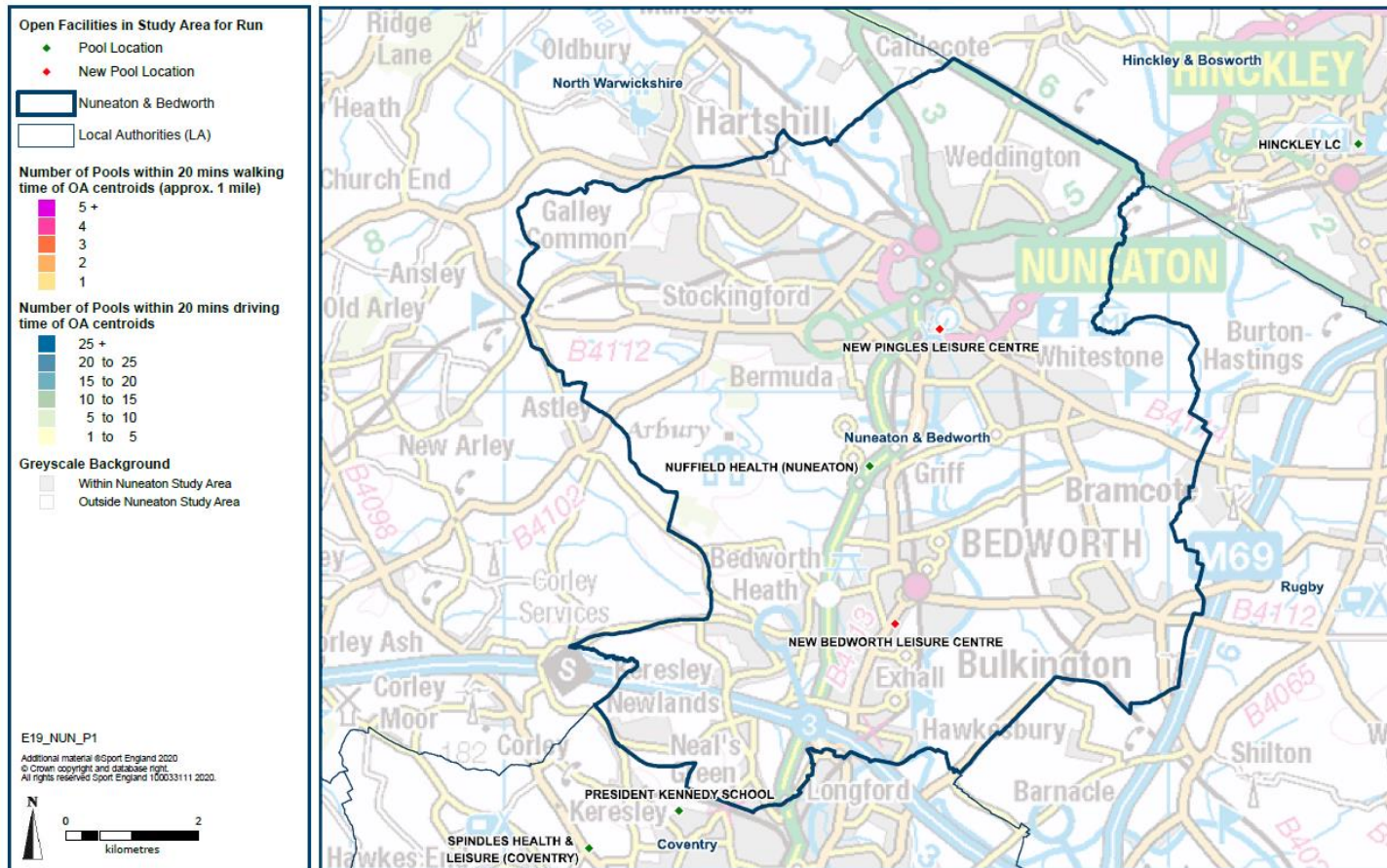


Map 2.2: Run 4 Location of Swimming Pool Sites Nuneaton and Bedworth Borough 2034



Facility Planning Model - Pools Catchments for Nuneaton & Bedworth
 Run 4: New Bedworth and Pingles Pools Open (2034)

Catchments shown thematically (colours) at output area level expressed as the number of Pools within 20 minutes travel time of output area centroid.



3. Demand for Swimming Pools

Table 3.1: Demand for Swimming Pools Nuneaton and Bedworth Borough 2019 - 2034

Nuneaton & Bedworth	RUN 1	RUN 2	RUN 3	RUN 4
Total Demand	2019	2034	2034	2034
Population	129,105.	154,295.	154,295.	154,295.
Swims demanded – visits per week peak period	7,966.	9,214.	9,214.	9,214.
Equivalent in water space – with comfort factor included	1,322.	1,529.	1,529.	1,529.
% of population without access to a car	21.2	21.2	21.2	21.2

- 3.1 **Definition of total demand** – it represents the total demand for swimming by both genders and for 14 five-year age bands from 0 to 65+. This is calculated as the percentage of each age band/gender that participates. This is added to the frequency of participation in each age band/gender, so as to arrive at a total demand figure, which is expressed in visits in the weekly peak period and sq. metres of water. The fpm parameters for the percentage of participation and frequency of participation, for both genders and for different age bands are set out in Appendix 2.
- 3.2 The Nuneaton and Bedworth Borough population in 2019 is 129,105 people and is projected to increase to 154,295 people by 2034, a 19.5% increase.
- 3.3 The Nuneaton and Bedworth total demand for swimming in 2019 is 7,966 visits per week in the weekly peak period and this equates to a total demand for 1,322 sq metres of water. (For context a 25m x 4 lane pool is between 210 – 250 sq. metres of water, depending on individual lane width).
- 3.4 Total demand is projected to increase to 9,214 visits in the weekly peak period in 2034 and this equates to a demand for 1,529 sq. metres of water, an increase of 15.6%.
- 3.5 So there is a projected 19.5% increase in the total population across Nuneaton and Bedworth between 2019 and 2034 and a projected 15.6% increase in the total demand for swimming.
- 3.6 The most likely reason for the lower percentage increase in the total demand for swimming, compared with the population percentage increase, is because the total demand for swimming in 2034 is made of (1) the resident population and (2) the growth in population between 2019 and 2034.

- 3.7 The ageing of the resident population between 2019 and 2034 will influence the demand for swimming. It can mean, there are fewer people in the main age bands for swimming (14 – 54 and for both genders) in the second run year than the first run year.
- 3.8 So, the increase in demand for swimming from population growth, is offset by the ageing of the much larger resident population between 2019 and 2034. The modelling is based on the frequency of swimming participation being unchanged between both years.
- 3.9 The changes in total demand for swimming for all the authorities, expressed in sq. metres of water, is set out in Table 3.2. Nuneaton and Bedworth has the second highest demand for swimming after Coventry. However, the Coventry population in 2019 is 372,025 and is not comparable with the other authorities.

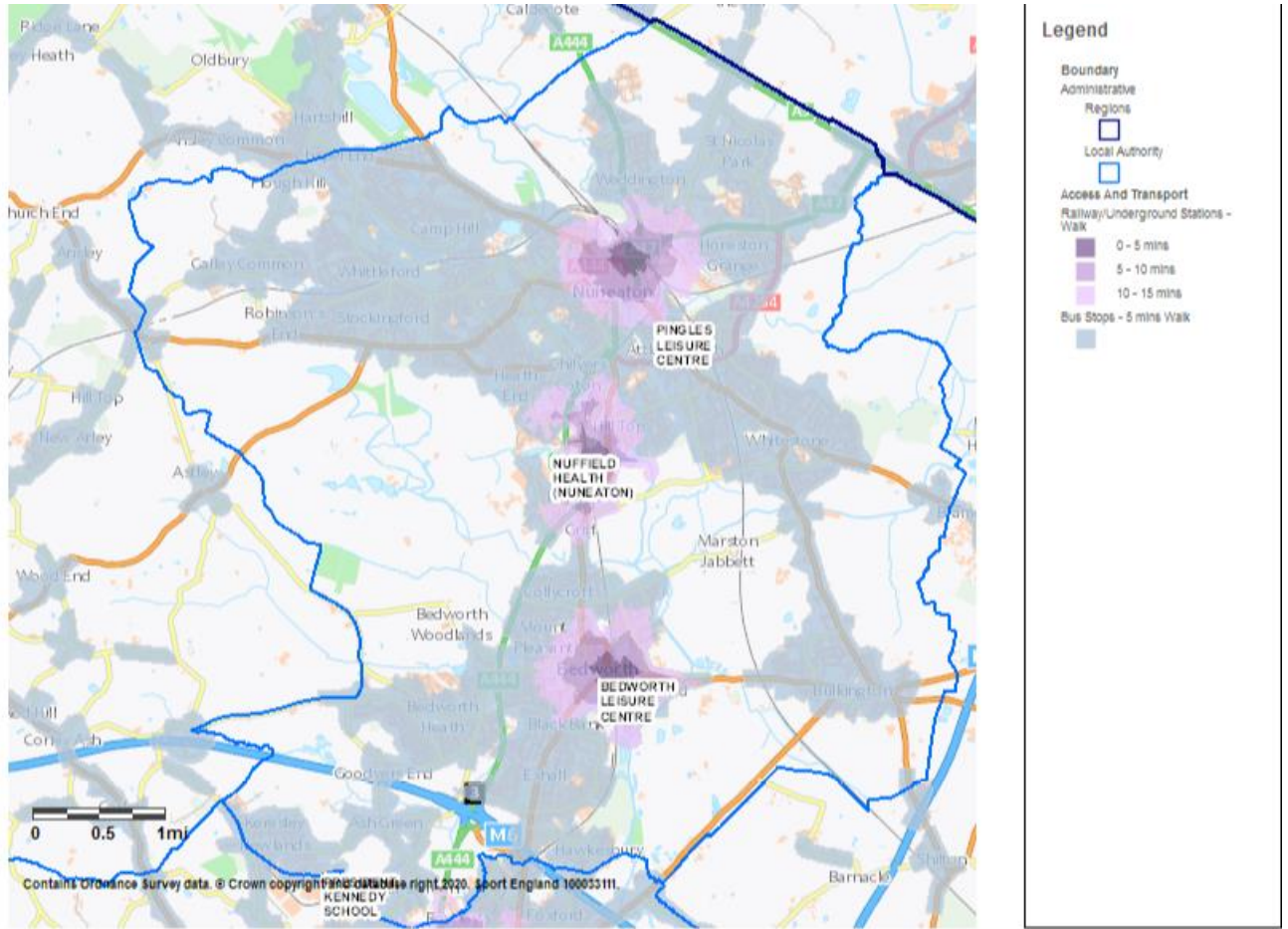
Table 3.2: Total demand for swimming in sq metres of water for all authorities 2019 and 2034

Equivalent in water space – with comfort factor included	RUN 1	RUN 2	RUN 3	RUN 4
	2019	2034	2034	2034
Nuneaton & Bedworth	1321.9	1529.1	1529.1	1529.1
Hinckley & Bosworth	1129.7	1188.0	1188.0	1188.0
Coventry	3889.3	4542.0	4542.0	4542.0
North Warwickshire	636.4	635.7	635.7	635.7
Rugby	1100.5	1151.3	1151.3	1151.3

- 3.10 The location of the total demand for swimming across Nuneaton and Bedworth in 2019 is set out in Map 3.1. Map 3.2 shows the distribution of total demand in run 4 for 2034, demand in runs 2 and 3 is the same as run 4.
- 3.11 The demand values are expressed in sq. metres of water in 1km grid square. The values are lowest in the purple squares, at 1 – 10 sq. metres of water, then mid blue squares 10 – 20 sq. metres of water, turquoise squares at 20 – 30 sq. metres of water, light green squares with 30 – 40 sq. metres of water, sage green squares with values of between 40 – 50 sq. metres of water and light beige with values of between 50sq – 75 sq metres of water.
- 3.12 Demand for swimming is highest in both years the area to the west of Pingles Leisure Centre in the Stockingford area. The rest of the borough has quite an even distribution of demand, again in both years.

- 3.13 The findings on the percentage of the population who do not have access to a car is set out under the total demand heading. In Nuneaton and Bedworth this is 21.2% of Nuneaton and Bedworth residents, based on the 2011 Census findings. The West Midlands Region average is 28.6% and for England wide it is 24.9% of the population who do not have access to a car.
- 3.14 If there is a high percentage of residents who do not have access to a car, then travel by public transport and walking is higher. For these residents a network of local accessible swimming pools is important to encourage swimming participation.
- 3.15 The fpm findings for 2019 are that, 80% of all visits to pools by Nuneaton and Bedworth residents are by car (20 minutes' drive time), whilst travel to pools by walkers (20 minutes/1mile catchment area) is 12% of all visits and travel to pools by public transport (20 minutes catchment area) is 8% of all visits.
- 3.16 So, 20% of all visits, or, one in five of all visits to pools, are by walkers or people who use public transport.
- 3.17 To provide some guidance on how accessible the swimming pools sites are by public transport Map 3.3 shows the area of the Borough that is within a range of 0 - 15 minute walk of a train station (areas in purple) and areas of the Borough within 5 minutes' walk of a bus stop (areas in grey). The swimming pool locations are shown by name.
- 3.18 There is an extensive area of the Borough within 5 minutes' walk of a bus stop and the swimming pool sites are co-located with these areas and the railway stations. So public transport is providing a good level of accessibility to the swimming pool sites.

Map 3.3: Areas of Nuneaton and Bedworth Borough within 0 - 15 minutes' walk of a railway station and 0 - 5 minutes' walk of a bus stop



4. Supply and Demand Balance

Table 4.1: Supply and Demand Balance Nuneaton and Bedworth Borough 2019 – 2034

Nuneaton & Bedworth	RUN 1	RUN 2	RUN 3	RUN 4
Supply/Demand Balance	2019	2034	2034	2034
Supply - Swimming pool provision (sq m) based on hours available for community use	1,130.	1,130.	157.	1,599.
Demand - Swimming pool provision (sq m) taking into account a 'comfort' factor	1,322.	1,529.	1,529.	1,529.
Supply / Demand balance - Variation in sq m of provision available compared to the minimum required to meet demand.	-192.	-399.	-1,372.	70.

- 4.1 **Definition of supply and demand balance** – supply and demand balance compares the total demand generated for swimming within Nuneaton and Bedworth Borough with the total supply of swimming pools within the Borough. It therefore represents an assumption that ALL the demand for swimming is met by ALL the supply of swimming pools within Nuneaton and Bedworth Borough. (Note: it does exactly the same for the other local authorities in the study area).
- 4.2 In short, supply and demand balance is NOT based on where the pools are located and their catchment area extending into other authorities. Nor, the catchment areas of pools in neighbouring authorities extending into Nuneaton and Bedworth. Most importantly supply and demand balance does NOT take into account the propensity/reasons for residents using facilities outside their own authority. The more detailed modelling based on the CATCHMENT AREAS of pools is set out under Satisfied Demand, Unmet Demand and Used Capacity.
- 4.3 The reason for presenting the supply and demand balance is because some local authorities like to see how THEIR total supply of pools compares with THEIR total demand for pools. Supply and demand balance presents this comparison.
- 4.4 When looking at this assessment, run 1 shows the Nuneaton and Bedworth Borough demand for swimming pools in 2019 is for 1,322 sq. metres of water in run 1 and this increases to 1,529 sq metres of water in runs 2 – 4.

- 4.5 The Nuneaton and Bedworth Borough supply of swimming pools available for community use, equates to 1,130 sq. metres of water in runs 1 and 2. It decreases to just 157 sq metres of water in run 3, when the existing Bedworth and Pingles Leisure Centres are closed.
- 4.6 Supply increases to 1,599 sq metres of water run 4, with the new and larger Bedworth and Pingles Leisure Centres included
- 4.7 In run 1 there is a negative supply and demand balance, with the Nuneaton and Bedworth Borough demand exceeding the Borough supply by 192 sq. metres of water. In run 2 with the projected increase in demand for swimming from population growth, and no change in the swimming pool supply, the Borough demand exceeds the Borough supply by 399 sq metres of water.
- 4.8 Evidently with both the Bedworth and Pingles Leisure Centres closed in run 3 and only the Nuffield Health pool site, the Borough's demand exceeds the Borough's supply by a very high 1,372 sq metres of water.
- 4.9 It is only in run 4, when there is the new and larger Bedworth and Pingles Leisure Centres are included that the Borough's supply of water space exceeds the Borough's demand and this is by 70 sq metres of water.
- 4.10 So run 4 does provide the best option, in terms of overall supply and demand balance for swimming, with this small surplus of supply over demand of 70 sq metres of water.
- 4.11 To repeat, this is the closed quantified assessment and is simply comparing the Nuneaton and Bedworth Borough demand for swimming with the Nuneaton and Bedworth Borough supply. It is NOT based on catchment area of pools across local authority boundaries. How much of the Nuneaton and Bedworth Borough demand for swimming can be met, and how much unmet demand there is, based on the catchment area of pools and across local authority boundaries, is set out under subsequent headings.

Supply and demand balance for all authorities

- 4.12 The supply and demand balance for all the authorities in the study area is set out in Table 4.2 below.
- 4.13 In 2019 across the 5 local authorities in the study area, demand exceeds supply by 1,124 sq metres of water, very close to the actual supply in Nuneaton and Bedworth.
- 4.14 In run 2 in 2034, and including the increase in demand for swimming from population growth, demand exceeds supply by 2,256 sq metres of water.

4.15 Given the overall supply and demand balance findings across the study area, it indicates the level of demand for swimming which can be met, is likely to be quite high, and the used capacity of the pools high. These findings are examined under the next set of headings.

Table 4.2: Supply and Demand Balance for Swimming Pools across the Study Area 2019 – 2034

Supply / Demand balance - Variation in sqm of supply available compared with the minimum required to meet demand.	RUN 1	RUN 2	RUN 3	RUN 4
	2019	2034	2034	2034
Nuneaton & Bedworth	-192.3	-399.5	-1372.3	70.3
Hinckley & Bosworth	-283.7	-342.0	-342.0	-342.0
Coventry	-819.7	-1636.3	-1636.3	-1636.3
North Warwickshire	-12.3	-11.6	-11.6	-11.6
Rugby	183.6	132.7	132.7	132.7

5. Satisfied Demand for Swimming

Table 5.1: Satisfied Demand for swimming Nuneaton and Bedworth Borough 2019 – 2034

Nuneaton & Bedworth	RUN 1	RUN 2	RUN 3	RUN 4
Satisfied Demand	2019	2034	2034	2034
Total number of visits which are met - visits per week peak period	7,230.	8,224.	6,319.	8,327.
% of total demand satisfied	90.8	89.3	68.6	90.4
% of demand satisfied who travelled by car	79.9	82.	95.	81.1
% of demand satisfied who travelled by foot	12.1	9.9	0.5	10.4
% of demand satisfied who travelled by public transport	8.	8.1	4.5	8.5
Demand Retained - visits per week peak period	5,999.	6,722.	1,270.	7,623.
Demand Retained -as a % of Satisfied Demand	83.	81.7	20.1	91.5
Demand Exported - visits per week peak period	1,231.	1,502.	5,049.	704.
Demand Exported -as a % of Satisfied Demand	17.	18.3	79.9	8.5

- 5.1 **Definition of satisfied demand** – it represents the proportion of total demand that is met by the capacity at the swimming pools from Nuneaton and Bedworth Borough residents who live within the driving, walking or public transport catchment area of a pool. This includes pools located both inside and outside Nuneaton and Bedworth Borough
- 5.2 In runs 1 and 2 the amount of the Nuneaton and Bedworth Borough total demand that can be satisfied/met is 90.8% in run 1, and 89.3% in run 2.
- 5.3 It decreases to 68.6% of the Borough’s total demand in run 3, with the Bedworth and Pingles Leisure Centres closed. This is still a high level given these changes, it is possible because the Borough can export a very high level of demand to swimming pools in neighbouring local authorities, and are pool sites accessible to Nuneaton and Bedworth Borough residents.
- 5.4 In run 4 some 90.4% of the Bedworth and Nuneaton demand for swimming can be met when the 2 new centres are included, very similar to the 2019 position. The difference is demand is being met in two new swimming pool sites which have a more extensive and higher quality offer.
- 5.5 The level of satisfied demand across the study area for runs 1 – 4 is set out in Table 5.2 below. In all the local authorities the percentage of total demand, which is satisfied is high, and within a range of 86% - 95% of total demand.

Rugby has the highest level of satisfied demand at 94% of total demand in all four runs

Table 5.2: Percentage of Satisfied Demand for Swimming across the Study Area 2019 – 2034

% of total demand satisfied	RUN 1	RUN 2	RUN 3	RUN 4
	2019	2034	2034	2034
Nuneaton & Bedworth	90.8	89.3	68.6	90.4
Hinckley & Bosworth	93.2	92.8	91.8	93.2
Coventry	92.4	89.1	86.2	90.6
North Warwickshire	90.5	89.8	86.7	90.4
Rugby	94.9	94.8	94.3	94.9

Retained demand

- 5.6 A subset of the satisfied demand findings show how much of the Nuneaton and Bedworth Borough demand for swimming is retained at the pools located within the Borough. This assessment is based on the catchment area of pools and residents using the nearest pool to where they live, and which is a pool located in Nuneaton and Bedworth – it is known as retained demand.
- 5.7 The findings in Table 5.1 show that retained demand is 83% of the 91% satisfied demand in run 1. In run 2 retained demand is 82% of the total 89% satisfied demand.
- 5.8 The significant change is in run 3, when there is only the Nuffield Health pool site open and retained demand drops to 20% of the total satisfied demand. In this run the Borough is exporting the vast majority of its demand to pools in neighbouring local authorities and which are accessible to Nuneaton and Bedworth residents.
- 5.9 In run 4 retained demand recovers with the opening of the new Bedworth and Pingles Leisure Centres and retained demand is 91% of the total demand which is satisfied.
- 5.10 The key finding is that in all runs, except run 3 retained demand is very high at between eight and nine out of ten visits to a swimming pool by a Nuneaton and Bedworth resident.
- 5.11 This shows there is a very high correlation between the location and catchment area of the Nuneaton and Bedworth Borough pool sites, and the location of the

Nuneaton and Bedworth Borough demand for swimming. In short, the pools are located in the right places to meet the Borough’s demand for swimming pools.

Exported demand

- 5.12 The residual of satisfied demand, after retained demand, is exported demand. Again, this is based on residents travelling to and using the nearest pool to where they live. In run 1 the model’s findings are that 17% of the Nuneaton and Bedworth Borough demand for swimming is exported and met at pools in neighbouring local authorities.
- 5.13 Exported demand increases to 18% of satisfied demand in run 2 and then increases significantly to 80% of total satisfied demand in run 3 when there is just the Nuffield Health pool site open.
- 5.14 In run 4 exported demand reduces to its lowest level, at 8.5% of the Borough’s satisfied demand for swimming. The increase in the size of the pools at the new Bedworth and Pingles Leisure Centres, means they can meet and retain more of the Borough’s demand for swimming.
- 5.15 The destination and scale of the Nuneaton and Bedworth Borough exported demand for runs 1 and 4 is set out in Tables 5.3 and 5.4.

Table 5.3: Run 1 Export of Nuneaton and Bedworth Borough Satisfied Demand for Swimming 2019

DEMAND	GOES TO	VISIT TOTAL	% TOTAL
	Nuneaton & Bedworth	5,999	83.0
	Hinckley & Bosworth	290	4.0
	Coventry	637	8.8
	North Warwickshire	243	3.4
	Rugby	10	0.1
	OTHER	51	0.7

Table 5.4: Run 4 Export of Nuneaton and Bedworth Borough Satisfied Demand for Swimming 2034

DEMAND	GOES TO	VISIT TOTAL	% TOTAL
	Nuneaton & Bedworth	7,623	91.5
	Hinckley & Bosworth	248	3.0
	Coventry	282	3.4
	North Warwickshire	146	1.8
	Rugby	5	0.1
	OTHER	23	0.3

5.16 The largest exported demand is to Coventry in both years, at 8.8% of the Nuneaton and Bedworth Borough satisfied demand in 2019 and falling to 3.4% in 2034. The figures for Nuneaton and Bedworth represent the level of the Borough's satisfied demand retained within the Borough.

Retained and exported demand in visits

5.17 For context, in run 1 the Borough's retained demand is 5,999 visits in the weekly peak period run 1 and the exported demand is 1,231 visits.

5.18 There is an even more marked contrast in run 4, when retained demand is 7,623 visits in the weekly peak period and the exported demand is just 704 visits in the weekly peak period.

5.19 The findings in Tables 5.3 and 5.4 can also be presented in map form and these are set out in Maps 5.1 for run 1 and Map 5.2 for run 4. The yellow chevron represents the number of visits which are exported and met in each of the neighbouring authorities. The figure in the Nuneaton and Bedworth map represents the number of visits retained within the Borough.

Map 5.1: Run 1 Export of Nuneaton and Bedworth Borough Satisfied Demand for Swimming 2019

Facility Planning Model - Pools Import/Export for Nuneaton & Bedworth
Run 1: Existing Position (2019)

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

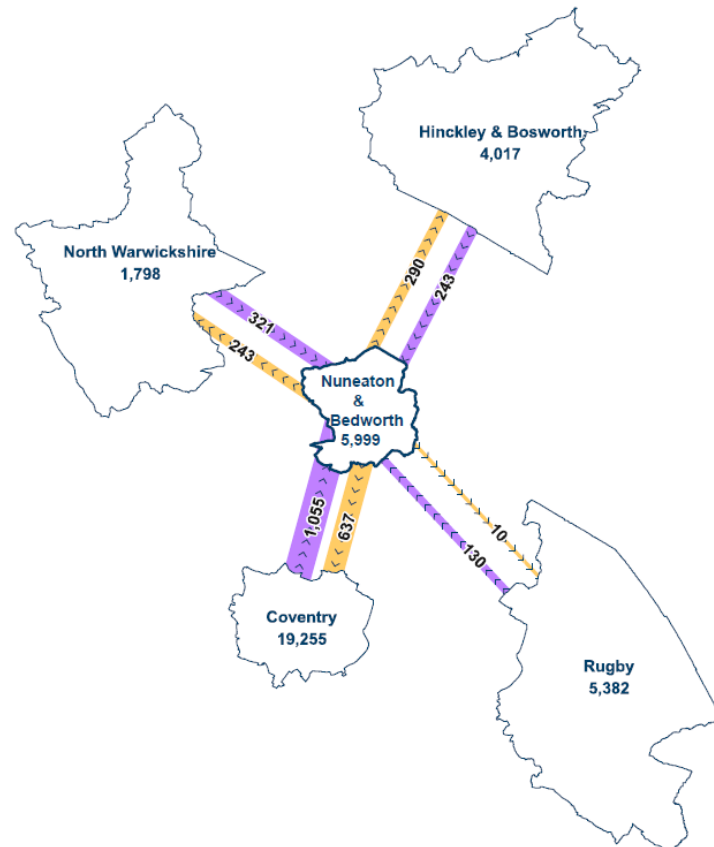
Boundaries
Values in areas show retained vpwpp

- Nuneaton & Bedworth
- Surrounding LAs

Import/Export

Values on arrows show flow vpwpp

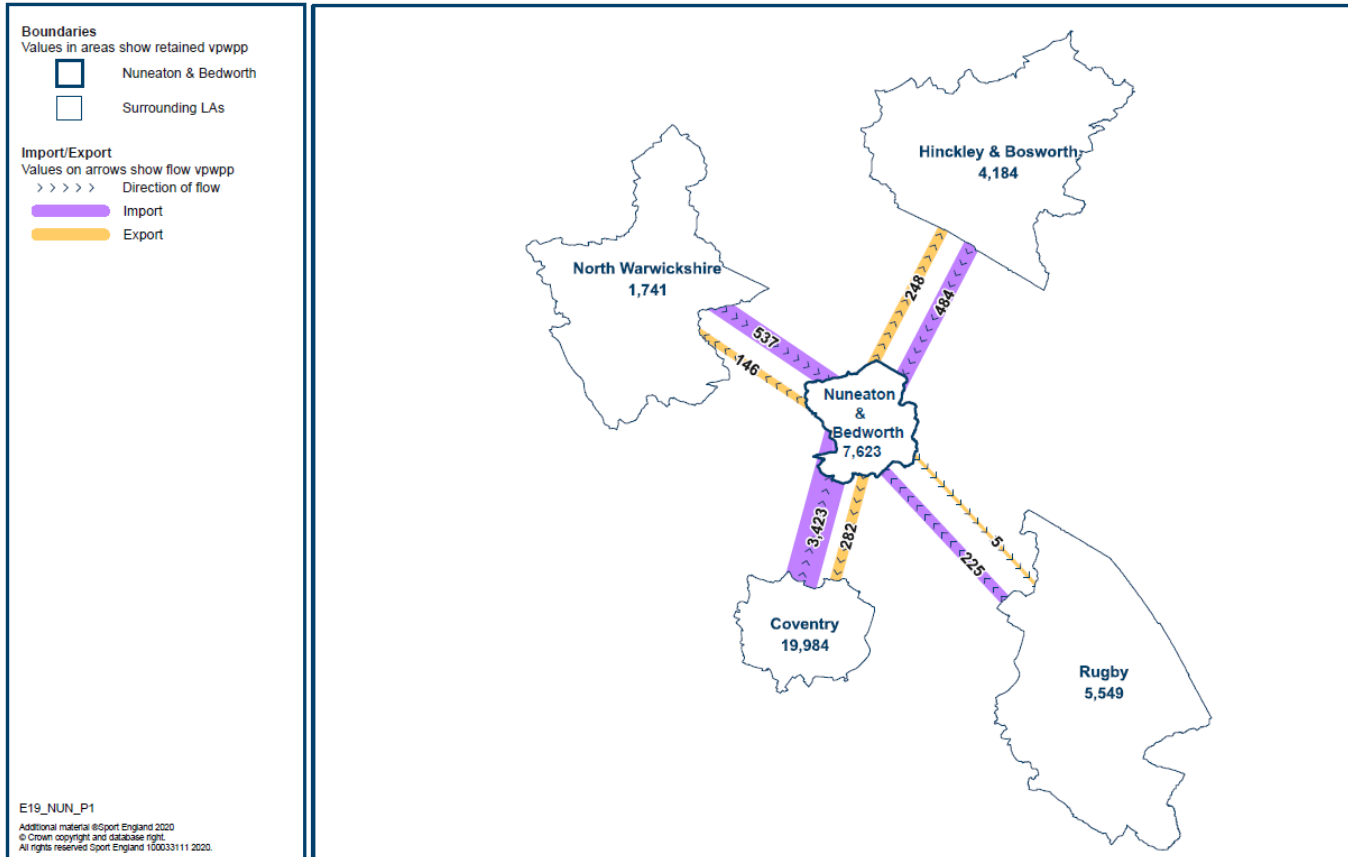
- >>>> Direction of flow
- Import
- Export



E19_NUN_P1
Additional material © Sport England 2020
© Crown copyright and database right.
All rights reserved Sport England 100033111 2020.

Map 5.2: Run 4 Export of Nuneaton and Bedworth Borough Satisfied Demand for Swimming 2034

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



6. Unmet Demand for Swimming

**Table 6.1: Unmet Demand for Swimming Nuneaton and Bedworth Borough
2019 – 2033**

Nuneaton & Bedworth	RUN 1	RUN 2	RUN 3	RUN 4
Unmet Demand	2019	2034	2034	2034
Total number of visits in the peak, not currently being met - visits per week peak period	736.	990.	2,895.	887.
Unmet demand as a % of total demand	9.2	10.7	31.4	9.6
Equivalent in Water space m2 - with comfort factor	122.	164.	480.	147.
% of Unmet Demand due to:				
Lack of Capacity -	3.1	14.1	39.3	4.2
Outside Catchment -	96.9	85.9	60.7	95.8
Outside Catchment:	96.9	85.9	60.7	95.8
% of Unmet demand who do not have access to a car	86.1	76.6	50.7	85.4

- 6.1 The **unmet demand definition** has two parts to it - demand for pools which cannot be met because (1) there is too much demand for any particular swimming pool within its catchment area and there is a lack of swimming pool capacity; or (2) the demand is located outside the catchment area of any pool and is then classified as unmet demand.
- 6.2 The Nuneaton and Bedworth Borough total unmet demand is within a very narrow range in runs 1, 2 and 4. It is 9.2% of total demand for swimming in run 1, which is 122 sq metres of water, 10.7% in run 2, which is 164 sq metres of water and 9.6% of total demand in run 4, and which is 147 sq metres of water. (Again for context a 25m x 4 lane pool is between 210 – 250 sq metres of water, depending on individual lane width).
- 6.3 In terms of the two different types of unmet demand, nearly all of it is from definition 2, which is unmet demand located outside the catchment area of a swimming pool. It is 96.9% of total unmet demand in run 1 (118 sq metres of water), then 85.9% in run 2 (140 sq metres of water) and 95.8% in run 4 (140 sq metres of water).
- 6.4 Unmet demand from lack of swimming pool capacity is 3.1% of total unmet demand in run 1 (4 sq metres of water), in run 2 it is 14.1% of the 2034 total unmet demand (23 sq metres of water) and in run 4 it is 4.2% (6 sq metres of water). These findings are reviewed under the used capacity heading.

6.5 The key findings are that

- In both years and all runs, unmet demand is low in both percentage and more importantly in sq. metres of water and within a range of 122 – 164 sq metres of water. For context, the total available supply of water space in Nuneaton and Bedworth Borough in run 1 is 1,130 sq metres of water and 1,599 sq metres of water in run 4.
- The major source of the unmet demand is from definition 2, demand located outside the catchment area of a pool, and within a range of 85% - 96% of total unmet demand
- Unmet demand, in all runs from definition 1 – lack of swimming pool capacity to meet demand – is very low and within a range of 4 – 23 sq metres of water. This means the swimming pool supply modelled in each of the runs, does provide enough swimming pool capacity, to meet the Nuneaton and Bedworth Borough demand for swimming pools.
- (Note these findings exclude run 3 as this run excludes the Bedworth and Pingles Leisure Centre sites and assumes there is only the one commercial pool site in the Borough)

6.6 Unmet demand from definition 2 – demand located outside catchment is the much larger source of unmet demand. It will always exist, because it is not possible to get complete spatial coverage, whereby all areas are inside the catchment area of a swimming pool.

6.7 This is especially true for the 20 minutes/1 mile walking catchment area, which, by definition, is quite a small catchment area. Also, as identified in the demand section (Table 3.1), some 21% of Nuneaton and Bedworth residents do not have access to a car and either walk or use public transport to access a pool.

6.8 Residents who do not have access to a car and live outside the catchment area of a swimming pool, accounts for 86% in run 1, 76% in run 2 and 85% in run 4 of the total unmet demand (final row of Table 6.1).

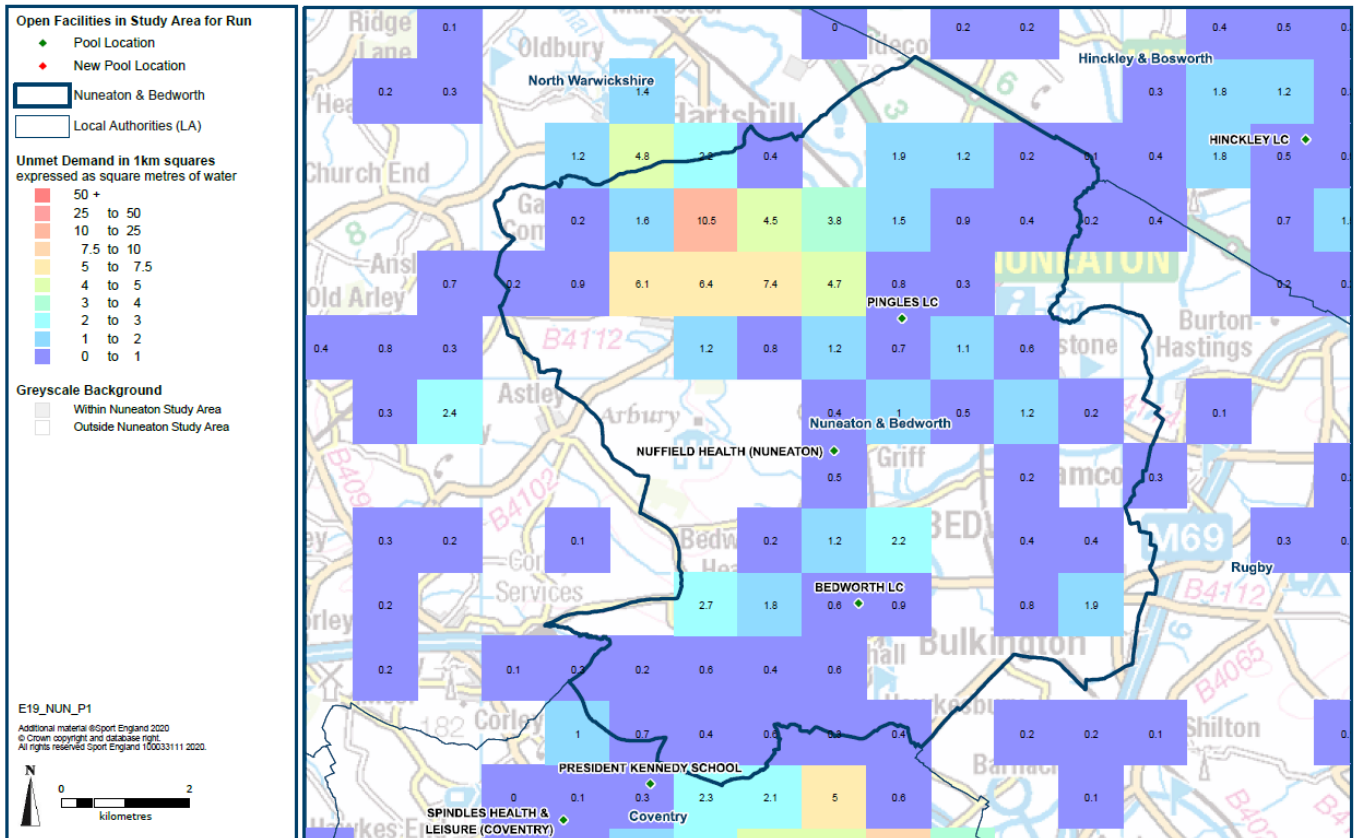
6.9 The key point is, NOT that unmet demand outside catchment exists but the SCALE, and at a range of between 118 – 140 sq metres of water it is very small. As reported, the total available supply of water space in Nuneaton and Bedworth Borough in run 1, is 1,130 sq metres of water and 1,599 sq metres of water in run 4.

- 6.10 The location and scale of unmet demand in 2019 across Nuneaton and Bedworth Borough is set out in Map 6.1 for run 1 and Map 6.2 for run 4 in 2034.
- 6.11 The unmet demand is represented in colour coded one-kilometre grid squares, with the sq metres of water of unmet demand shown in each square. The values and findings for Nuneaton and Bedworth are, purple (0 - 1 sq. metre of water), mid blue (1 – 2 sq. m) light blue (2 – 3 sq. m), turquoise (3 – 4 sq metres of water), green (4 – 5 sq metres of water) light beige (5 – 7.5 sq metres of water) and pink (7.5 – 10 sq metres of water).
- 6.12 Unmet demand in both years is highest in the Stockingford area where it totals 45 sq metres of water in both years, so very low values of unmet demand. Unmet demand is then dispersed across the Borough with very low values in each square.
- 6.13 There is no one area of the Borough which has a cluster of unmet demand, in sufficient quantity, to consider increasing swimming pool provision on grounds of increasing accessibility for residents. This would require a location with at least 160 sq metres of water. The total unmet demand across the whole of the Borough, ranges from 122 sq metres of water (run 1) to 164 sq metres of water (run 2), excluding run 3 where there are no public swimming pool sites.

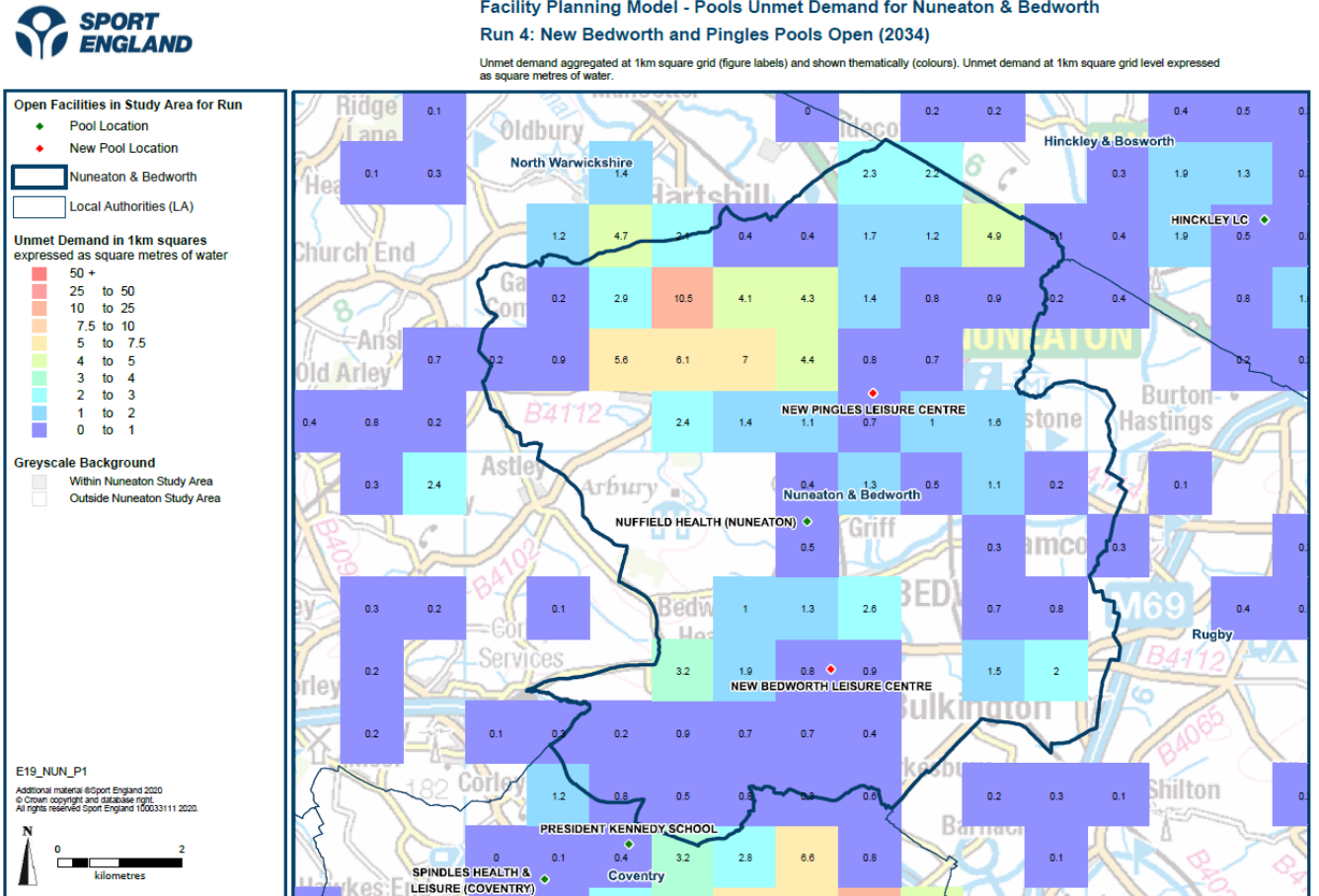
Map 6.1: Run 1 Unmet Demand for Swimming Pools Nuneaton and Bedworth Borough 2019

Facility Planning Model - Pools Unmet Demand for Nuneaton & Bedworth
Run 1: Existing Position (2019)

Unmet demand aggregated at 1km square grid (figure labels) and shown thematically (colours). Unmet demand at 1km square grid level expressed as square metres of water.



Map 6.2: Run 4 Unmet Demand for Swimming Pools Nuneaton and Bedworth Borough 2034



Car catchment area for swimming pools

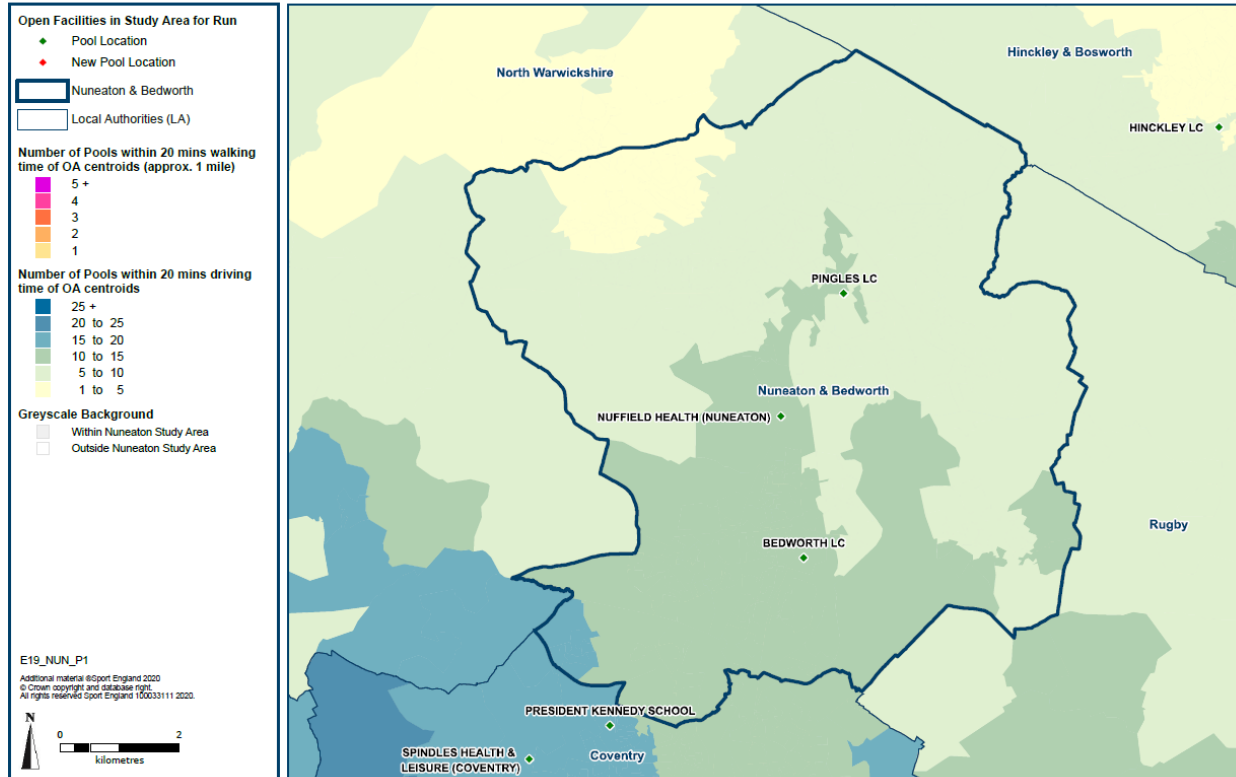
- 6.14 It is possible to set out how many swimming pools can be accessed by Nuneaton and Bedworth residents, based on where they live and the 20 minute drive time catchment area of the swimming pool locations. This includes pool sites located in neighbouring authorities, and where the catchment area extends into Nuneaton and Bedworth. These findings are set out in Map 6.3 for run 1.
- 6.15 Given the pool locations do not change the findings for subsequent runs do not change, except in run 3 where there is just the Nuffield Health pool location. For illustration, the findings for Run 3 are shown in Map 6.4
- 6.16 Residents living in the cream area, around 8% of the land area of the Borough, have the least access to swimming pools based on car travel from where they live, with access to between 1 – 5 swimming pools. Residents living in the light green areas, around 40% of the land area of the Borough, have access to between 5 – 10 swimming pools, based on the pool locations and their drive time catchment area. Residents in the darker green areas, around 40% of the land area have access to between 10 - 15 pool sites, based on the same criteria.
- 6.17 Whilst residents in the blue area around 12% of the land area of the Borough have the highest accessibility to swimming pools, with between 15 – 20 swimming pools, based on the same criteria.
- 6.18 Overall, there is a good level of accessibility to a high number of pool sites in the southern half of the Borough. This decreases in the northern half and is lowest in the north west of the Borough. The fpm finding is that 80% of Nuneaton and Bedworth residents visit pools by car.
- 6.19 The findings for run 3 and Map 6.4 show that when there is only the Nuffield Health swimming pool site, accessibility is greatly reduced. There is a much larger cream area in the northern half of the Borough and where residents have access to between 1 – 5 swimming pools. Also the light green area is much larger than in the other runs and where residents have access to between 5 – 10 swimming pools based on car travel.

Map 6.3: Run 1 Access to Swimming Pools Based on the Car Travel Catchment Area of Pools Nuneaton and Bedworth 2019

Facility Planning Model - Pools Catchments for Nuneaton & Bedworth

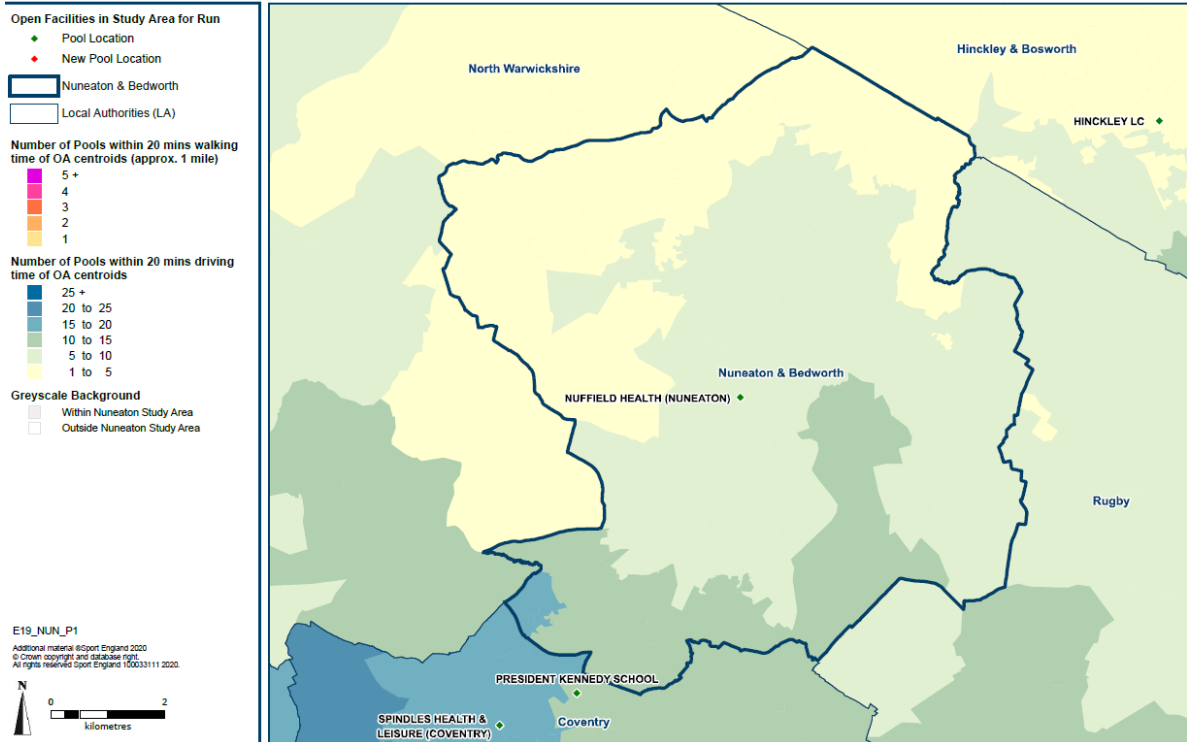
Run 1: Existing Position (2019)

Catchments shown thematically (colours) at output area level expressed as the number of Pools within 20 minutes travel time of output area centroid.



Map 6.4: Run 3 Access to Swimming Pools Based on the Car Travel Catchment Area of Pools Nuneaton and Bedworth 2034

Catchments shown thematically (colours) at output area level expressed as the number of Pools within 20 minutes travel time of output area centroid.



Walking Catchment Area of Swimming Pools

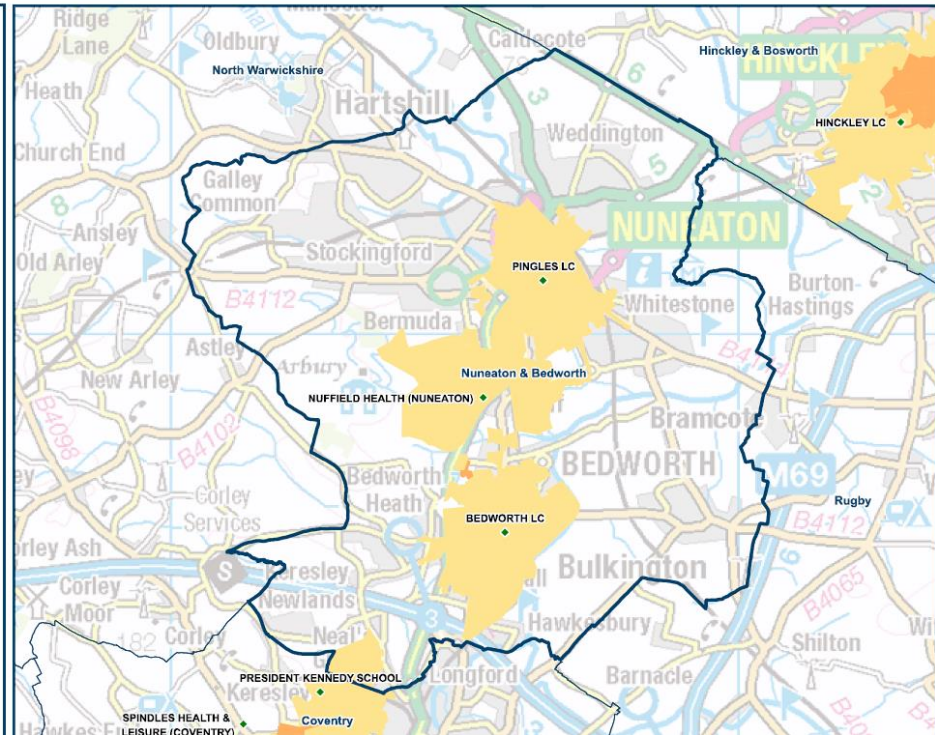
- 6.20 It is also possible to do the same mapping for the 20 minutes/1 mile walking catchment area of swimming pools and this is set out below in Map 6.5 for run 1 and it does not change for runs 2 and 4. By definition this is a small catchment area and residents in the area shaded orange are inside the walking catchment area of 1 swimming pool site.
- 6.21 The fpm finding is that walking to swimming pools by Nuneaton and Bedworth Borough residents, represents 12% of all visits in 2019.

Map 6.5 Run 1 Access to Swimming Pools Based on the Walking Catchment Area of Pools Nuneaton and Bedworth Borough 2019

Facility Planning Model - Pools Catchments for Nuneaton & Bedworth

Run 1: Existing Position (2019)

Catchments shown thematically (colours) at output area level expressed as the number of Pools within 20 minutes travel time of output area centroid.



7. Used Capacity (how full are the pools?)

Table 7.1: Used Capacity of Swimming Pools Nuneaton and Bedworth Borough 2019 – 2034

Nuneaton & Bedworth	RUN 1	RUN 2	RUN 3	RUN 4
Used Capacity	2019	2034	2034	2034
Total number of visits used of current capacity - visits per week peak period	7,802.	9,160.	1,360.	12,515.
% of overall capacity of pools used	79.7	93.5	100.	90.3
Visits Imported; Number of visits imported - visits per week peak period	1,803.	2,438.	90.	4,892.
As a % of used capacity	23.1	26.6	6.6	39.1

- 7.1 **Definition of used capacity** - is a measure of usage at swimming pools and estimates how well used/how full facilities are. The facilities planning model is designed to include a 'comfort factor', beyond which the venues are too full. The pool itself becomes too crowded to swim comfortably and the changing and circulation areas also become too crowded. In the model Sport England assumes that usage over 70% of capacity is busy, and the swimming pool is operating at an uncomfortable level above that percentage.
- 7.2 In run 1 the swimming pools, as an authority wide average, are estimated to be 79.7% full at peak times in 2019. Used capacity increases over the next two runs, with 93.5% in run 2, 100% in run 3 and then decreases to 90.3% in run 4, when the new and larger Bedworth and Pingles Leisure Centre pool sites are provided. .
- 7.3 Used capacity increases in run 2 because of the projected increase in demand for swimming pools from population growth. It increases in run 4 for the same reason, plus the draw and attraction of the new swimming pool sites at both Bedworth and Pingles, replacing the older leisure centres at both locations. Run 3 is at 100% of pool capacity used because there is only the Nuffield Health Pool site available.
- 7.4 These are the Borough wide average findings for pool capacity used, in each run. The estimated used capacity for each pool site does vary from the authority wide average, and the findings for each pool site are set out in Table 7.2. The executive summary report contains a full assessment of these findings

Table 7.2: Runs 1 - 3 Used Capacity of the Nuneaton and Bedworth Borough Swimming Pools 2019 – 2031

Individual Sites Utilised Capacity	PUBLIC / COMMERCIAL	RUN 1	RUN 2	RUN 3	RUN 4
		2019	2034	2034	2034
Nuneaton & Bedworth		80	94	100	90
BEDWORTH LEISURE CENTRE	P	63	94	0	0
NEW BEDWORTH LEISURE CENTRE	P	0	0	0	100
NEW PINGLES LEISURE CENTRE	P	0	0	0	96
NUFFIELD HEALTH (NUNEATON)	C	38	67	100	26
PINGLES LEISURE CENTRE	P	100	100	0	0

Imported Demand

- 7.5 Imported demand is reported under used capacity because if residents in the neighbouring local authorities use the nearest pool to where they live, and it is a pool site in Nuneaton and Bedworth, then this becomes part of the used capacity of the Nuneaton and Bedworth pools.
- 7.6 Imported demand increases from 23% in run 1 to 26% in run 2 and 39% in run 4. it decreases to just 6% of used capacity in run 3, when there is just the Nuffield Health pool site and the pool is full of use by Nuneaton and Bedworth residents.
- 7.7 The levels of imported demand from each authority in runs 1 and 4 are shown in Tables 7.3 and 7.4. The largest imported demand is from Coventry in both years, with 13.5% of the used capacity of the Nuneaton and Bedworth pools in 2019 and a very high 27.3% in run 4 for 2034.
- 7.8 The reason for the high imported demand from Coventry is because as shown in Table 4. 2 in the supply and demand section, the Coventry demand for swimming pools exceeds the Coventry supply by 819 sq metres of water in run 1 and 1,636 sq metres of water in run 4. So demand from Coventry will be exported, if there are swimming pools which are accessible to Coventry residents..
- 7.9 The figures in the Nuneaton and Bedworth rows in the tables, show the level of used capacity of the Borough's pools by Nuneaton and Bedworth residents.

Table 7.3 Run 1 Level of imported demand to Nuneaton and Bedworth Borough Swimming Pools 2019

DEMAND	COMES FROM	VISIT TOTAL	% TOTAL
	Nuneaton & Bedworth	5,999	76.9
	Hinckley & Bosworth	243	3.1
	Coventry	1,055	13.5
	North Warwickshire	321	4.1
	Rugby	130	1.7
	OTHER	55	0.7

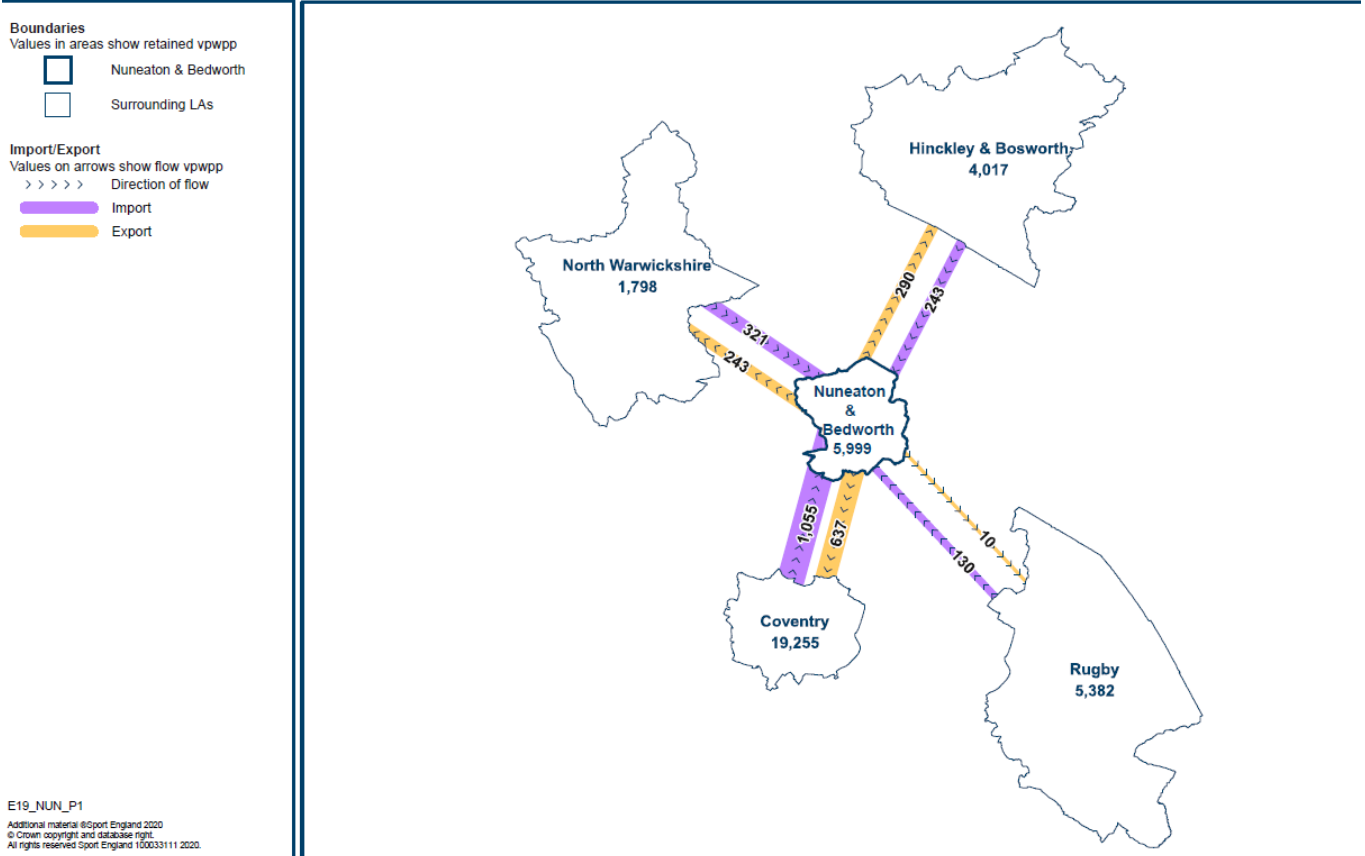
Table 7.4 Run 4 Level of imported demand to Nuneaton and Bedworth Borough Swimming Pools 2034

DEMAND	COMES FROM	VISIT TOTAL	% TOTAL
	Nuneaton & Bedworth	7,623	60.9
	Hinckley & Bosworth	484	3.9
	Coventry	3,423	27.3
	North Warwickshire	537	4.3
	Rugby	225	1.8
	OTHER	224	1.8

7.10 The final comment on imported demand is to illustrate the source and scale of the imported demand from each neighbouring local authority in map form. This is presented in Maps 7.1 for run 1 and Map 7.2 for run 4. The purple chevron shows the number of visits imported from each authority in 2019 and then 2034.

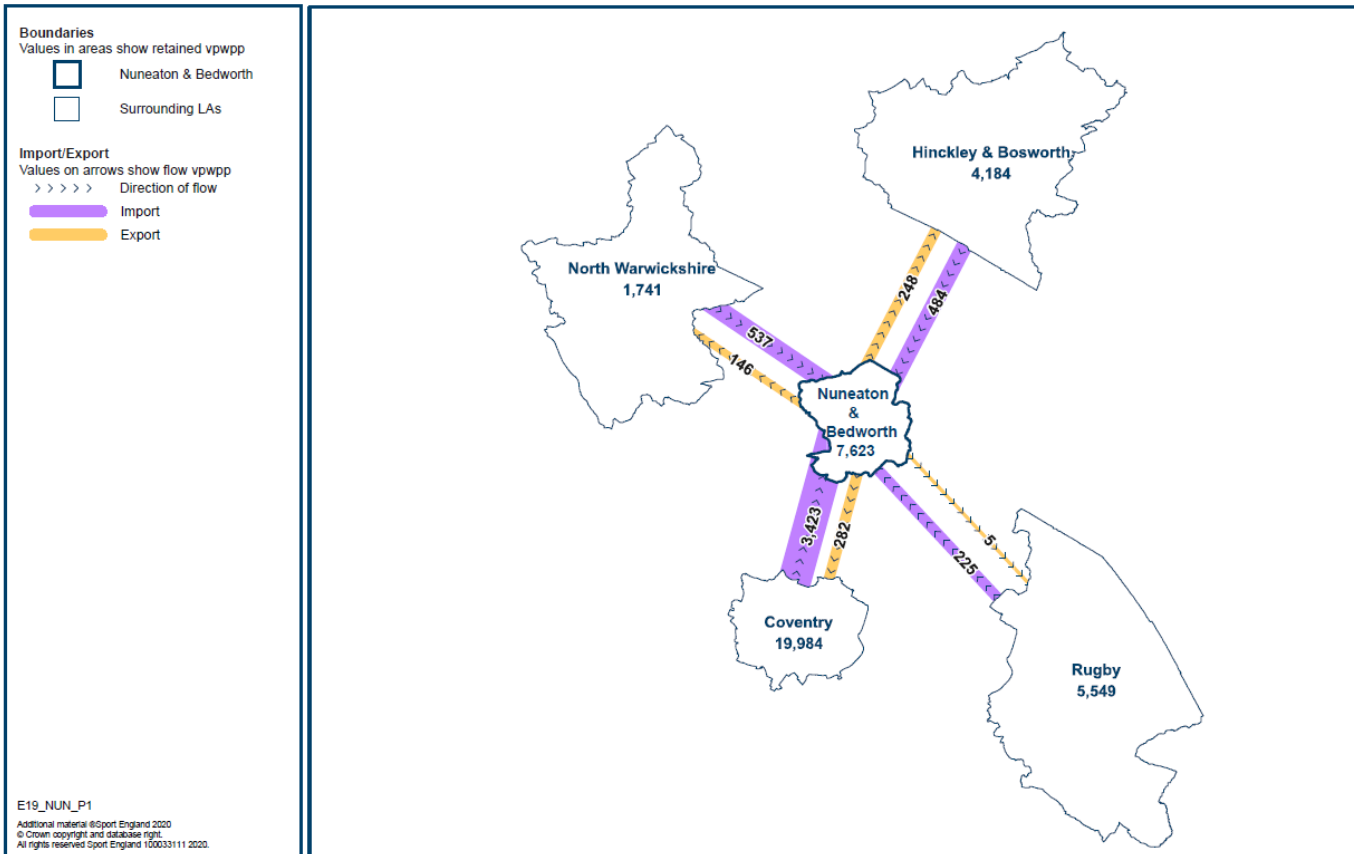
Map 7.1: Run 1 Source and levels of imported demand for the Nuneaton and Bedworth swimming pool sites in visits 2019

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



Map 7.2: Run 4 Source and levels of imported demand for the Nuneaton and Bedworth swimming pool sites in visits 2034

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



8. Local Share of Facilities

Table 8.1: Local Share of Swimming Pools Nuneaton and Bedworth Borough 2019 – 2034

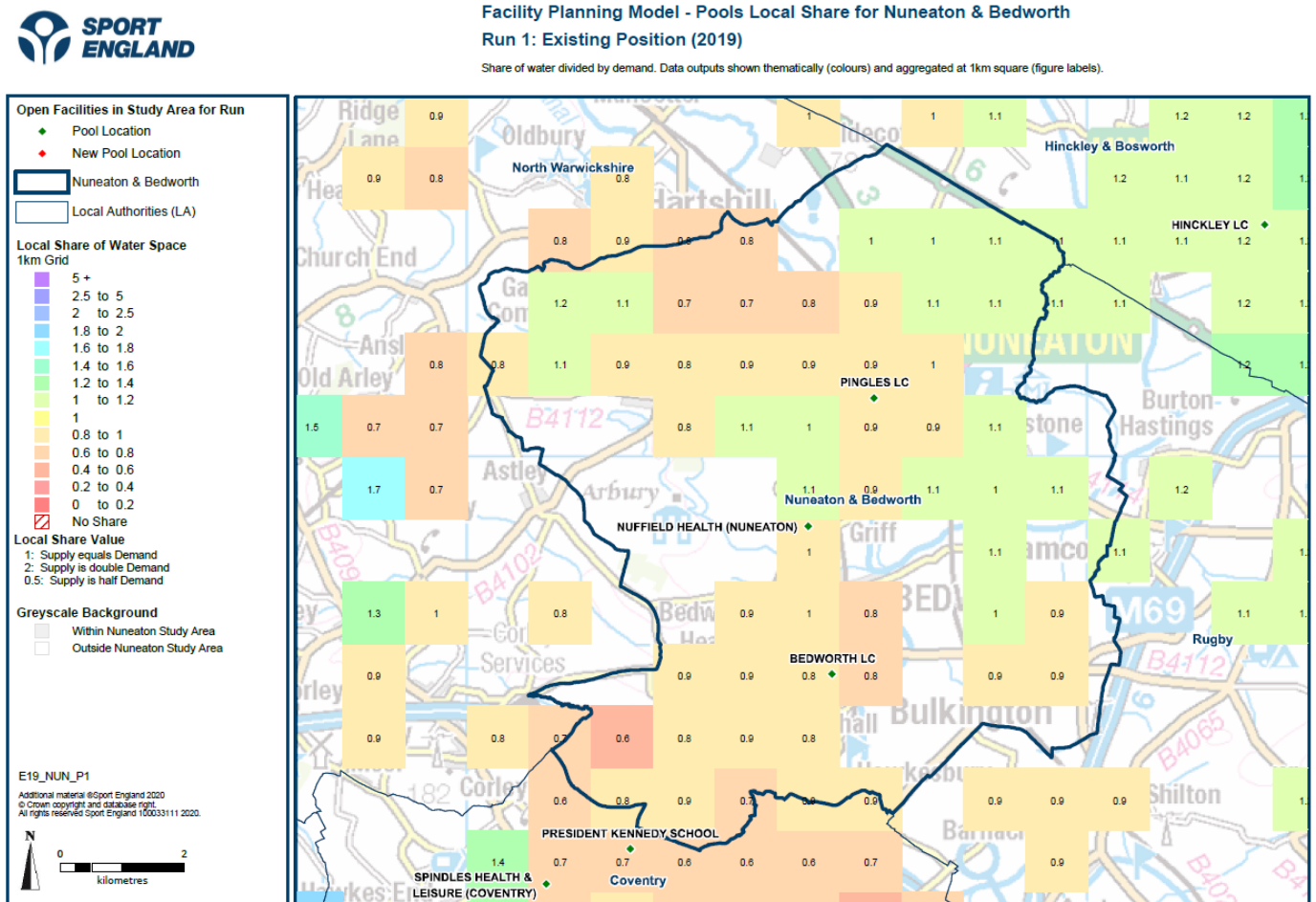
Nuneaton & Bedworth	RUN 1	RUN 2	RUN 3	RUN 4
Local Share	2019	2034	2034	2034
Local Share: <1 capacity less than demand, >1 capacity greater than demand	0.9	0.58	0.45	1.06

- 8.1 **Local share** has quite a complicated **definition** - it helps to show which areas have a better or worse share of facility provision. It takes into account the size and availability of facilities as well as travel modes. Local share is useful at looking at 'equity' of provision. Local Share is the available capacity that can be reached in an area, divided by the demand for that capacity in the area.
- 8.2 A value of 1 means that the level of supply just matches demand, while a value of less than 1 indicates a shortage of supply and a value greater than 1 indicates a surplus.
- 8.3 In run 1 Nuneaton and Bedworth Borough has a local share of 0.9 as a Borough average so demand in terms of local share of facilities across the Borough is greater than supply.
- 8.4 In runs 2 and 3 for 2034 local share is also below 1 with 0.58 in run 2 and 0.45 in run 3. In run 4 local share is above 1 and so supply is greater than demand with a local share of 1.06.
- 8.5 It changes in run 4, because of the increase in size of the new Bedworth and Pingles Leisure Centres. These increases in supply are greater than the increases in demand – in terms of local share of swimming pools - and so supply is now greater than demand and with a value over 1
- 8.6 The distribution of local share does vary across the Borough and the findings for runs 1 and 4 are shown in Maps 8.1 and 8.2. In run 1 local share in the light beige areas is between 1.00 – 0.80, in the darker beige areas it is between 0.80 – 0.60 and in the darkest beige squares (only one square in the south west of the Borough) is between 0.60 – 0.40.
- 8.7 Local share in the east of the Borough is above 1 in the green squares and so supply is greater than demand with values 1 - 1.20. It is likely that population

density is lower in this part of the Borough, so less demand to share with the available supply of swimming pools

- 8.8 The values in Map 8.2 and run 4 in 2034 are distinctly different from 2019, with most of the Borough having green squares and the 1 – 1.20 value.
- 8.9 Demand is only greater than supply with values of 1 – 0.80 in a very few areas in the north west of the Borough, the south west and just one area/square in the south east of the Borough.
- 8.10 It seems these areas are furthest from the Nuneaton and Bedworth swimming pool sites, so less supply/access to share with the demand for swimming pools in these areas.

Map 8.1. Run 1 Local Share of Swimming Pools Nuneaton and Bedworth Borough 2019

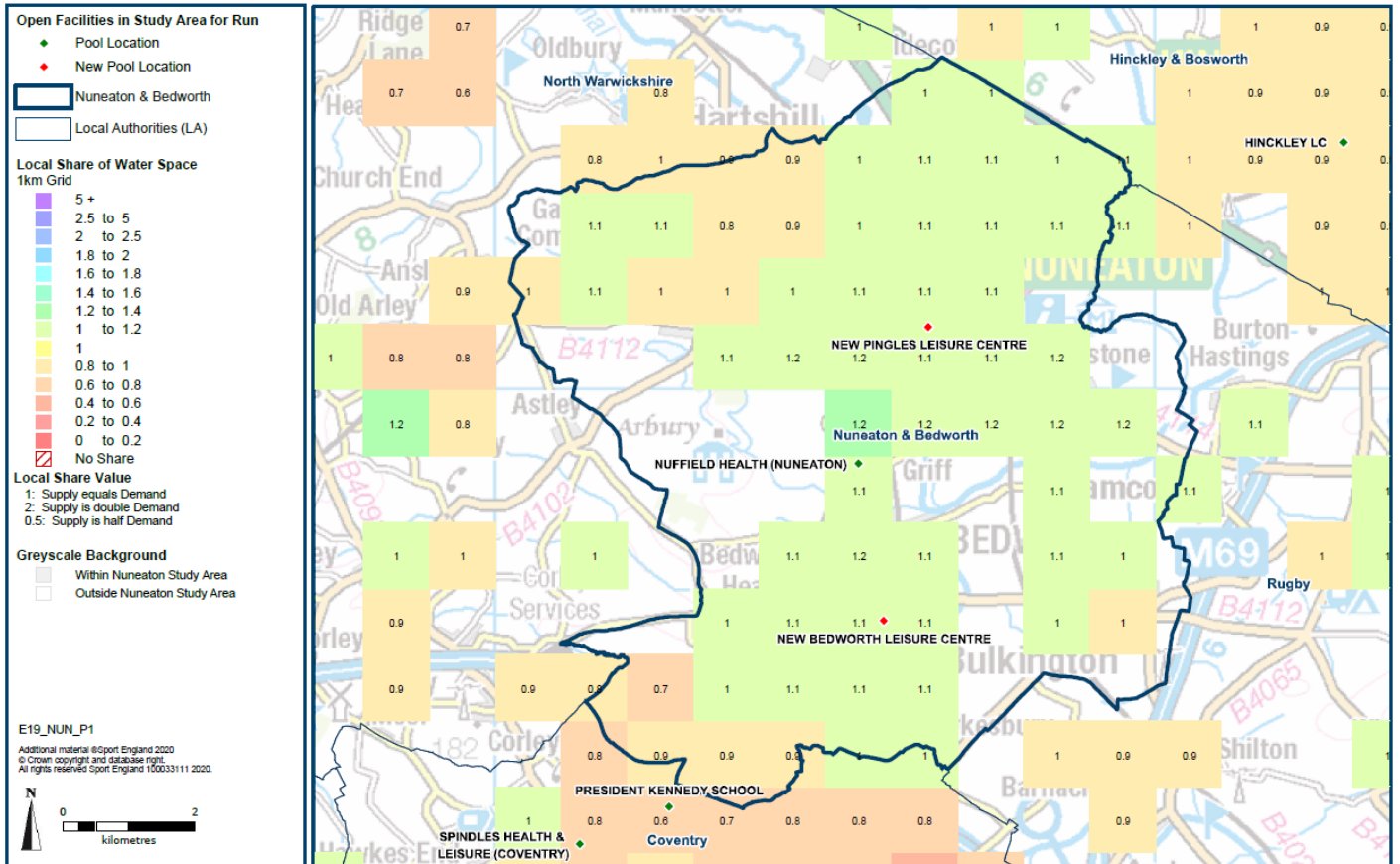


Map 8.2. Run 4 Local Share of Swimming Pools Nuneaton and Bedworth Borough 2034



Facility Planning Model - Pools Local Share for Nuneaton & Bedworth
Run 4: New Bedworth and Pingles Pools Open (2034)

Share of water divided by demand. Data outputs shown thematically (colours) and aggregated at 1km square (figure labels).



8.11 This ends the reporting on the detailed findings for the Nuneaton and Bedworth Borough assessment of swimming pools provision for each of the four runs, and under each of the seven assessment headings. The executive summary of key findings is set out in the next section of the report.

9. Executive Summary of Key Findings and Overall Summary

Introduction

- 9.1 Nuneaton and Bedworth Borough Council is reviewing the current provision of swimming pools and assessing the future provision required up to 2034 and beyond.
- 9.2 The Council has commissioned a Sport England facility planning model (fpm) local assessment to develop an evidence base for swimming pool provision. The evidence base will also inform the Council's strategic planning for the future provision of swimming pools.
- 9.3 The overall aims of the fpm work are to:
- Assess the extent to which the existing supply of swimming pools meets current levels of demand in 2019, across the Council area and a wider study area;
 - Assess the extent to which the existing supply of swimming pools would meet future demand and its distribution, taking into account population increases across the Council area and a wider study area up to 2034; and
 - Assess the impact on supply, demand and access to swimming pools, from options to close Bedworth Leisure Centre and Pingles Leisure Centre. Then open a new Bedworth Leisure Centre in 2024 and Pingles Leisure Centre in 2025 - are these changes the most beneficial for Nuneaton and Bedworth residents?
- 9.4 The fpm work has four assessments (known as runs) and these include the swimming pool provision and population in the neighbouring authorities to Nuneaton and Bedworth Borough. The assessment is catchment area based across local authority boundaries.
- 1.17 The fpm separate modelling runs are:
- **Run 1** – supply, demand and access to swimming pools, in 2019. This run provides a baseline assessment of current provision and from which to measure change. Run 1 also includes the Coventry Wave pool site which opened in 2019;
 - **Run 2** – supply, demand and access to swimming pools in 2034, based on the impact the projected growth in population 2019 – 2034 across Nuneaton and Bedworth Borough and the neighbouring authorities. Run 2 also includes the new 50m swimming pool site in Coventry which is

scheduled to open in 2020 and replace the Coventry Sports and Leisure Centre swimming pool site.

- **Run 3** – is based on run 2, and also includes the option to close the existing Bedworth Leisure Centre and Pingles Leisure Centre
- **Run 4** is as run 3 and also includes the option to open a new Bedworth Leisure Centre in 2024, with a 25m x 8 lane main pool and a 17m x 10m teaching/learner pool. Run 4 also includes the option to open a new Pingles Leisure Centre in 2025 to include (1) a 25m x 8 lane main pool, (2) a 25m x 6 lane main pool and (3) a teaching/learner pool of 17m x 10m

9.5 This summary report sets out the key findings from the assessment under specific headings:

Swimming pool supply

9.6 The key findings on swimming pool supply are

- The average age of all the pool sites in 2019, including Nuffield Health, is 26 years, the oldest pool site is Bedworth Leisure Centre which opened in 1975 and was modernised in 2000. The Pingles Leisure Centre opened in 2003 and is the most recent centre to open, is the Nuffield Health swimming pool site in 2001
- The scale of the new public swimming pools sites is very extensive, the Bedworth Centre has both a main pool and a separate dedicated learner/teaching pool. Whilst the Pingles Centre includes both a 25m x 8 lane main pool, a 25m x 6 main pool, plus a dedicated teaching/learner pool.
- This means that both public leisure centre sites can provide for all the swimming activities of: developing confidence in water; learn to swim; public recreational swimming; lane and fitness swimming and swimming development through clubs.
- The total amount of water space in the Borough in runs 1 and 2 available for community use is 1,130 sq metres of water. In run 3 this decreases to just 157 sq metres of water, with the closure of both the Bedworth and Pingles sites and just the Nuffield Health centre open. This is an unrealistic option, but it does show the impact on the supply of water space from closure of the 2 public leisure centres.

- Then in run 4, the water space available for community use increases to 1,599 sq metres of water, with the new Bedworth and Pingles Leisure Centres.
- The **first key finding** is the difference in water space when comparing the current Bedworth and Pingles Centres with the two new centres. The difference in the water space between the existing and new centre is an increase of 469 sq metres of water, a 41% increase. The fpm findings will report whether this is the required amount of water space and balance in pool scale and configuration, to meet the demand for swimming up to 2034 and beyond.
- The two new centres do provide a very extensive public and club swimming offer, in modern fit for purpose pools.

Measure of Provision

- 9.7 A comparative measure of swimming pool provision, is water space per 1,000 population and in 2019 Nuneaton and Bedworth Borough has 9 sq. metres of water per 1,000 population. This increases to 11 sq metres of water per 1,000 population in run 4.
- 9.8 In comparison to the neighbouring authorities, Nuneaton and Bedworth has the lowest supply in 2019, along with Hinckley and Bosworth. The highest supply is in Rugby which has 14.9 sq metres of water per 1,000 population.
- 9.9 The findings for West Midlands Region and England wide in 2019 are 10 and 12 sq metres of water per 1,000 population respectively.
- 9.10 The findings on water space per 1,000 population are set out, because some local authorities like to compare their quantitative provision with elsewhere, it is not setting a standard of provision. The supply and demand for swimming pools in Nuneaton and Bedworth is based on the findings from all seven headings analysed in the report.

Supply and demand balance

- 9.11 Supply and demand balance compares the total demand generated for swimming within Nuneaton and Bedworth Borough with the total supply of swimming pools within the Borough. It therefore represents an assumption that ALL the demand for swimming in is met by ALL the supply of swimming pools within Nuneaton and Bedworth Borough. This is set out in Table 9.1 for all four runs.
- 9.12 In short, supply and demand balance is NOT based on where the pools are located and their catchment area extending into other authorities. The more

detailed modelling based on the CATCHMENT AREAS of pools is set out under Satisfied Demand, Unmet Demand and Used Capacity.

9.13 The reason for presenting supply and demand balance is because some local authorities like to see how THEIR total supply of pools compares with THEIR total demand for pools.

Table 9.1: Runs 1 – 4 Supply and Demand Balance for Swimming Pools Nuneaton and Bedworth 2019 - 2034

Nuneaton & Bedworth	RUN 1	RUN 2	RUN 3	RUN 4
Supply/Demand Balance	2019	2034	2034	2034
Supply - Swimming pool provision (sq m) based on hours available for community use	1,130.	1,130.	157.	1,599.
Demand - Swimming pool provision (sq m) taking into account a 'comfort' factor	1,322.	1,529.	1,529.	1,529.
Supply / Demand balance - Variation in sq m of provision available compared to the minimum required to meet demand.	-192.	-399.	-1,372.	70.

9.14 As the table shows over runs 1 – 3 there is a negative balance of demand exceeding supply. The **second key finding** is that it is only in run 4, with the new and larger Bedworth and Pingles Leisure Centres that the Borough's supply of water space exceeds the Borough's demand and this is by 70 sq metres of water. (For context a 25m x lane pool is between 210 and 250 sq metres of water, depending on individual lane width).

9.15 So run 4 does provide the best option, in terms of overall supply and demand balance for swimming, with this balance of supply over demand of 70 sq metres of water.

9.16 However, to repeat, this is the closed quantified assessment and is simply comparing the Nuneaton and Bedworth Borough demand for swimming with the Nuneaton and Bedworth Borough supply

Access to swimming pools and satisfied demand

9.17 Satisfied demand measures the amount of total demand that is met by the capacity at the swimming pools from Nuneaton and Bedworth Borough residents, who live within the driving, walking or public transport catchment

area of a pool. This includes pools located both inside and outside Nuneaton and Bedworth Borough

- 9.18 In runs 1 and 2 the amount of the Nuneaton and Bedworth Borough total demand that can be satisfied/met is 91% in run 1, and 90% in run 2. It decreases to 68.6% of the Borough's total demand in run 3, with the Bedworth and Pingles Leisure Centres closed.
- 9.19 This is still a high level given these changes, it is possible because the Borough can export a very high level of demand to swimming pools in neighbouring local authorities, and which are accessible to Nuneaton and Bedworth Borough residents.
- 9.20 The **third key finding** is that in run 4 some 90.4% of the Bedworth and Nuneaton demand for swimming can be met, when the two new centres are included, This finding is almost unchanged from the run 1 percentage of 90.8%.
- 9.21 The very significant difference is that demand is now being met in two new swimming pool sites, with a more extensive and higher quality swimming offer.

Retained demand

- 9.22 A subset of the satisfied demand findings is retained demand and this measures how much of the Nuneaton and Bedworth Borough demand for swimming is retained at the pools located within the Borough. The assessment is based on the catchment area of pools and residents using the nearest pool to where they live, and which is a pool located in Nuneaton and Bedworth – it is known as retained demand.
- 9.23 In runs 1 and 2, retained demand is 83% and 82% of the total 91% and 90% satisfied demand. The significant change is in run 3 when there is only the Nuffield Health pool site open, retained demand drops to 20% of the total satisfied demand. In this run the Borough is exporting the vast majority of its demand to pools in neighbouring local authorities, and which are accessible to Nuneaton and Bedworth residents.
- 9.24 In run 4 retained demand recovers, with the opening of the new Bedworth and Pingles Leisure Centres and retained demand is 91% of the total demand which is satisfied.

9.25 The **fourth key finding** is that in all runs, except run 3, retained demand is very high, with between eight and nine out of ten visits by a Borough resident to a swimming pool, being retained in the Borough.

9.26 The **fifth key finding** is that there is a very high correlation between the location and catchment area of the Nuneaton and Bedworth Borough pool sites, and the location of the Nuneaton and Bedworth Borough demand for swimming. In short, the pools are located in the right places to meet the Borough's demand for swimming pools.

Exported demand

9.27 The residual of satisfied demand, after retained demand, is exported demand. Again, based on residents travelling to and using the nearest pool to where they live. In run 1, 17% of the Nuneaton and Bedworth Borough demand for swimming is exported.

9.28 Exported demand increases to 18% of satisfied demand in run 2 and increases significantly to 80% of total satisfied demand in run 3 when there is just the Nuffield Health pool site open.

9.29 In run 4 exported demand reduces to its lowest level, at 8.5% of the Borough's satisfied demand for swimming. The increase in the size of the pools at the new Bedworth and Pingles Leisure Centres, means they can retain more of the Borough's demand for swimming.

Unmet demand

9.30 The unmet demand definition has two parts to it – demand for pools which cannot be met because (1) there is too much demand for any particular swimming pool within its catchment area; or (2) the demand is located outside the catchment area of any pool, it is then classified as unmet demand.

9.31 The **sixth key finding** relates to all the unmet demand findings:

- In both years and all runs, unmet demand is low in both percentage and, more importantly in sq. metres of water and within a range of 122 – 164 sq metres of water. For context, the total available supply of water space in Nuneaton and Bedworth Borough in run 1 is 1,130 sq metres of water and 1,599 sq metres of water in run 4.
- The major source of the unmet demand is from definition 2, demand located outside the catchment area of a pool, and is within a range of 85% - 96% of total unmet demand across the runs

- Unmet demand, in all runs from definition 1 – lack of swimming pool capacity to meet demand is within a range of 4 – 23 sq metres of water and is reviewed under the used capacity heading.
- 9.32 Unmet demand located outside catchment will always exist, because it is not possible to get complete spatial coverage, whereby all areas are inside the catchment area of a swimming pool.
- 9.33 This is especially true for the 20 minutes/1 mile walking catchment area, which, by definition, is quite a small catchment area. Some 21% of Nuneaton and Bedworth 86 residents do not have access to a car and either walk or use public transport to access a pool.
- 9.34 Residents who do not have access to a car and live outside the catchment area of a swimming pool, accounts for 86% in run 1, 76% in run 2 and 85% in run 4 of the total unmet demand.
- 9.35 The **seventh key finding** is, NOT that unmet demand outside catchment exists but the SCALE, and at a range of between 118 – 140 sq metres of water (from this definition) it is very small. As reported, the total available supply of water space in Nuneaton and Bedworth Borough in run 1, is 1,130 sq metres of water and 1,599 sq metres of water in run 4.
- 9.36 Unmet demand in both years is highest in the Stockingford area where it totals 45 sq metres of water. Unmet demand is then dispersed across the Borough in very low values of between 1 – 2 sq metres of water. (Maps 6.1. and 6.2).
- 9.37 The **eighth key finding** is that there is not an area of the Borough which has a cluster of unmet demand of sufficient quantity, to consider increasing swimming pool provision on grounds of increasing accessibility to swimming pools for residents. This would require a location with at least 160 sq metres of water. The total unmet demand (from both definitions) across the whole of the Borough, ranges from 122 sq metres of water (run 1) to 164 sq metres of water (run 2), excluding run 3 where there are no public swimming pool sites

Used capacity of swimming pools (how full are the pools?)

- 9.38 The facilities planning model is designed to include a 'comfort factor', beyond which the venues are too full. The pool itself becomes too crowded to swim comfortably and the changing and circulation areas also become too crowded. The model assumes that usage over 70% of capacity is busy and the swimming pool is operating at an uncomfortable level above that percentage.
- 9.39 Used capacity as an authority wide average, ranges from 79.7% in 2019 to 90.3% in the weekly peak period in run 4.
- 9.40 Used capacity increases because of the projected increase in demand for swimming pools from population growth. It also increases in run 4 because of the draw and attraction of the new swimming pool sites at both Bedworth and Pingles, replacing the older leisure centres at both locations.
- 9.41 The estimated used capacity for each pool site does vary from the authority wide average. The **existing Bedworth Leisure Centre** has an estimated used capacity of 63% in run 1 and then 94% in run 2 (with the projected increase in demand from population growth).
- 9.42 The **new Bedworth Leisure Centre** has an estimated used capacity of 100% in run 4, the increase is because of the draw and attraction of the new centre. Plus it is located in the area of the Borough with the highest access to swimming pools, based on car travel (Map 6.3), so a very accessible pool site. All these factors combine and contribute to the used capacity finding
- 9.43 The **existing Pingles Leisure Centre** has an estimated used capacity of 100% at peak times in run 1 and the **new Pingles Leisure Centre** 96% in run 4. The slight drop is because the new Pingles Leisure Centre is larger than the existing centre by 307 sq metres of water. It has a lower percentage but can accommodate far more actual use. The new centre has a 25m x 8 lane main pool, plus a 25m x 6 lane main pool and a 17m x 10m teaching/training pool, replacing the current 25m x 8 lane main pool and the leisure pool of 200 sq metres of water.
- 9.44 The estimated used capacity of the public swimming pool sites is higher than the Borough average, because both sites provide for the full range of swimming activities of: learn to swim; public recreational swimming; lane and fitness swimming; swimming development through clubs; and fun and family based activities.

- 9.45 In addition, public swimming pools have the fullest accessibility, in terms of opening hours and access for swimming club and public use. The pools do not have limited access, based on the ability to pay a monthly membership fee. Finally, the public swimming pools are proactively managed to encourage and support swimming participation and physical activity.
- 9.46 For all these reasons of: (1) range of swimming activities available; (2) highest access for public and club swimming use; (3) hours of availability; and (4) proactive programmes of increasing participation - the public swimming pool sites have a draw effect, hence the findings on the estimated used capacity.
- 9.47 The **Nuffield Health** pool site has a much lower estimated used capacity, it being 38% in run 1, then 67% in run 2, 100% in run 3 (when it is the only pool site in the Borough) and 26% in run 4. This pool site will provide for recreational swimming by the centre membership and may also operate a swim school. So a more limited programme of use than the public leisure centre sites and hence the lower used capacity findings.

Given the findings on used capacity, should the new Bedworth and Pingles Leisure Centres be larger?

- 9.48 Based on the fpm findings the answer is no and it is important to consider the fpm findings.
- 9.49 The pools are estimated to be very full for all the reasons set out. Increasing the size of the pools could achieve two purposes. Firstly to accommodate unmet demand, however, as set out under the unmet demand heading, unmet demand from lack of swimming pool capacity is within a range of 4 – 23 sq metres of water by 2034. So increasing the pool sizes is not driven by meeting unmet demand.
- 9.50 Secondly, increasing the size of the pools will attract more demand to them – again for all the reasons set out. Plus they will be modern and more attractive to swimmers in the neighbouring local authorities and who live within the drive time catchment area of either location.
- 9.51 So bigger pools equals, more capacity and more attraction to residents in neighbouring local authorities. The fpm findings on imported demand are telling in this respect.

Imported Demand

- 9.52 Imported demand is reported under used capacity because if residents in the neighbouring local authorities use the nearest pool to where they live, and this is a pool site in Nuneaton and Bedworth, then this becomes part of the used capacity of the Nuneaton and Bedworth pools.
- 9.53 Imported demand increases from 23% in run 1 to 26% in run 2 and 39% in run 4. It decreases to just 6% of used capacity in run 3, when there is just the Nuffield Heath pool site and the pool is full of use by Nuneaton and Bedworth residents.
- 9.54 The largest imported demand is from Coventry in both years, with 13% of the used capacity of the Nuneaton and Bedworth pools in 2019 and 27% in run 4. This assessment does include the Coventry wave pool site and the Coventry new 50m pool site.
- 9.55 The explanation for high imported demand from Coventry, despite new pools in Coventry, is most likely that the Bedworth pool site is the nearest pool site for a lot of Coventry residents.
- 9.56 Also, as set out in the supply and demand balance section, (Table 4.2), the Coventry demand for swimming pools exceeds the Coventry supply by 819 sq metres of water in run 1 and 1,636 sq metres of water in run 4, despite the pool changes. So some of the Coventry demand will be looking to access pools in neighbouring local authorities.

Export/Import Balance

- 9.57 The **ninth key finding** is that Nuneaton and Bedworth is a net importer of demand for swimming. In run 1 the Borough exports 1,231 visits per week in the weekly peak period and imports 1,803 visits, so a net importer of just 572 visits.
- 9.58 In run 4 the Borough exports just 704 visits, such is the draw and attraction of the two new sites that it is retaining more of the Borough's demand. The Borough imports 4,892 visits, so the Borough is a net importer of 4,188 visits per week in the weekly peak period – a significant total and does support the viability and business case for the two new pool sites.

Overall Summary

- 9.59 Nuneaton and Bedworth Borough Council is undertaking strategic planning for the future provision of swimming pools within the Borough. The objective

being to provide a modern fit for purpose stock of public swimming pools that supports swimming participation and physical activity by its residents

- 9.60 The facilities planning modelling exercise has assessed the demand for swimming and its distribution up to 2034 and beyond. This is based on replacing the Bedworth and Pingles Leisure Centre swimming pools, with new and different configurations of swimming pools at both locations
- 9.61 The fpm findings do support the changes proposed, in terms of the type and scale of the pools and at the locations proposed. They do meet the projected demand for swimming and its distribution across the Borough. The swimming pool locations and their catchment areas do provide the best accessibility for Borough residents, based on the car, public transport and walking catchments for the pool sites.
- 9.62 Both new pool sites are estimated to be very full at peak times. This is because they provide for all swimming activities of: learn to swim; public recreational swimming; lane and fitness swimming; family based activities; and swimming development through clubs, with these activities taking place in dedicated pools.
- 9.63 There will be a draw and attraction to modern fit for purpose swimming pools and the findings are that a lot of the demand and usage of each pool site, is from outside the Borough.
- 9.64 Finally, swimming pools are very important facilities for helping to create an active and healthy lifestyle by residents. Swimming provides for participation by all age groups, from cradle to grave. Also, swimming is one of the few indoor activities where female participation is higher than male participation, and it is also a family-based activity.

The facilities planning model study

- 9.65 It is most important to set out that the fpm study is a quantitative, accessibility and spatial assessment of the supply, demand and access to swimming pools. It assesses how this changes based on projected population growth and options to change the swimming pool supply.
- 9.66 The fpm study provides a hard evidence base that can inform consultations, so as to then provide a rounded evidence base. This can then be used in the development of the Council's strategic planning for the provision of swimming pools.

Appendix 1: Swimming pools in the study area included in the assessment. Runs 1 – 4

Nuneaton and Bedworth Borough Swimming Pool Supply

Name of Site	Type	Dimensions	Area	Site Year Built	Site Year Refurb	Public/Commercial	Car % Demand	Public Tran % Demand	Walk % Demand
Nuneaton & Bedworth							80%	9%	11%
BEDWORTH LEISURE CENTRE (Runs 1 and 2)	Main/General	25 x 13	313	1975	2000	P	71%	10%	19%
BEDWORTH LEISURE CENTRE	Learner/Teaching/Training	10 x 7	70						
NEW BEDWORTH LEISURE CENTRE (Run 4)	Main/General	25 x 17	425	2024		P			
NEW BEDWORTH LEISURE CENTRE	Learner/Teaching/Training	17 x 10	170						
NUFFIELD HEALTH (NUNEATON) (All runs)	Main/General	20 x 8	160	2001		C	91%	6%	3%
PINGLES LEISURE CENTRE (Runs 1 and 2)	Main/General	25 x 17	413	2003		P	83%	9%	9%
PINGLES LEISURE CENTRE	Leisure Pool	25 x 8	200						
NEW PINGLES LEISURE CENTRE (Run 4)	Main/General	25 x 17	425	2025		P	90%	6%	4%
NEW PINGLES LEISURE CENTRE	Main/General	25 x 13	325						
NEW PINGLES LEISURE CENTRE	Learner/Teaching/Training	17 x 10	170						

Swimming Pool Supply in the Neighbouring Local Authorities

Name of Site	Type	Dimensions	Area	Site Year Built	Site Year Refurb	Car % Demand	Public Transport % Demand	Walk % Demand	
HINCKLEY AND BOSWORTH							83%	5%	11%
BOSWORTH ACADEMY	Main/General	25 x 10	250	1969	2000	80%	5%	16%	
HINCKLEY ACADEMY AND JOHN CLEVELAND SIXTH FORM CENTRE	Main/General	25 x 8	200	1974	2012				
HINCKLEY LEISURE CENTRE	Main/General	25 x 17	425	2016		86%	6%	8%	
HINCKLEY LEISURE CENTRE	Main/General	15 x 9	128			83%	6%	12%	
COVENTRY							66%	12%	22%
BABLAKE SCHOOL	Main/General	20 x 10	200	1960	2005	48%	9%	43%	
CALUDON CASTLE SPORTS CENTRE	Main/General	25 x 13	325	2007		69%	13%	18%	
CENTRE AT7	Main/General	25 x 13	325	2014		66%	15%	18%	
CENTRE AT7	Leisure Pool	20 x 8	150						
COVENTRY SPORTS & LEISURE CENTRE	Main/General	50 x 17	850	1966		60%	13%	27%	
COVENTRY SPORTS & LEISURE CENTRE	Leisure Pool	15 x 10	150						
COVENTRY SPORTS & LEISURE CENTRE	Learner/Teaching/Training	10 x 5	50						
COVENTRY NEW 50M POOL	Main/General	50 x 17	850	2020		78%	16%	7%	
DAVID LLOYD COVENTRY	Main/General	25 x 10	250	1996		85%	6%	9%	
DAVID LLOYD COVENTRY	Learner/Teaching/Training	5 x 5	25						
KING HENRY VIII SCHOOL	Main/General	25 x 13	313	2009		68%	13%	19%	
PRESIDENT KENNEDY SCHOOL	Main/General	18 x 9	162	1965		40%	6%	54%	
SPINDLES HEALTH & LEISURE (COVENTRY)	Main/General	18 x 9	162	1999	2005	82%	7%	11%	

THE WAVE COVENTRY	Leisure Pool	25 x 8	195	2019		63%	13%	25%
VILLAGE GYM (COVENTRY)	Main/General	25 x 10	250	2000		73%	6%	20%
WINDMILL VILLAGE HOTEL AND GOLF CLUB	Main/General	20 x 8	160	1990	2007	75%	6%	19%
XCEL LEISURE CENTRE	Main/General	25 x 10	250	2008		70%	11%	18%
NORTH WARWICKSHIRE						86%	6%	8%
ATHERSTONE LEISURE COMPLEX	Main/General	25 x 10	250	2002		86%	6%	8%
ATHERSTONE LEISURE COMPLEX	Learner/Teaching/ Training	12 x 10	120					
KINGSBURY SCHOOL	Main/General	25 x 10	250	1972		81%	6%	13%
MARRIOTT LEISURE & COUNTRY CLUB (FOREST OF ARDEN)	Main/General	19 x 10	181	1989	2004	94%	6%	0%
RUGBY						80%	7%	13%
BILTON GRANGE SCHOOL	Main/General	25 x 10	250	1983	2017	84%	6%	10%
NUFFIELD HEALTH RUGBY FITNESS & WELLBEING GYM	Main/General	25 x 12	300	2001		87%	4%	9%
NUFFIELD HEALTH RUGBY FITNESS & WELLBEING GYM	Learner/Teaching/ Training	5 x 5	25					
RUGBY SCHOOL SPORTS CENTRE	Main/General	25 x 10	250	1991	2003	76%	8%	16%
SPORTS DIRECT FITNESS (RUGBY)	Main/General	20 x 7	144	1994	2007	76%	5%	19%
THE QUEENS DIAMOND JUBILEE CENTRE	Main/General	25 x 20	500	2013		78%	8%	14%

Appendix 2: Model description, Inclusion Criteria and Model Parameters

Included within this appendix are the following:

- Model description
- Facility Inclusion Criteria
- Model Parameters

Model Description

1. Background

- 1.1 The Facilities Planning Model (FPM) is a computer-based supply/demand model, which has been developed by Edinburgh University in conjunction with sportscotland and Sport England since the 1980s.
- 1.2 The model is a tool to help to assess the strategic provision of community sports facilities in an area. It is currently applicable for use in assessing the provision of sports halls, swimming pools, indoor bowls centres and artificial grass pitches.

2. Use of FPM

- 2.1 Sport England uses the FPM as one of its principal tools in helping to assess the strategic need for certain community sports facilities. The FPM has been developed as a means of:
 - assessing requirements for different types of community sports facilities on a local, regional or national scale;
 - helping local authorities to determine an adequate level of sports facility provision to meet their local needs;
 - helping to identify strategic gaps in the provision of sports facilities; and
 - comparing alternative options for planned provision, taking account of changes in demand and supply. This includes testing the impact of opening,

relocating and closing facilities, and the likely impact of population changes on the needs for sports facilities.

- 2.2 Its current use is limited to those sports facility types for which Sport England holds substantial demand data, i.e. swimming pools, sports halls, indoor bowls and artificial grass pitches.
- 2.3 The FPM has been used in the assessment of Lottery funding bids for community facilities, and as a principal planning tool to assist local authorities in planning for the provision of community sports facilities. For example, the FPM was used to help assess the impact of a 50m swimming pool development in the London Borough of Hillingdon. The Council invested £22 million in the sports and leisure complex around this pool and received funding of £2,025,000 from the London Development Agency and £1,500,000 from Sport England¹.

3. How the model works

- 3.1 In its simplest form, the model seeks to assess whether the capacity of existing facilities for a particular sport is capable of meeting local demand for that sport, taking into account how far people are prepared to travel to such a facility.
- 3.2 In order to do this, the model compares the number of facilities (supply) within an area, against the demand for that facility (demand) that the local population will produce, similar to other social gravity models.
- 3.3 To do this, the FPM works by converting both demand (in terms of people), and supply (facilities), into a single comparable unit. This unit is 'visits per week in the peak period' (VPWPP). Once converted, demand and supply can be compared.
- 3.4 The FPM uses a set of parameters to define how facilities are used and by whom. These parameters are primarily derived from a combination of data including actual user surveys from a range of sites across the country in areas of good supply, together with participation survey data. These surveys provide core information on the profile of users, such as, the age and gender of users, how often they visit, the distance travelled, duration of stay, and on the facilities themselves, such as, programming, peak times of use, and capacity of facilities.
- 3.5 This survey information is combined with other sources of data to provide a set of model parameters for each facility type. The original core user data for halls and pools comes from the National Halls and Pools survey undertaken in 1996. This data formed the basis for the National Benchmarking Service (NBS). For AGPs, the core data used comes from the user survey of AGPs carried out in 2005/6 jointly with sportscotland.

¹ Award made in 2007/08 year.

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

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

4. Calculating Demand

4.1 This is calculated by applying the user information from the parameters, as referred to above, to the population². This produces the number of visits for that facility that will be demanded by the population.

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

4.3 The use of OAs in the calculation of demand ensures that the FPM is able to reflect and portray differences in demand in areas at the most sensitive level based on available census information. Each OA used is given a demand value in VPWPP by the FPM.

5. Calculating Supply Capacity

² For example, it is estimated that 7.72% of 16-24 year old males will demand to use an AGP, 1.67 times a week. This calculation is done separately for the 12 age/gender groupings.

³ Census Output Areas (OA) are the smallest grouping of census population data, and provides the population information on which the FPM's demand parameters are applied. A demand figure can then be calculated for each OA based on the population profile. There are over 171,300 OAs in England. An OA has a target value of 125 households per OA.

- 5.1 A facility's capacity varies depending on its size (i.e. size of pool, hall, pitch number), and how many hours the facility is available for use by the community.
- 5.2 The FPM calculates a facility's capacity by applying each of the capacity factors taken from the model parameters, such as the assumptions made as to how many 'visits' can be accommodated by the particular facility at any one time. Each facility is then given a capacity figure in VPWPP. (See parameters in Section C).
- 5.3 Based on travel time information⁴ taken from the user survey, the FPM then calculates how much demand would be met by the particular facility having regard to its capacity and how much demand is within the facility's catchment. The FPM includes an important feature of spatial interaction. This feature takes account of the location and capacity of all the facilities, having regard to their location and the size of demand and assesses whether the facilities are in the right place to meet the demand.
- 5.4 It is important to note that the FPM does not simply add up the total demand within an area and compare that to the total supply within the same area. This approach would not take account of the spatial aspect of supply against demand in a particular area. For example, if an area had a total demand for 5 facilities, and there were currently 6 facilities within the area, it would be too simplistic to conclude that there was an oversupply of 1 facility, as this approach would not take account of whether the 5 facilities are in the correct location for local people to use them within that area. It might be that all the facilities were in one part of the borough, leaving other areas under provided. An assessment of this kind would not reflect the true picture of provision. The FPM is able to assess supply and demand within an area based on the needs of the population within that area.
- 5.5 In making calculations as to supply and demand, visits made to sports facilities are not artificially restricted or calculated by reference to administrative boundaries, such as local authority areas. Users are generally expected to use their closest facility. The FPM reflects this through analysing the location of demand against the location of facilities, allowing for cross boundary movement of visits. For example, if a facility is on the boundary of a local authority, users will generally be expected to come from the population living close to the facility, but who may be in an adjoining authority.

6. Facility Attractiveness – for halls and pools only

- 6.1 Not all facilities are the same and users will find certain facilities more attractive to use than others. The model attempts to reflect this by introducing an attractiveness weighting factor, which effects the way visits are distributed between facilities.

⁴ To reflect the fact that as distance to a facility increases, fewer visits are made, the FPM uses a travel time distance decay curve, where the majority of users travel up to 20 minutes. The FPM also takes account of the road network when calculating travel times. Car ownership levels, taken from Census data, are also taken into account when calculating how people will travel to facilities.

Attractiveness, however, is very subjective. Currently weightings are only used for hall and pool modelling, with a similar approach for AGPs is being developed.

6.2 Attractiveness weightings are based on the following:

- Age/refurbishment weighting – pools & halls - the older a facility is, the less attractive it will be to users. It is recognised that this is a general assumption and that there may be examples where older facilities are more attractive than newly built ones due to excellent local management, programmes and sports development. Additionally, the date of any significant refurbishment is also included within the weighting factor; however, the attractiveness is set lower than a new build of the same year. It is assumed that a refurbishment that is older than 20 years will have a minimal impact on the facilities attractiveness. The information on year built/refurbished is taken from Active Places. A graduated curve is used to allocate the attractiveness weighting by year. This curve levels off at around 1920 with a 20% weighting. The refurbishment weighting is slightly lower than the new built year equivalent.
- Management & ownership weighting – halls only - due to the large number of halls being provided by the education sector, an assumption is made that in general, these halls will not provide as balanced a program than halls run by LAs, trusts, etc, with school halls more likely to be used by teams and groups through block booking. A less balanced programme is assumed to be less attractive to a general, pay & play user, than a standard local authority leisure centre sports hall, with a wider range of activities on offer.

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

- High weighted curve - includes Non-education management - better balanced programme, more attractive.
- Lower weighted curve - includes Educational owned & managed halls, less attractive.

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

7. Comfort Factor – halls and pools

- 7.1 As part of the modelling process, each facility is given a maximum number of visits it can accommodate, based on its size, the number of hours it's available for community use and the 'at one-time capacity' figure (pools =1 user /6m², halls = 6 users /court). This gives each facility a "theoretical capacity".
- 7.2 If the facilities were full to their theoretical capacity, then there would simply not be the space to undertake the activity comfortably. In addition, there is a need to take account of a range of activities taking place which have different numbers of users, for example, aqua aerobics will have significantly more participants, than lane swimming sessions. Additionally, there may be times and sessions that, whilst being within the peak period, are less busy and so will have fewer users.
- 7.3 To account of these factors the notion of a 'comfort factor' is applied within the model. For swimming pools 70%, and for sports halls 80%, of its theoretical capacity is considered as being the limit where the facility starts to become uncomfortably busy. (Currently, the comfort factor is NOT applied to AGPs due to the fact they are predominantly used by teams, which have a set number of players and so the notion of having 'less busy' pitch is not applicable).
- 7.4 The comfort factor is used in two ways;
- Utilised Capacity - How well used is a facility? 'Utilised capacity' figures for facilities are often seen as being very low, 50-60%, however, this needs to be put into context with 70-80% comfort factor levels for pools and halls. The closer utilised capacity gets to the comfort factor level, the busier the facilities are becoming. You should not aim to have facilities operating at 100% of their theoretical capacity, as this would mean that every session throughout the peak period would be being used to its maximum capacity. This would be both unrealistic in operational terms and unattractive to users.
 - Adequately meeting Unmet Demand – the comfort factor is also used to increase the amount of facilities that are needed to comfortably meet the unmet demand. If this comfort factor is not added, then any facilities provided will be operating at its maximum theoretical capacity, which is not desirable as a set out above.

8. Utilised Capacity (used capacity)

- 8.1 Following on from Comfort Factor section, here is more guidance on Utilised Capacity.
- 8.2 Utilised capacity refers to how much of facilities theoretical capacity is being used. This can, at first, appear to be unrealistically low, with area figures being in the 50-60% region. Without any further explanation, it would appear that facilities are half empty. The key point is not to see a facilities theoretical maximum capacity (100%) as being an optimum position. This, in practise, would mean that a facility

would need to be completely full every hour it was open in the peak period. This would be both unrealistic from an operational perspective and undesirable from a user’s perspective, as the facility would completely full.

8.3 For example:

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

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

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

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

9. Travel times Catchments

9.1 The model uses travel times to define facility catchments in terms of driving and walking.

9.2 The Ordnance Survey (OS) Integrated Transport Network (ITN) for roads has been used to calculate the off-peak drive times between facilities and the population, observing one-way and turn restrictions which apply, and taking into account delays at junctions and car parking. Each street in the network is assigned a speed for car travel based on the attributes of the road, such as the width of the road, and geographical location of the road, for example the density of properties along the street. These travel times have been derived through national survey work, and so are based on actual travel patterns of users. The road speeds used for Inner & Outer London Boroughs have been further enhanced by data from the Department for Transport.

9.3 The walking catchment uses the OS Urban Path Network to calculate travel times along paths and roads, excluding motorways and trunk roads. A standard walking speed of 3 mph is used for all journeys.

- 9.4 The model includes three different modes of travel, by car, public transport & walking. Car access is also taken into account, in areas of lower access to a car, the model reduces the number of visits made by car and increases those made on foot.
- 9.5 Overall, surveys have shown that the majority of visits made to swimming pools, sports halls and AGPs are made by car, with a significant minority of visits to pools and sports halls being made on foot.

Facility	Car	Walking	Public transport
Swimming Pool	76%	15%	9%
Sports Hall	77%	15%	8%
AGP			
Combined	83%	14%	3%
Football	79%	17%	3%
Hockey	96%	2%	2%

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

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