Appendix 5: Shropshire Swimming Pool FPM

Strategic Assessment of Swimming Pool Provision Shropshire County

Facility Planning Model

National Run Report

July 2019

Contents

1. Introduction

1.1 Shropshire County is undertaking a review of swimming pool provision across the County. As part of this work the Council has commissioned a Sport England National Run report to provide an assessment of current swimming pool provision.

1.2 This report and the accompanying maps, provide a baseline evidence base for the supply, demand and access to swimming pools. The report is based on Sport England's facilities planning model (fpm) data from the 2019 national assessment of swimming pools.

1.3 The report sets out the findings under seven headings and includes data tables and maps. The headings are defined at the start and include: total supply; total demand; supply and demand balance; satisfied/met demand; unmet demand; used capacity (how full the pools are); and local share of pools. Each heading is followed by a commentary on the findings.

1.4 A summary of main findings is set out at the end of the report.

1.5 The data tables include the findings for the neighbouring local authorities to Shropshire County. This is because the assessment is catchment area based, and the catchment area of the swimming pools extends across local authority boundaries. The nearest swimming pool for some Shropshire residents, could be a pool located in a neighbouring authority (exported demand) and vice versa, the nearest swimming pool for residents of neighbouring authorities could be a pool located in Shropshire County.

1.6 Where valid to do so, the findings for Shropshire County are compared with the neighbouring local authorities.

1.7 The information contained within the report should be read alongside the two appendices. Appendix 1 sets out the details of the swimming pools included and excluded within the assessment. Appendix 2 provides background to the fpm, facility inclusion criteria and the model parameters.

1.8 Fpm modelling and datasets build in a number of assumptions as set out in Appendix 2, regarding the supply and demand for provision of pools. In developing the strategic planning work, it will be important to consider the fpm findings alongside other information and consultations. This includes information and knowledge from (a) sports perspective (National Governing Bodies and local clubs) and (b) from a local perspective (from the local authority /facility providers and operators and the local community).

1.9 This report has been prepared by WYG Consulting on behalf of Sport England. WYG Consulting are contracted by Sport England, to undertake facility planning model work on behalf of Sport England and local authorities.

2. Supply of Swimming Pools

Total Supply	**Shropshire County**	Malvern Hills	Newcastle-u -Lyme	Powys	Cheshire East	Cheshire West & Chester	Hertf'shire County
Number of pools	**29**	6	5	11	29	22	88
Number of pool sites	22	6	4	9	21	14	62
Supply of total water space in sq m	5,985	1,549	1,180	2,057	5,878	4,643	20,100
Supply of publicly available water space in sq m in the peak period	4,121	1,158	938	1,858	5,307	4,324	16,847
Supply of total water space in visits per week peak period	35,730	10,039	8,134	16,107	46,009	37,492	146,063
Water space per 1,000 population	19	20	9	16	15	14	17

Total Supply	South Staffs	Stafford	Telford & Wrekin	Wrexham	Wyre Forest
Number of pools	5	3	9	12	6
Number of pool sites	5	2	9	9	4
Supply of total water space in sq m	1,172	832	2,095	2,437	1,108
Supply of publicly available water space in sq m peak period	880	790	1,622	2,029	987
Supply of total water space in in visits per week peak period	7,626	6,854	14,058	17,590	8,558
Water space per 1,000 population	10	6	12	17	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 There are 29 individual pools located at 22 swimming pool sites across Shropshire County in 2019. The total supply of water space available for community use in the weekly peak period is 4.121 sq metres of water. (Note: for context a 25m x 4 lane pool is between 210 and 250 sq metres of water, depending on lane width).

2.3 Based on a measure of water space per 1,000 population, the Shropshire County supply is 19 sq metres of water space per 1,000 population in 2019.Shropshire has the second highest supply based on this measure, after Malvern Hills with 20 sq metres of water per 1,000 population.

2.4 The range is 20 sq metres of water per 1,000 population in Malvern Hills to 6 sq metres of water per 1,000 population in Stafford, the mid-range is 12 sq metres of water per 1,000 population

2.5 The West Midlands Region average is 11 sq metres of water per 1,000 population and for England wide it is 12 sq metres of water per 1,000 population in 2019. So the provision in Shropshire County, is higher than nearly all the neighbouring local authorities and considerably higher than the West Midlands Region and the England wide averages.

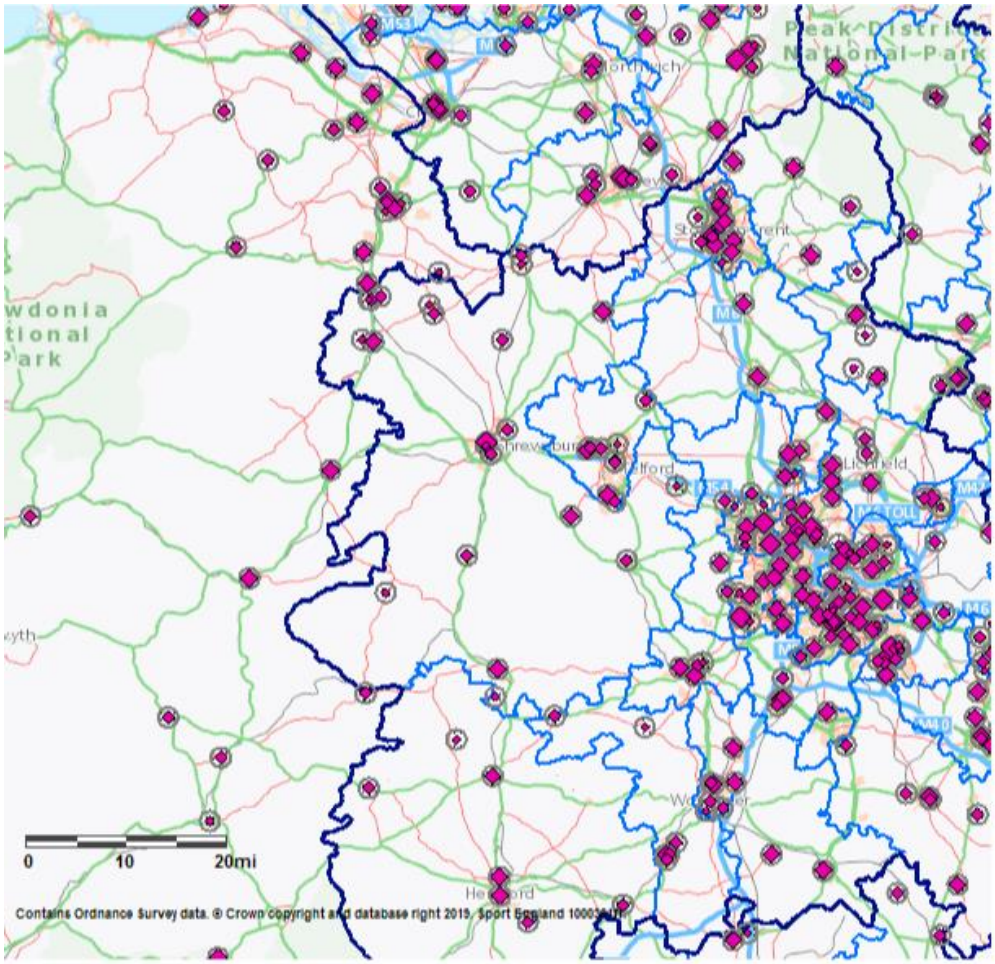
2.6 The overall level of provision identified for Shropshire County will be based on all the supply and demand findings. This is simply a measure which compares the Shropshire supply, with that of the neighbouring local authorities. It is set out, because some local authorities like to understand how their provision compares with other authorities.

2.7 The location of the swimming pool site across Shropshire and those in neighbouring authorities closest to the Shropshire boundary are shown in Map 2.1. The purple diamond is the pool site location, and the size of the diamond is representative of the scale of the pool site in terms of the pool capacity.

2.8 Given the size of the land area of the County, Map 2.2 provide the same information but in more detail for the Shrewsbury area. The notional one mile walking catchment area for the pool sites in the Shrewsbury area is also shown.

2.9 .Across the twelve local authorities in the study area and which includes Shropshire County, there are a very high total of 225 individual swimming pools, with 88 individual pools in Herefordshire County. There are 167 swimming pool sites, with Herefordshire County having 62 pool sites. The Shropshire County supply of swimming pool sites is 13.1% of the total number of swimming pool sites, overall it is a very extensive supply of swimming pools.

Map 2.1: Location of the Swimming Pool Sites Shropshire County 2019



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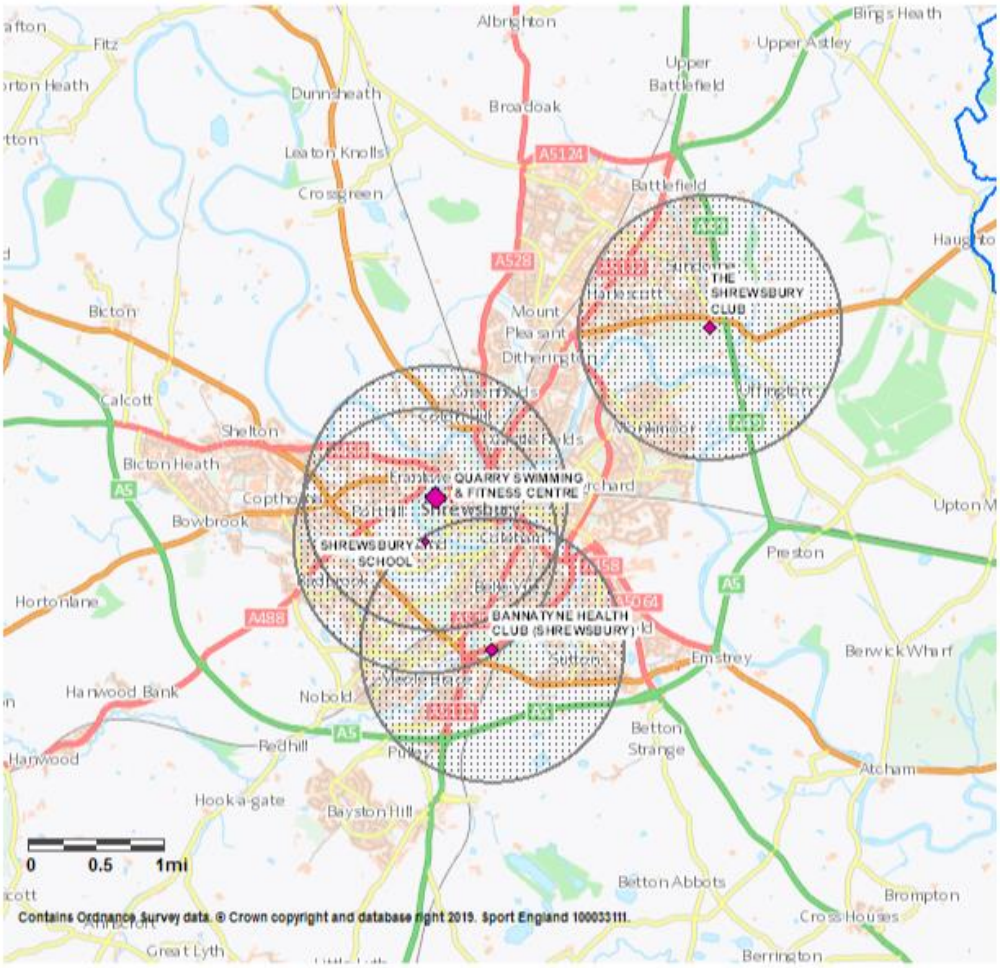
Map 2.2: Location of the Swimming Pool Sites Shrewsbury 2019



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2.10 A description of the swimming pools in Shropshire County is set out in Table 2.1 below.

2.11 Five of the 22 swimming pool sites are public leisure centre swimming pools sites, there are 8 commercial swimming pools sites, 7 are education swimming pool sites. 1 pool site Wem Swimming and Lifestyle Centre is owned by a charity and there is the RAF Cosford pool site.

2.12 In terms of swimming pool scale, at the five public leisure centre pool sites, there is a 25m x 8 lane main pool at Quarry Swimming and Fitness Centre, and also a two further main pools of 25m x 4 lanes and a18m x 9 metres pool. There are 25m x 6 lane main pools at Market Drayton Swimming and Fitness Centre, Oswestry Leisure Centre, and Much Wenlock Leisure Centre. The main pool at Whitchurch Swimming Centre is a 25m x 4 lane pool.

2.13 At 3 of these centres there are also separate teaching/leaner pools, with a 12m x 5m pool at Market Drayton, a 13m x 8m pool at Oswestry and an 11m x 8m pool at the Quarry Swimming and Fitness Centre.

2.14 The scale of provision at these sites, means they can provide for all the swimming activities of: learn to swim; casual recreational swimming; lane and aqua aerobics fitness swimming activities; and swimming development through clubs. This takes place in dedicated and separate pools - it is a very extensive public leisure centre swimming offer.

2.15 At the Whitchurch Swimming Centre and the Much Wenlock Leisure Centre, the scale of the main pool means they are also able to provide for the full range of swimming activities, albeit they are single pool sites.

2.16 The education swimming pools sites are smaller in scale, there is a 25m x 6 lane main pool at Shrewsbury School and 25m x 4 lane pools at Ellesmere College, Moreton Hall School, and St Martins Sports Centre. Whilst the smaller education pool sites are located at, Ellesmere Swimming Centre with a 20m x 4 lane main pool and Moor Park School 18m x 9m main pool.

2.17 The education pool sites will provide for organised swimming club use and may operate a swim school. The hours of access for this wider community use depends on the policy of each education provider. Some schools and colleges are proactive in providing for community use, whist other schools and colleges let the pool in response to requests and again for the same types of use. Independent schools tend to provide for extra curricular use by school sports clubs and any partner schools and not provide for wider community use

2.18 The largest commercial swimming pool site is at Teme Ludlow which has a 25m x 6 lane main pool with water Slide, diving plunge pool and two leisure pools with water features. The other commercial pool sites are single pool sites, ranging in size from the

2.19 25m x 6 lane main pool and two separate pools with a 10m x 9m diving pool and a12m x 6m leisure pool t s are al single pool sites and ranging in size from the 25m x 4 lane pool at Lions Quays Leisure Centre to the 20m x 3 lane pool at The Shrewsbury Club.

2.20 Commercial pools provide for recreational swimming by the centre membership and some also operate a swim school.

2.21 The average age for the public swimming pool sites, is 27 years, the oldest pool site being the Quarry Swimming and Fitness Centre which opened in 1971 and the most recent public leisure centre is Oswestry Leisure Centre which opened in 2011

2.22 The average age of all the swimming pool sites is 29 years and this excludes, Ellesmere College, which opened in 1950 and RAF Cosford which opened in 1948. The most recent pool site to open is Oswestry Leisure Centre in 2011.

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Table 2.1: Swimming Pool Supply Shropshire County 2019

Name of Site	Type	Dimensions	Area	Site Year Built	Site Year Refurb	Car % Demand	Public Transport % Demand	Walk % Demand
SHROPSHIRE						83%	5%	12%
ELLESMERE COLLEGE	Main/General	25 x 10	250	1950	2007	87%	3%	11%
ELLESMERE SWIMMING CENTRE	Main/General	20 x 8	160	1972	2003	45%	2%	53%
LION QUAYS LEISURE CLUB	Main/General	25 x 8	200	2008	2013	93%	6%	1%
MARKET DRAYTON SWIMMING & FITNESS CENTRE	Main/General	25 x 13	325	1995	2012	88%	3%	9%
MARKET DRAYTON SWIMMING & FITNESS CENTRE	Learner/Teaching/ Training	12 x 5	60					
MORETON HALL SCHOOL	Main/General	25 x 10	250	1975	2008	78%	7%	15%
OSWESTRY LEISURE CENTRE	Main/General	25 x 13	313	2011		82%	5%	13%
OSWESTRY LEISURE CENTRE	Learner/Teaching/ Training	13 x 8	94					
OSWESTRY SCHOOL	Main/General	20 x 9	180	1975		54%	3%	42%
ST MARTINS SPORTS CENTRE	Main/General	25 x 10	250	1981	2004	80%	7%	13%
VITAL HEALTH & WELLBEING (HILL VALLEY HOTEL)	Main/General	20 x 8	160	2007		92%	2%	6%
WEM SWIMMING AND LIFESTYLE CENTRE	Main/General	20 x 8	160	2005		82%	3%	15%
WHITCHURCH SWIMMING CENTRE	Main/General	25 x 9	225	1974		72%	2%	26%
BANNATYNE HEALTH CLUB (SHREWSBURY)	Main/General	20 x 8	160	2005		90%	6%	4%
QUARRY SWIMMING & FITNESS CENTRE	Main/General	33 x 13	413	1971	1995	81%	7%	11%
QUARRY SWIMMING & FITNESS CENTRE	Main/General	25 x 10	250					
QUARRY SWIMMING & FITNESS CENTRE	Main/General	18 x 9	162					
QUARRY SWIMMING & FITNESS CENTRE	Learner/Teaching/ Training	11 x 7	68					
SHREWSBURY SCHOOL	Main/General	25 x 13	313	2007		81%	7%	13%
THE SHREWSBURY CLUB	Main/General	20 x 6	120	2005		87%	5%	9%
BRIDGNORTH ENDOWED LEISURE CENTRE	Main/General	25 x 8	200	1976		80%	3%	17%
MOOR PARK SCHOOL	Main/General	18 x 9	166	1978	2015	94%	5%	0%
MUCH WENLOCK LEISURE CENTRE	Main/General	25 x 13	313	2010		91%	5%	4%
RAF COSFORD SCHOOL OF PHYSICAL TRAINING	Main/General	25 x 15	375	1948		76%	5%	19%
TEME CHURCH STRETTON	Main/General	20 x 8	160	1980		85%	3%	12%
TEME LUDLOW	Main/General	25 x 13	325	1997		89%	6%	5%
TEME LUDLOW	Diving	10 x 9	85					
TEME LUDLOW	Leisure Pool	12 x 6	72					
TEME SPARC	Main/General	20 x 9	180	1972	2006	86%	2%	12%

3. Demand for Swimming Pools

Total- Demand	**Shropshire County**	Malvern Hills	Newcastle-u-Lyme	Powys	Cheshire East	Cheshire West & Chester	Hertfordshire County
Population	**318,003**	77,549	130,067	131,721	380,546	339,067	1,204,851
Swims demanded – in visits per week peak period	**18,748**	4,484	7,850	7,338	22,812	20,538	75,228
Equivalent in water space – with comfort factor included	**3,111**	744	1,302	1,217	3,786	3,409	12,485
% of population without access to a car	**14.90**	12.80	21.10	14.30	15.20	17.70	16.10

Total Demand	South Staffs	Stafford	Telford & Wrekin	Wrexham	Wyre Forest
Population	111,829	134,922	177,096	139,751	100,957
Swims demanded – in visits per week peak period	6,440	8,017	11,042	8,049	6,018
Equivalent in water space – with comfort factor included	1,069	1,331	1,833	1,335	999
% of population without access to a car	12.50	16.40	19.80	21.60	17.80

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. The demand figure is expressed in visits in the weekly peak period, and also expressed in sq metres of water.

3.2 The total population of Shropshire County in 2019 is 318,003 people. This population generates a total demand for swimming of 18,748 visits in the weekly peak period of week day lunchtimes (1 hour), weekday evenings (up to 5 hours per day) and weekend days (up to 7 hours per weekend day). This equates to a total demand for 3,111 sq metres of water. (Again for context, a 25m x 4 lane pool is between 210 – 250 sq metres of water, depending on lane width).

3.3 The percentage of the population without access to a car is recorded under the demand heading. This finding is important, because it influences travel patterns to swimming pools. If there is a low percentage, it does mean there is likely to be higher percentage of visits to pools by car, the drive time catchment is 20 minutes travel time.

3.4 If there is a high percentage of residents who do not have access to a car, and either walk or use public transport to access a pool, then a network of local accessible swimming pool sites is important. This will provide opportunities for residents to swim and be physically active. The public transport catchment area for pools is also 20 minutes travel time, and for walking, it is 20 minutes/1 mile.

3.5 In Shropshire County 14.9% of the resident population do not have access to a car, based on the 2011 Census. Shropshire has the third lowest percentage of all the local authorities in the study area, the highest being 21.6% of the population in Wrexham and the lowest 12.5% in South Staffordshire. .

3.6 The West Midlands Region average is 24.1% and for England wide 24.9% of the population do not have access to a car.

3.7 The findings for Shropshire are that, 84% of all visits to pools are by car, with 11% of visits by walking and 5% of visits by public transport. So the vast majority of visits to pools are by car, with 16%, or, just over one in six visits to a swimming pool by a combination of walking and public transport. The significance of these findings in providing access to swimming pools will be reviewed under the unmet demand heading.

4. Supply & Demand Balance

Supply/Demand Balance	Shropshire County	Malvern Hills	Newcastle-u-Lyme	Powys	Cheshire East	Cheshire West & Chester	Hertfordshire County
Supply - Swimming pool provision (sq m) based on hours available for community use	4,121	1,158	938	1,858	5,307	4,324	16,847
Demand - Swimming pool provision (sq m) taking into account a 'comfort' factor	3,111	744	1,302	1,217	3,786	3,409	12,485
Provision available compared to the minimum required to meet demand	1,010	414	-364	641	1,521	915	4,362

Supply/Demand Balance	South Staffs	Stafford	Telford & Wrekin	Wrexham	Wyre Forest
Supply - Swimming pool provision (sq m) based on hours available for community use	880	790	1,622	2,029	987
Demand - Swimming pool provision (sq m) taking into account a 'comfort' factor	1,069	1,331	1,833	1,335	999
Provision available compared to the minimum required to meet demand	-189	-541	-211	694	-12

4.1 **Definition of supply and demand balance** – supply and demand balance compares the total demand for swimming in Shropshire County with the total supply across Shropshire County. It therefore represents an assumption that ALL the demand for swimming is met by ALL the supply in Shropshire. (Note: it does exactly the same for the other authorities).

4.2 In short, supply and demand balance is NOT based on where the venues are located and their catchment area extending into other authorities. Nor, the catchment areas of pools in neighbouring authorities extending into Shropshire County.

4.3 The more detailed modelling based on the CATCHMENT AREAS of pools is set out under Satisfied Demand, Unmet Demand and Used Capacity. These findings reflect how much of the Shropshire County demand for swimming can be met and the level of unmet demand.

4.4 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.

4.5 When looking at this closed assessment, the resident population of Shropshire County in 2019, generates a demand for 3,111 sq metres of water. This compares to the total supply of 4,121 sq metres of water, which is available for community use in the weekly

peak period. So, there is a positive balance of supply exceeding demand by 1,010 sq metres of water in 2019.

4.6 Supply of water space exceeds demand for swimming, in six of the neighbouring local authorities and is highest in Herefordshire County at a very high 4,362 sq metres of water. Demand exceeds supply in five local authorities, and it is highest in Stafford at 541 sq metres of water.

4.7 Overall, across the total twelve local authorities, the total supply is 43,861 sq metres of water and the total demand for swimming is 32,621 sq metres of water. There is a positive supply and demand balance of supply exceeding demand by 11,240 sq metres.

4.8 These findings are likely to mean that when the assessment is based on the catchment area of swimming pools, and across local authority boundaries, a very high level of the total demand for swimming will be met and there is a very low level of unmet demand. These findings are examined in the next two sets of headings.

5. Satisfied Demand - demand from Shropshire County residents currently being met by supply

Satisfied Demand	**Shropshire County**	Malvern Hills	Newcastle-u-Lyme	Powys	Cheshire East	Cheshire West & Chester	Hertfordshire County
Total number of visits which are met	**16,776**	4,204	7,204	5,543	21,417	18,936	71,845
% of total demand satisfied	**89.50**	93.80	91.80	75.50	93.90	92.20	95.50
% of demand satisfied who travelled by car	**83.80**	84.50	77.80	84.10	81.60	81.40	77.40
% of demand satisfied who travelled by foot	**11.40**	10.90	13.50	11.90	12.80	11.80	16.40
% of demand satisfied who travelled by public transport	**4.80**	4.50	8.70	4	5.60	6.80	6.20
Demand Retained	**14,383**	3,153	3,877	5,056	18,305	17,125	65,247
Demand Retained -as a % of Satisfied Demand	**85.70**	75	53.80	91.20	85.50	90.40	90.80
Demand Exported	**2,392**	1,051	3,327	487	3,111	1,811	6,621
Demand Exported -as a % of Satisfied Demand	**14.30**	25	46.20	8.80	14.50	9.60	9.20

Satisfied Demand	South Staffs	Stafford	Telford & Wrekin	Wrexham	Wyre Forest
Total number of visits which are met	6,051	6,993	10,075	7,586	5,538
% of total demand satisfied	94	87.20	91.20	94.30	92
% of demand satisfied who travelled by car	84.20	88.70	79.30	74	81
% of demand satisfied who travelled by foot	11.30	6.10	14.10	17.60	12.60
% of demand satisfied who travelled by public transport	4.50	5.20	6.50	8.30	6.40
Demand Retained	2,386	5,489	9,581	7,117	5,067
Demand Retained -as a % of Satisfied Demand	39.40	78.50	95.10	93.80	91.50
Demand Exported	3,665	1,504	493	470	470

5.1 **Definition of satisfied demand** – it represents the proportion of total demand that is met by the capacity at the swimming pools from residents who live within the car, walking or public transport catchment area of a swimming pool.

5.2 The finding is that in 2019, some 89.6% of the total demand for swimming from Shropshire County residents is satisfied/met. This is the level of the County's total demand for swimming that is located inside the catchment area of a swimming pool (pools located both inside and outside the County). Plus there is enough swimming pool capacity at these pools to meet just under 90% of the Shropshire County total demand for swimming.

5.3 Satisfied demand in nine of the eleven neighbouring local authorities, satisfied demand is over 90% of total demand and it is highest in Herefordshire County at 95.5% of total demand being met. Herefordshire also has the highest supply of swimming pools with 88 individual pools on 62 swimming pool sites.

Retained demand

5.4 There is a sub set of findings for satisfied demand, which is about how much of the Shropshire County satisfied demand for swimming is retained at the swimming pool sites located in the County. This assessment is based on Shropshire residents travelling to and using the nearest pool to where they live, and it is a swimming pool located in the County.

5.5 In 2019, some 85.7% of the total 89.5% Shropshire County demand for swimming which is met/satisfied, is retained demand within the County. This means there is a very close correlation between the swimming pool locations and catchment areas and the location of the Shropshire County demand for swimming pools. So much so, that the nearest pool for over eight out of ten visits to a swimming pool by a Shropshire resident is a pool located in the authority.

5.6 It is important to reiterate, the model distributes demand based on residents traveling to and using the nearest pool to where they live. Sport England research does support this modelling assumption. However, there are increasingly other factors which influence which pools residents chose to use. These are the quality of the swimming pool itself, plus other facilities on the same site, such as a gym or studio. Some residents may travel further to swim in a pool that provides a better quality offer, than simply choosing to swim at the nearest pool to where they live.

Exported demand

5.7 The residual of satisfied demand, after retained demand, is exported demand. The 2019 finding is that 14.3% of the Shropshire County satisfied demand for swimming is met outside the authority. Again, this is based on the nearest pool for this level of the County's satisfied demand, is a pool located outside the County.

5.8 In terms of visits, the Shropshire County retained demand is14, 383 visits per week in the weekly peak period. Whilst the Shropshire County exported demand, is 2.392 visits in the weekly peak period.

5.9 The data does not identify how much of the Shropshire County demand goes to which authority or pool site, it just provides the total figure for exported demand.

6. Unmet Demand - Demand from Shropshire County residents not being met

Unmet Demand	**Shropshire County**	Malvern Hills	Newcastle-u-Lyme	Powys	Cheshire East	Cheshire West & Chester	Hertfordshire County
Total number of visits in the peak, not currently being met	**1,973**	280	646	1,795	1,395	1,602	3,383
Unmet demand as a % of total demand	**10.50**	6.20	8.20	24.50	6.10	7.80	4.50
Equivalent in water space m2 - with comfort factor	**328**	46	106	298	232	266	561
% of Unmet Demand due to ;							
Lack of Capacity -	**2**	0.10	7	0	0	0	0.50
Outside Catchment –	**98**	99.90	93	100	100	100	99.50
% Unmet demand who do not have access to a car	**55.90**	**64.80**	**79.90**	**29.70**	**79.70**	**81.40**	**85.80**
% of Unmet demand who have access to a car	**42**	35.10	13.10	70.30	20.30	18.60	13.70

Unmet Demand	South Staffs	Stafford	Telford & Wrekin	Wrexham	Wyre Forest
Total number of visits in the peak, not currently being met	389	1,024	967	463	480
Unmet demand as a % of total demand	6	12.80	8.80	5.70	8
Equivalent in water space m2 - with comfort factor	65	170	161	76	79
% of Unmet Demand due to ;					
Lack of Capacity –	3.70	10.90	19.80	0	9.20
Outside Catchment –	96.30	89.10	80.20	100	90.80
% Unmet demand who do not have access to a car	72	64.60	70.20	87	75.30
% of Unmet demand who have access to a car	24.30	24.50	10	13	15.50

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; or (2) the demand is located outside the catchment area of any pool and is then classified as unmet demand.

6.2 In 2019 the Shropshire County total unmet demand is 10.5% of total demand, and this equates to 328 sq metres of water. Of the total unmet demand, 98% is from the second definition, unmet demand located outside the catchment area of a pool and 2% from lack of swimming pool capacity (reviewed under the used capacity heading).

6.3 Unmet demand from this lack of access and demand outside catchment, is mainly by people who do not have access to a car, and live outside the walking or public transport catchment area of a pool. It represents 56% of the unmet demand outside catchment (row in bold in the unmet demand table).

6.4 Unmet demand outside catchment will always exist, this is because it is not possible to get complete spatial coverage, whereby all areas are inside catchment. This is especially so when an authority has an extensive land area, such as Shropshire County. As Map 2.1 in the supply section shows, there are extensive areas in the south and west of the County, where there are no swimming pool sites.

6.5 Fortunately, there is not a lot of demand for swimming located in these areas, and in terms of visits, the total unmet demand outside catchment, is 1,933 visits per week in the weekly peak period. This compares with the demand inside catchment, and which is being met, of 16,776 visits per week in the weekly peak period.

6.6 The overall key point, is not that unmet demand outside catchment exists, but the SCALE of the unmet demand and which is more important. Plus, if this unmet demand is clustered enough to consider further pool provision, so as to improve accessibility to pools for residents.

6.7 Map 6.1 overleaf shows the location and scale of the total unmet demand for swimming across Shropshire County. Maps 6.2 and 6.3 show the same information in more detail, for the northern and southern halves of the County, whilst Map 6.4 shows the location and scale of unmet demand in the Shrewsbury area, (all maps show the unmet demand from both sources)..

6.8 The unmet demand is set out in sq metres of water contained within one kilometre grid square and the squares are colour coded. The blue to green squares have values between 0.1 – 0.7 sq metres of water, so very low values. The yellow squares represent 0.8 – 1 sq metres of water, the lighter beige squares 1. – 2.5 sq metres of water, and the darker beige squares 2.5 – 5 sq metres of water.

6.9 Unmet demand is highest in the area in and around the Shrewsbury town area (Map 6.4), and it totals 48 sq metres of water but this over quite an extensive area. It is likely in this area, there are residents who do not have access to a car and live outside the walking or public transport catchment area of a swimming pool.

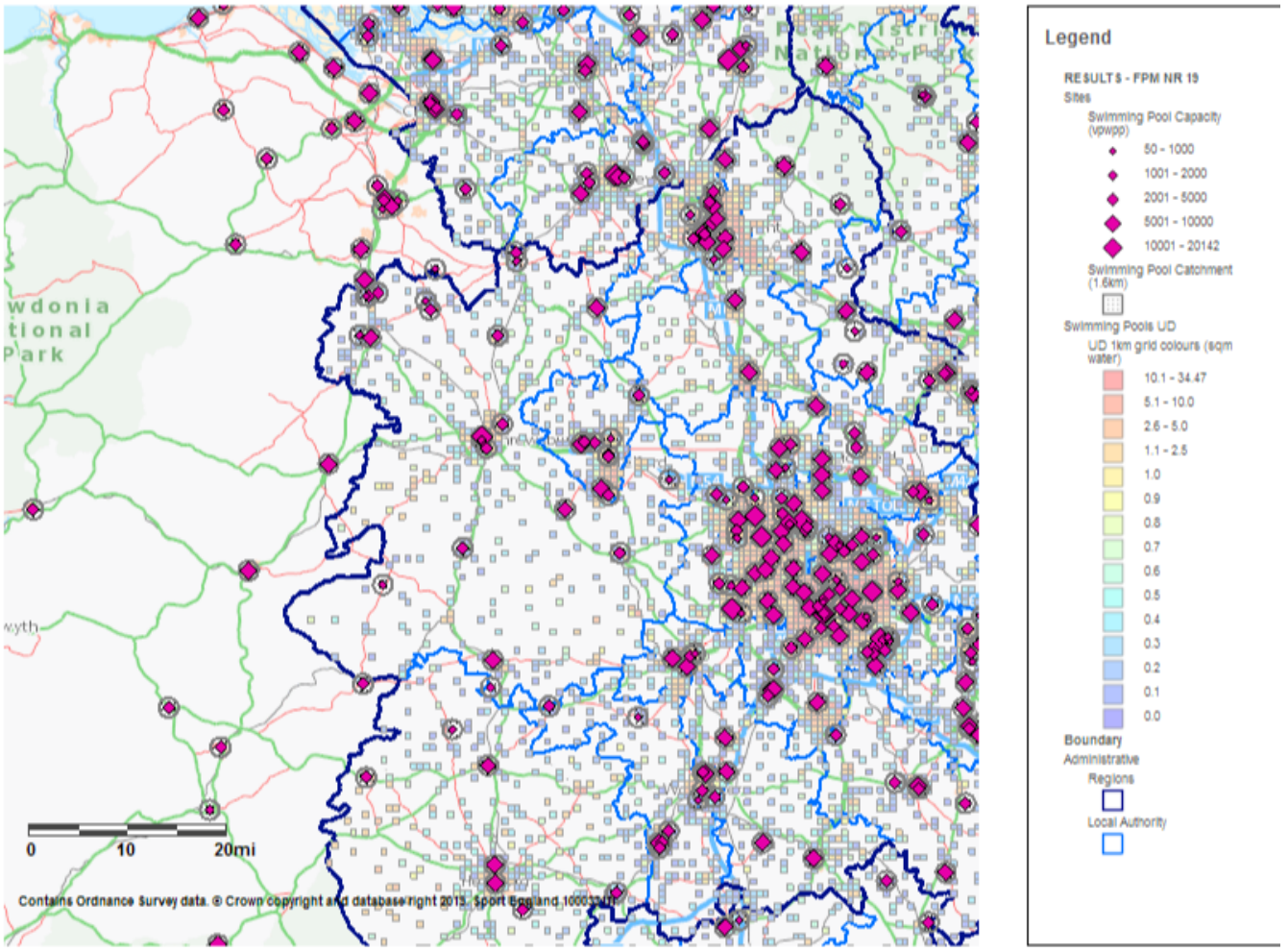
6.10 Unmet demand in the Wem area totals between 10 - 15 sq metres of water, in the Oswestry area unmet demand totals between 5 – 10 sq metres of water, and in both the Market Drayton and Ludlow areas, it is around 5 sq metres of water. Overall the unmet demand is very low in the main settlements within the County.

6.11 The remainder of the unmet demand is distributed in low values, across the rest of the County. This is mainly in the blue squares, with a value of 0.1 – 0.7 sq metres of water. The total unmet demand of 328 sq metres across the County is a low total. There is not a sufficient total of unmet demand clustered in any one location, to consider increasing swimming pool provision, so as to increase accessibility for residents. Again, for context, a 25m x 4 lane swimming pool is between 210 – 250 sq metres of water, depending on lane width.

Map 6.1: Unmet Demand for Swimming Shropshire County 2019

Facilities Planning Model - National Runs - Swimming Pools 2019 Unmet Demand

Unmet Demand expressed as square metres of water (round to two decimal places). Data outputs shown thematically (colours) at either output area level or aggregated at 1km square (figure labels).



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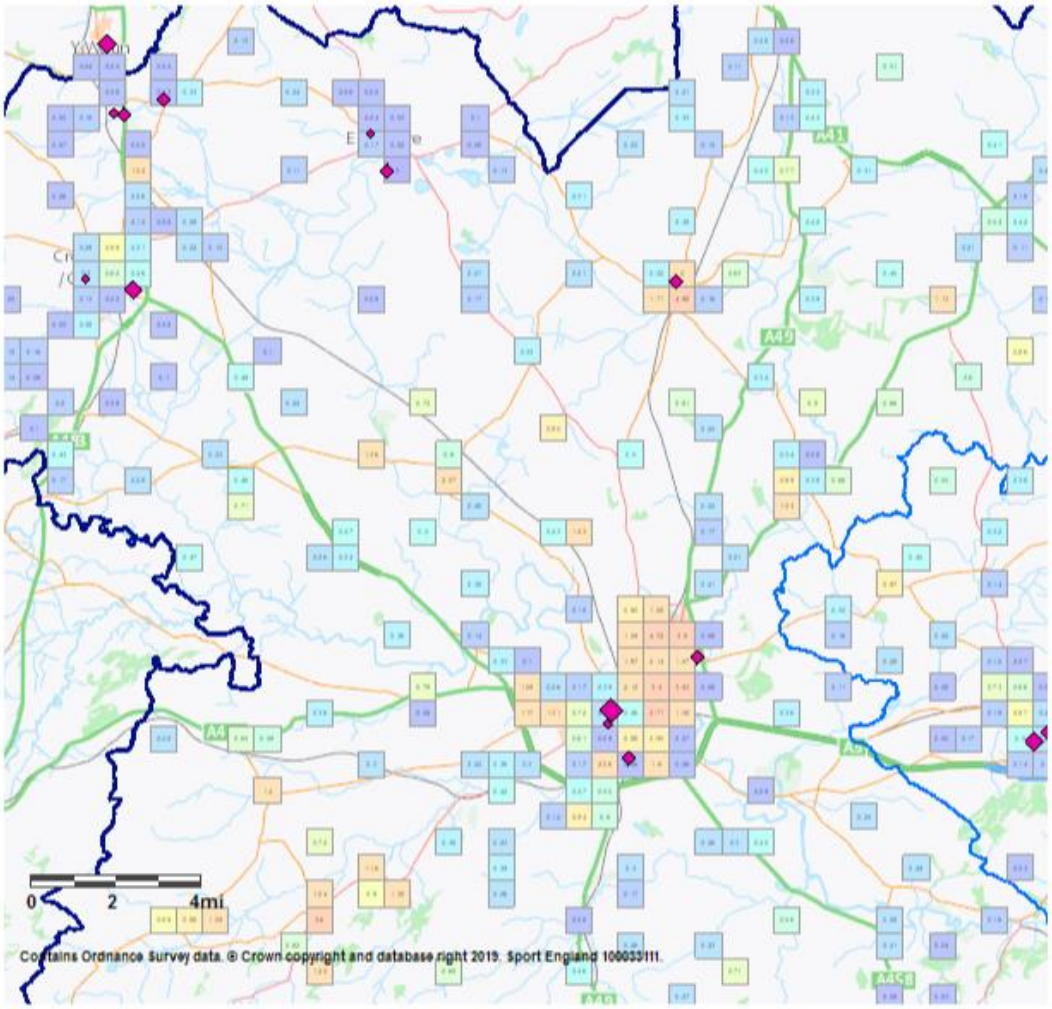
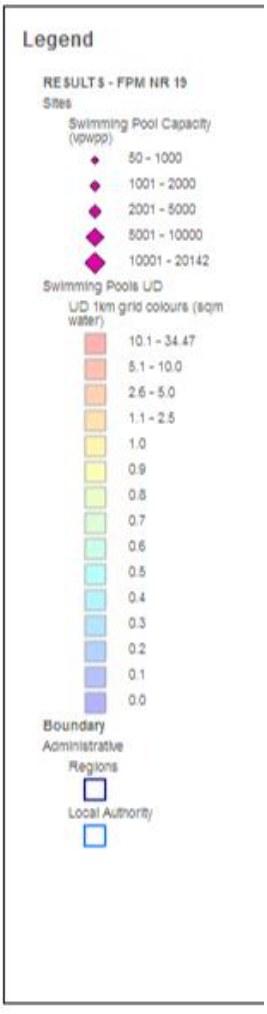
Map 6.2: Unmet Demand for Swimming Shropshire County Northern Half of the County 2019

Facilities Planning Model - National Runs - Swimming Pools 2019 Unmet Demand

Unmet Demand expressed as square metres of water (round to two decimal places). Data outputs shown thematically (colours) at either output area level or aggregated at 1km square (figure labels).





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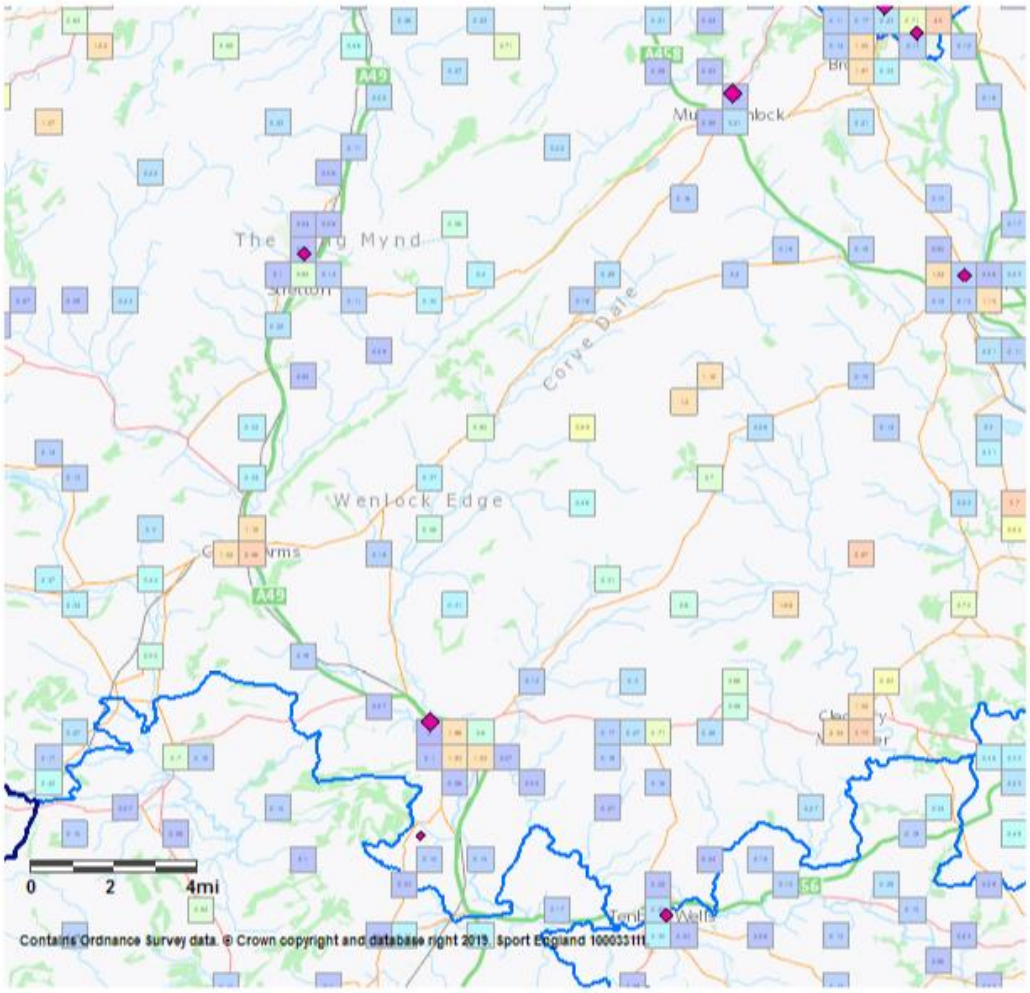
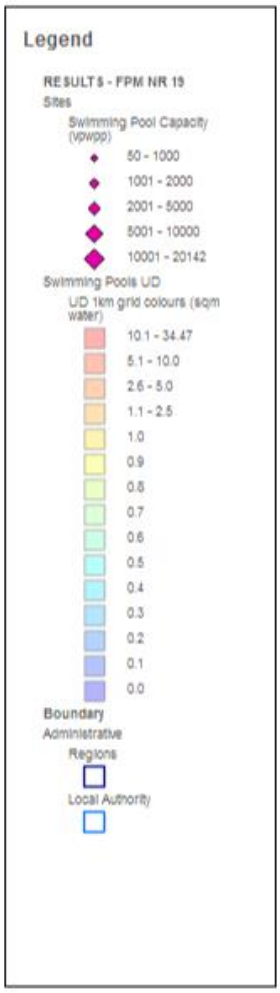
Map 6.3: Unmet Demand for Swimming Shropshire County Southern Half of the County 2019

Facilities Planning Model - National Runs - Swimming Pools 2019 Unmet Demand

Unmet Demand expressed as square metres of water (round to two decimal places). Data outputs shown thematically (colours) at either output area level or aggregated at 1km square (figure labels).





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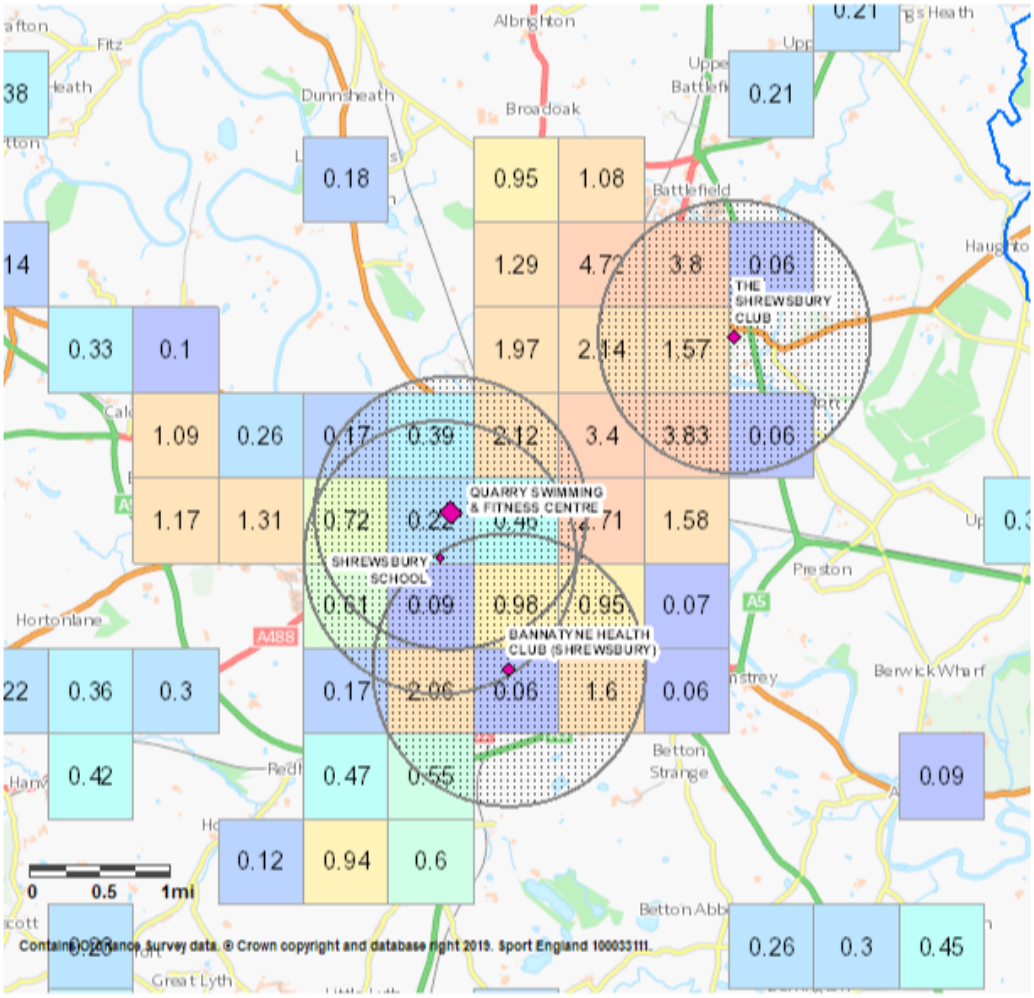
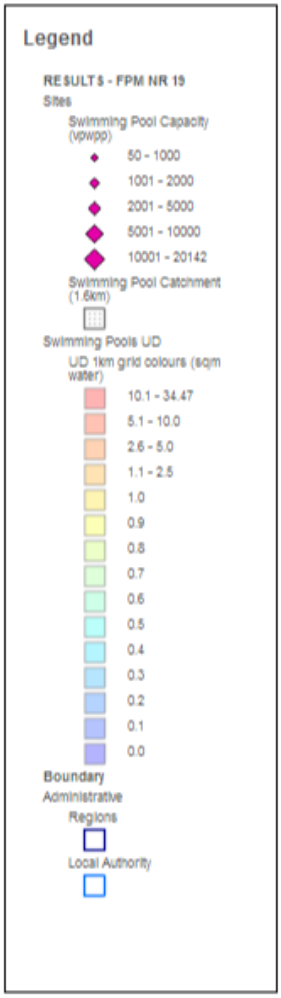
Map 6.4: Unmet Demand for Swimming Shrewsbury area 2019

Facilities Planning Model - National Runs - Swimming Pools 2019 Unmet Demand

Unmet Demand expressed as square metres of water (round to two decimal places). Data outputs shown thematically (colours) at either output area level or aggregated at 1km square (figure labels).





7. Used Capacity - How well used are the swimming pools?

Used Capacity	**Shropshire County**	Malvern Hills	Newcastle-u-Lyme	Powys	Cheshire East	Cheshire West & Chester	Hertfordshire County
Total number of visits used of current capacity	**16,143**	4,144	7,054	5,428	21,121	20,006	77,471
% of overall capacity of pools used	**45.20**	41.30	86.70	33.70	45.90	53.40	53
Visits Imported;							
Number of visits imported	**1,760**	991	3,178	372	2,816	2,881	12,224
As a % of used capacity	**10.90**	23.90	45	6.90	13.30	14.40	15.80

Used Capacity	South Staffs	Stafford	Telford & Wrekin	Wrexham	Wyre Forest
Total number of visits used of current capacity	4,762	6,193	10,955	8,214	5,765
% of overall capacity of pools used	62.40	90.40	77.90	46.70	67.40
Visits Imported;					
Number of visits imported	2,375	703	1,374	1,098	698
As a % of used capacity	49.90	11.40	12.50	13.40	12.10

7.1 **Definition of used capacity** - is a measure of usage and throughput 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 busy to be able to swim comfortably, plus the changing and circulation areas become too crowded. The model assumes that usage over 70% of capacity used in the weekly peak period is busy, and the swimming pool is operating at an uncomfortable level above that percentage.

7.2 In 2019, the estimated used capacity of the swimming pools as a Shropshire County average, is estimated to be 45.2% of pool capacity used in the weekly peak period. This is well within the Sport England benchmark of pools being comfortably full, at 70% of pool capacity used in the weekly peak period, is reached.

7.3 The findings on used capacity can be explained by some of the earlier findings, namely:

- The resident population of Shropshire County, generates a demand for 3,111 sq metres of water. This compares to the total supply of 4,121 sq metres of water, which is available for community use in the weekly peak period. So, there is a positive balance of supply exceeding demand by 1,010 sq metres of water in 2019.

- In 2019, nearly 90% of the total demand for swimming from Shropshire County residents is satisfied/met. This is the level of the County's total demand for swimming located inside the catchment area of a swimming pool and the pools have enough capacity to meet this level of total demand

- Unmet demand for swimming from Shropshire County residents is low, at 328 sq metres of water. This compares with an available supply of water space which is 4,121 sq metres of water. Of the total unmet demand, 98% is demand located outside the catchment area of a pool and only 2% from lack of swimming pool capacity.

7.4 The findings for each individual pool site do vary from the County wide average, and these are set out in Table 7.1.The findings for the public leisure centre sites are in blue typeface. An explanation of the reasons for the variation is set out in the summary report.

7.5 **Table 7.1: Used Capacity of the Shropshire County Swimming Pool Sites 2019**

Name of Site	Type	Dimensions	Area	Site Year Built	Site Year Refurb	% of Capacity Used	% of Capacity Not Used
SHROPSHIRE						45%	55%
ELLESMERE COLLEGE	Main/General	25 x 10	250	1950	2007	30%	70%
ELLESMERE SWIMMING CENTRE	Main/General	20 x 8	160	1972	2003	63%	37%
LION QUAYS LEISURE CLUB	Main/General	25 x 8	200	2008	2013	19%	81%
MARKET DRAYTON SWIMMING & FITNESS CENTRE	Main/General	25 x 13	325	1995	2012	53%	47%
MARKET DRAYTON SWIMMING & FITNESS CENTRE	Learner/Teaching/Training	12 x 5	60				
MORETON HALL SCHOOL	Main/General	25 x 10	250	1975	2008	27%	73%
OSWESTRY LEISURE CENTRE	Main/General	25 x 13	313	2011		57%	43%
OSWESTRY LEISURE CENTRE	Learner/Teaching/Training	13 x 8	94				
OSWESTRY SCHOOL	Main/General	20 x 9	180	1975		31%	69%
ST MARTINS SPORTS CENTRE	Main/General	25 x 10	250	1981	2004	23%	77%
VITAL HEALTH & WELLBEING (HILL VALLEY HOTEL)	Main/General	20 x 8	160	2007		23%	77%
WEM SWIMMING AND LIFESTYLE CENTRE	Main/General	20 x 8	160	2005		33%	67%
WHITCHURCH SWIMMING CENTRE	Main/General	25 x 9	225	1974		82%	18%
BANNATYNE HEALTH CLUB (SHREWSBURY)	Main/General	20 x 8	160	2005		80%	20%
QUARRY SWIMMING & FITNESS CENTRE	Main/General	33 x 13	413	1971	1995	47%	53%
QUARRY SWIMMING & FITNESS CENTRE	Main/General	25 x 10	250				
QUARRY SWIMMING & FITNESS CENTRE	Main/General	18 x 9	162				
QUARRY SWIMMING & FITNESS CENTRE	Learner/Teaching/Training	11 x 7	68				
SHREWSBURY SCHOOL	Main/General	25 x 13	313	2007		100%	0%
THE SHREWSBURY CLUB	Main/General	20 x 6	120	2005		57%	43%
BRIDGNORTH ENDOWED LEISURE CENTRE	Main/General	25 x 8	200	1976		67%	33%

MOOR PARK SCHOOL	Main/General	18 x 9	166	1978	2015	19%	81%
MUCH WENLOCK LEISURE CENTRE	Main/General	25 x 13	313	2010		40%	60%
RAF COSFORD SCHOOL OF PHYSICAL TRAINING	Main/General	25 x 15	375	1948		35%	65%
TEME CHURCH STRETTON	Main/General	20 x 8	160	1980		34%	66%
TEME LUDLOW	Main/General	25 x 13	325	1997		33%	67%
TEME LUDLOW	Diving	10 x 9	85				
TEME LUDLOW	Leisure Pool	12 x 6	72				
TEME SPARC	Main/General	20 x 9	180	1972	2006	42%	58%

Imported demand

7.6 Imported demand is reported under used capacity because it measures the demand from residents who live outside Shropshire County but the nearest pool to where they live is inside the County. So if residents use the pool nearest to where they live, this becomes part of the used capacity of the Shropshire pools.

7.7 In 2019 the imported demand is10.9% of the used capacity of the Shropshire County pools and this is 2,375 visits in the weekly peak period. As with exported demand, the data only reports the total, and not how much demand comes from each authority, or goes to which pool sites.

Export/Import Balance

7.8 In terms of visits, Shropshire County exports 2,392 visits per week in the weekly peak period, and imports 2,375 visits in the same weekly peak period. So export and import of demand are almost in balance and Shropshire County is a net exporter of just 17 visits in the weekly peak period.

8. Local Share - Equity Share of facilities

Local Share	**Shropshire County**	Malvern Hills	Newcastle-u-Lyme	Powys	Cheshire East	Cheshire West & Chester	Hertfordshire County
Local Share: <1 capacity less than demand, 1> capacity greater than demand	**1.30**	1.80	1.10	1.70	1.30	1.40	1.40

Local Share	South Staffs	Stafford	Telford & Wrekin	Wrexham	Wyre Forest
Local Share: <1 capacity less than demand, 1> capacity greater than demand	1	0.90	0.90	1.70	1.20

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.

8.2 Local share is the available capacity that can be reached in an area divided by the demand for that capacity in the area. 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 Shropshire County has a local share of 1.3 and so supply is greater than demand, in terms of share of access to pools – as a Shropshire County average.

8.4 Local share does vary across the County and its distribution is set out in Map 8.1. Map 8.2 has the same information but in more detail for the northern part of the County, Map 8.3 is for the southern half of the County and Map 8.4 shows the distribution of local share in the Shrewsbury area.

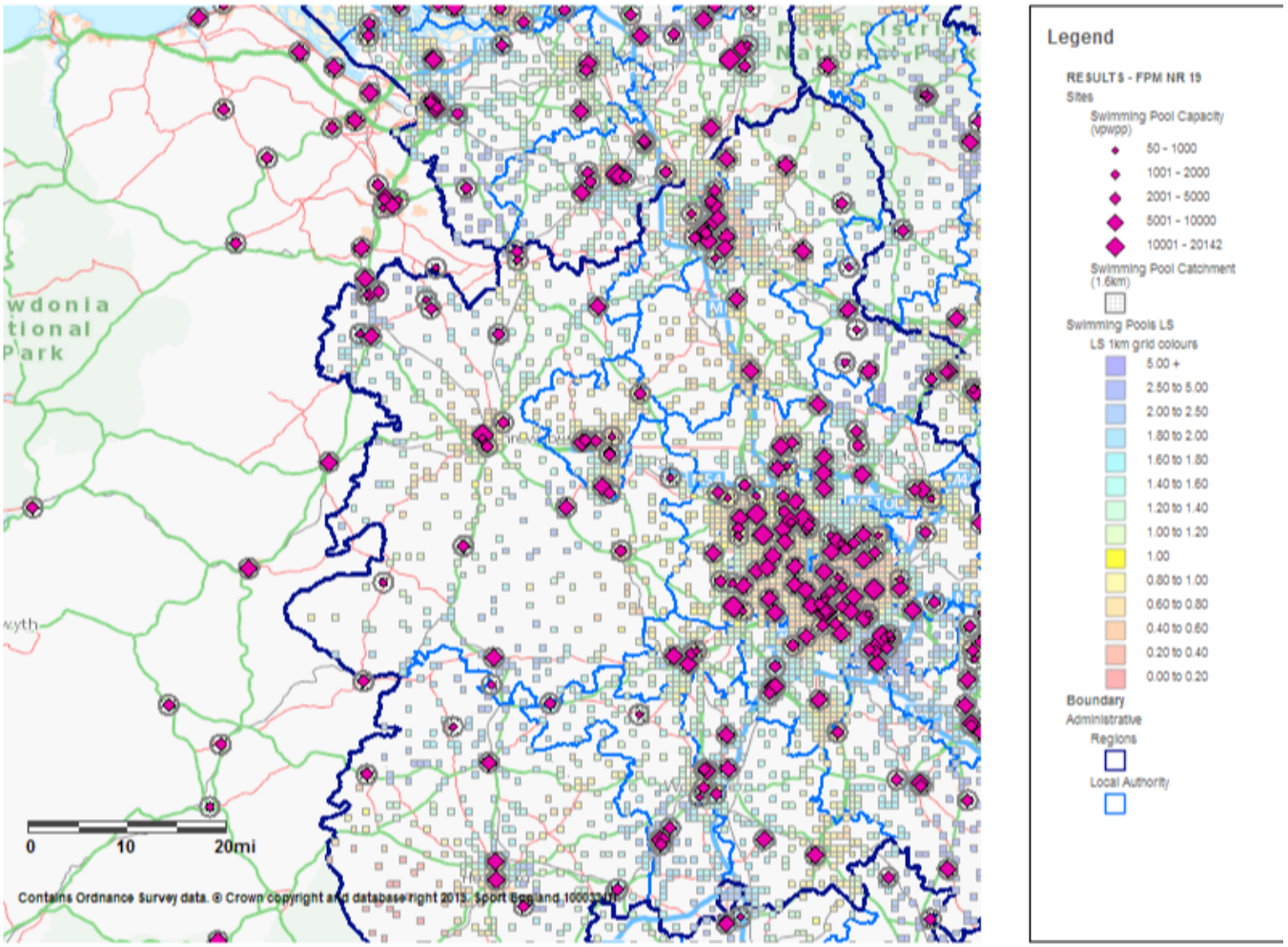
8.5 The two shades of green squares have a value of 1. – 1.20, 1.20 – 1.40. Whilst the light turquoise squares have values of 1-40 – 1.60 and the light blue squares values of 1.60 – 1.80. Areas with the darker yellow squares have a value of 1, for the lighter yellow squares it is 1.00 – 0.80 the light beige square areas have a local share of between 0.80 – 0.60 and the darker beige squares have a value of 0.60 – 0.40.

8.6 Local share is highest in the Oswestry, Western Rhyn and Ellesmere areas. The likely explanation is that these areas do have swimming pool sites and the population density is lower in these areas than other parts of the County. So there is a lot of supply to share in areas of the County where the demand is lower and so a high local share of swimming pools in these areas.

Map 8.1: Local Share of Swimming Pools Shropshire County 2019

Facilities Planning Model - National Runs - Swimming Pools 2019 Local Share

Share of water divided by demand. Data outputs shown thematically (colours) and aggregated at 1km square (figure labels). Local Share Values: 1 – Supply equals Demand, 2 – Supply is double Demand, 0.5 – Supply is half Demand.



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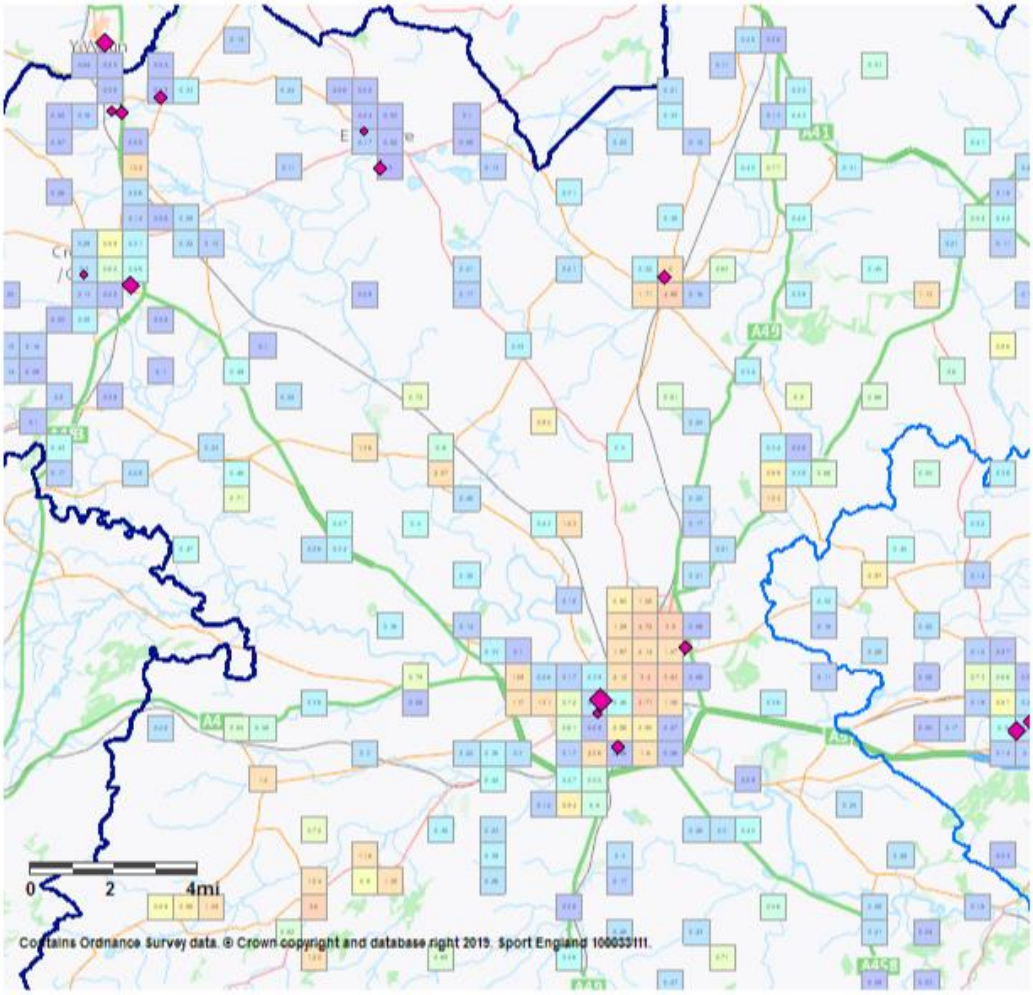
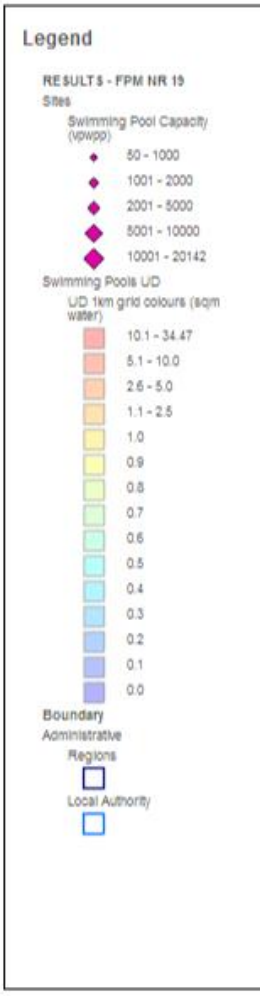
10/7/2019 14:50

Map 8.2: Local Share of Swimming Pools Shropshire North 2019

Facilities Planning Model - National Runs - Swimming Pools 2019 Unmet Demand

Unmet Demand expressed as square metres of water (round to two decimal places). Data outputs shown thematically (colours) at either output area level or aggregated at 1km square (figure labels).





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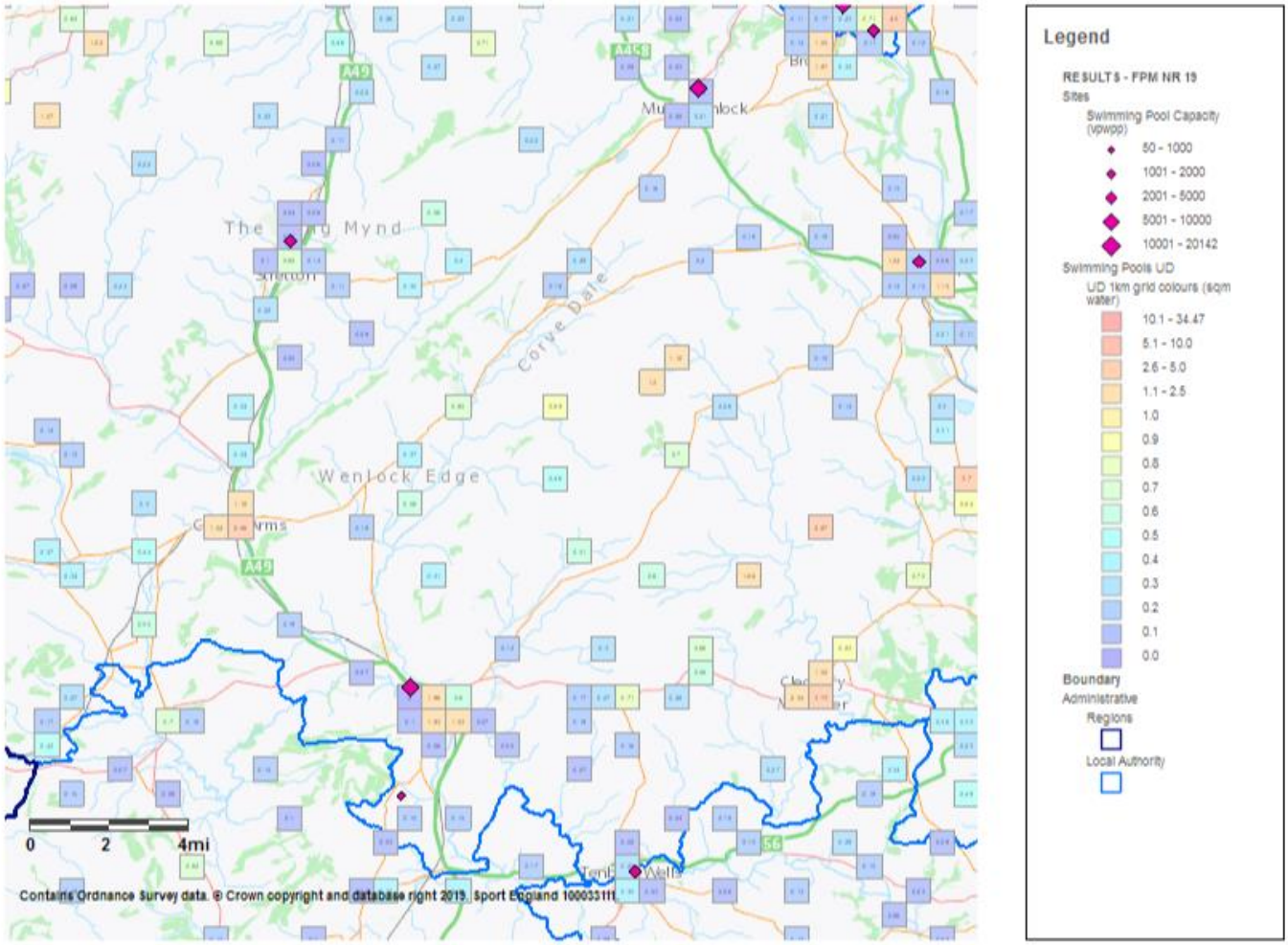
Map 8.3: Local Share of Swimming Pools Shropshire South 2019

Facilities Planning Model - National Runs - Swimming Pools 2019 Unmet Demand

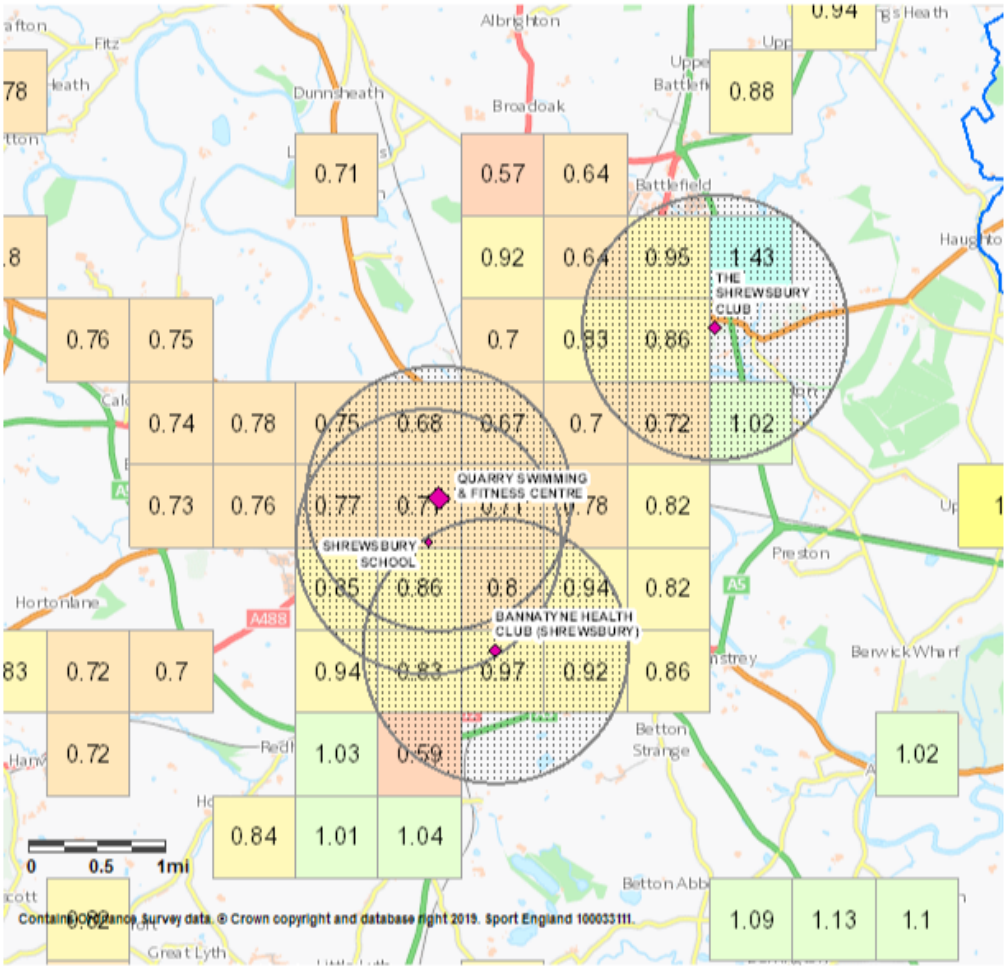
Unmet Demand expressed as square metres of water (round to two decimal places). Data outputs shown thematically (colours) at either output area level or aggregated at 1km square (figure labels).

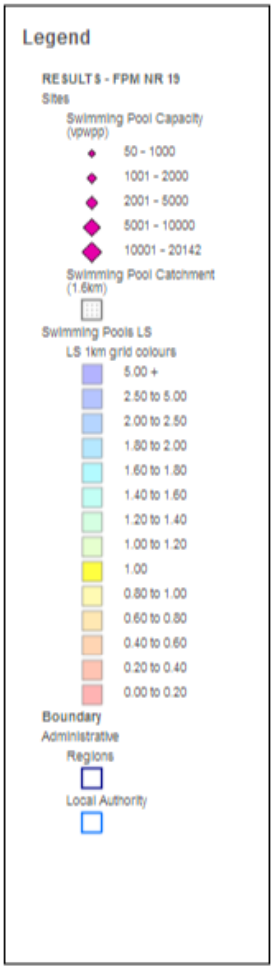


Map 8.4: Local Share of Swimming Pools Shrewsbury area 2019

Facilities Planning Model - National Runs - Swimming Pools 2019 Local Share

Share of water divided by demand. Data outputs shown thematically (colours) and aggregated at 1km square (figure labels). Local Share Values: 1 – Supply equals Demand, 2 – Supply is double Demand, 0.5 – Supply is half Demand.





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9. Summary Report

Report Context

9.1 This report and the accompanying maps, provide a strategic assessment and evidence base for swimming pool provision in Shropshire County in 2019. The assessment is based on Sport England's facilities planning model (fpm) data from the 2019 National Run for supply, demand and access to swimming pools.

9.2 The report will contribute to the strategic planning for the provision of swimming pools by Shropshire County.

9.3 The catchment area of the swimming pools extends across local authority boundaries. So it is important to include the data and findings for Shropshire County and all the neighbouring local authorities. This information is set out in the data tables in the main report.

9.4 The evidence base can be used in consultations, to check and challenge the findings and then provide a rounded evidence base and assessment of need for swimming pools in 2019.

9.5 This summary report sets out the main findings from the facility planning model assessment.

Findings from the Assessment

Swimming Pool Supply

9.6 A summary of the Shropshire County swimming pool supply findings are:

- There are 29 individual pools located at 22 swimming pool sites across Shropshire County in 2019. The total supply of water space available for community use in the weekly peak period is 4.121 sq metres of water. (Note: for context a 25m x 4 lane pool is between 210 and 250 sq metres of water, depending on lane width).

- Five of the 22 swimming pool sites are public leisure centre swimming pools sites, there are 8 commercial swimming pools sites, 7 education swimming pool sites. 1 pool site, Wem Swimming and Lifestyle Centre, is owned by a charity and there is the RAF Cosford pool site.

- In terms of swimming pool scale, the largest pool site is Quarry Swimming and Fitness Centre, which has a 25m x 8 lane main pool and two further main pools of 25m x 4 lanes plus a18m x 9m pool. **First key finding**, the Quarry Swimming and Fitness Centre is the largest swimming pool site in the County, it has 4 individual pools and a total water area of 893 sq metres of water, which is 21% of the total water area available for community use, across all the 22 swimming pool sites in the County

- There are 25m x 6 lane main pools at Market Drayton Swimming and Fitness Centre, Oswestry Leisure Centre, and Much Wenlock Leisure Centre. The main pool at Whitchurch Swimming Centre is a 25m x 4 lane pool. At the Whitchurch Swimming Centre and the Much Wenlock Leisure Centre, the scale of the main pool means they are also able to provide for the full range of swimming activities, albeit they are single pool sites.

- At 3 of these centres there are also separate teaching/leaner pools, with a 12m x 5m pool at Market Drayton, a 13m x 8m pool at Oswestry and an 11m x 8m pool at the Quarry Swimming and Fitness Centre.

- **Second key finding** - the scale of provision at the public leisure centres, means they can provide for all the swimming activities of: learn to swim; casual recreational swimming; lane and aqua aerobics fitness swimming activities; and swimming development through clubs. Furthermore, at three of the sites this can take place in dedicated and separate pools.

- Overall, there is a very extensive provision of public leisure centre swimming pools, with pools that that can provide for all swimming activities.

- The education swimming pools sites are smaller in scale, there is a 25m x 6 lane main pool at Shrewsbury School and 25m x 4 lane pools at Ellesmere College, Moreton Hall School, and St Martins Sports Centre. Whilst the smaller education pool sites are located at, Ellesmere Swimming Centre with a 20m x 4 lane main pool and Moor Park School 18m x 9m main pool.

- The education pool sites will provide for organised swimming club use and may operate a swim school. The hours of access for this wider community use depends on the policy of each education provider. Some schools and colleges are proactive in providing for community use, whist other schools and colleges let the pool in response to requests. Independent schools tend to provide for extra-curricular use by school sports clubs and partner schools and not provide for wider community use

- The largest commercial swimming pool site is at Teme Ludlow, which has a 25m x 6 lane main pool with water slide, diving plunge pool and two leisure pools with water features. The other commercial pool sites are single pool sites ranging from the 25m x 4 lane pool at Lions Quays Leisure Centre to the 20m x 3 lane pool at The Shrewsbury Club. Commercial pools provide for recreational swimming by the centre membership and some also operate a swim school.

- **Third key finding** - the average age of the public swimming pool sites, is 27 years, the oldest pool site being the Quarry Swimming and Fitness Centre, which opened in 1971. The most recent public leisure centre is Oswestry Leisure Centre which opened in 2011.

- The average age of all the swimming pool sites is 29 years excluding Ellesmere College, which opened in 1950 and RAF Cosford which opened in 1948. The most recent pool site to open is Oswestry Leisure Centre in 2011.

- **Fourth key finding** - the Shropshire County supply of swimming pool sites is 13.1% of the total number of swimming pool sites in the study area. Across Shropshire County and the eleven neighbouring local authorities, there are a very high 225 individual swimming pools, of which 88 are in Herefordshire County. There are 167 swimming pool sites, with Herefordshire County having 62 pool sites - overall it is a very extensive supply of swimming pools.

Measure of Provision

9.7 Based on a measure of water space per 1,000 population, the Shropshire County supply is 19 sq metres of water space per 1,000 population in 2019. Shropshire has the second highest supply based on this measure, after Malvern Hills with 20 sq metres of water per 1,000 population.

9.8 The range is 20 sq metres of water per 1,000 population in Malvern Hills to 6 sq metres of water per 1,000 population in Stafford, the mid-range is 12 sq metres of water per 1,000 population

9.9 The West Midlands Region average is 11 sq metres of water per 1,000 population and for England wide it is 12 sq metres of water per 1,000 population in 2019.

9.10 So the provision in Shropshire County, is higher than nearly all the neighbouring local authorities and considerably higher than the West Midlands Region and the England wide averages.

9.11 The overall level of provision identified for Shropshire County will be based on all the supply and demand findings. This is simply a measure which compares the Shropshire supply, with that of the neighbouring local authorities. It is set out, because some local authorities like to understand how their provision compares with other authorities.

Supply and Demand for Swimming Pools

9.12 Supply and demand balance compares the total demand for swimming in Shropshire County with the total supply across Shropshire County. It therefore represents an assumption that ALL the demand for swimming is met by ALL the supply in Shropshire. (Note: it does exactly the same for the other authorities).

9.13 In short, supply and demand balance is NOT based on where the venues are located and their catchment area extending into other authorities. Nor, the catchment areas of pools in neighbouring authorities extending into Shropshire County.

9.14 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.

9.15 **Fifth key finding** - in 2019 the resident population of Shropshire County, generates a demand for 3,111 sq metres of water. The supply available for community use is 4,121 sq metres of water, in the weekly peak period. So, there is a positive balance of supply exceeding demand by 1,010 sq metres of water in 2019.

9.16 Overall, across the total twelve local authorities, the total supply is 43,861 sq metres of water and the total demand for swimming is 32,621 sq metres of water. There is a positive supply and demand balance of supply exceeding demand by 11,240 sq metres.

9.17 **Sixth key finding** - these findings mean that when the assessment is based on the catchment area of swimming pools, and across local authority boundaries, a very high level of the total demand for swimming will be met. Plus there is likely to be a low level of unmet demand. These findings are examined in the next two sets of headings.

Satisfied or Met Demand for Swimming

9.18 Satisfied demand, measures the proportion of total demand that is met by the capacity of the swimming pools from residents who live within the car, walking or public transport catchment area of a swimming pool (pools located both inside and outside the Borough)

9.19 **Seventh key finding** - satisfied demand is 89% of the total demand for swimming from Shropshire County residents. This means this level of the County's total demand for swimming is located inside the catchment area of a swimming pool, and there is enough swimming pool capacity to meet 89% of the Shropshire County total demand for swimming.

Retained demand

9.20 A sub set of findings for satisfied demand, is how much of the Shropshire County satisfied demand for swimming is retained at the swimming pool sites located in the County. This assessment is based on Shropshire residents travelling to and using the nearest pool to where they live, and it is a swimming pool located in the County.

9.21 **Seventh key finding** - in 2019, some 85% of the total 89% Shropshire County demand for swimming which is satisfied, is retained demand within the County. **An eighth key finding** - is that there is a very close correlation between the Shropshire swimming pool locations and catchment areas and the location of the Shropshire County demand for swimming pools. So much so, that the nearest pool for over eight out of ten visits to a swimming pool by a Shropshire resident is a pool located in the authority.

9.22 It is important to reiterate, the model distributes demand based on residents traveling to and using the nearest pool to where they live. Sport England research does support this modelling assumption. However, there are increasingly other factors which influence which pools residents chose to use. These are the quality of the swimming pool itself, plus other facilities on the same site, such as a gym or studio. Some residents may travel further to swim in a pool that provides a better quality offer, than simply choosing to swim at the nearest pool to where they live.

Exported demand

9.23 The residual of satisfied demand, after retained demand, is exported demand. The 2019 finding is that 14% of the Shropshire County satisfied demand for swimming is met outside the authority. Again, this is based on the nearest pool for this level of the County's satisfied demand, is a pool located outside the County.

9.24 In terms of visits, the Shropshire County retained demand is14, 383 visits per week in the weekly peak period. Whilst the Shropshire County exported demand, is 2.392 visits in the weekly peak period. The data does not identify how much of the Shropshire County demand goes to which authority or pool site, it just provides the total figure for exported demand.

Unmet Demand for Swimming Pools

9.25 The unmet demand definition has two parts to it (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 and is then classified as unmet demand.

9.26 **Ninth key finding** - the Shropshire County total unmet demand is 10.5% of total demand, and this equates to 328 sq metres of water. 98% is from the definition, unmet demand located outside the catchment area of a pool and 2% is from lack of swimming pool capacity (reviewed under the used capacity heading).

9.27 Unmet demand outside catchment will always exist, this is because it is not possible to get complete spatial coverage, whereby all areas are inside catchment. This is especially so when an authority has an extensive land area, such as Shropshire County. As Map 2.1 in the supply section shows, there are extensive areas in the south and west of the County, where there are no swimming pool sites. Fortunately, there is not a lot of demand for swimming located in these areas.

9.28 **Tenth key finding** - the total unmet demand outside catchment, is 1,933 visits per week in the weekly peak period. This compares with the demand inside catchment, and which is being met, of 16,776 visits per week in the weekly peak period.

9.29 **Eleventh key finding** - the overall key point, is not that unmet demand outside catchment exists, but the SCALE of the unmet demand and which is more important. Plus, if this unmet demand is clustered enough to consider further pool provision, so as to improve accessibility to pools for residents. Unmet demand is highest in the area in and around the Shrewsbury town area (Map 6.4), it totals 48 sq metres of water but this over quite an extensive land area. It is likely in this area, there are residents who do not have access to a car and live outside the walking or public transport catchment area of a swimming pool.

9.30 Unmet demand in the Wem area totals between 10 - 15 sq metres of water, in the Oswestry area unmet demand is between 5 – 10 sq metres of water, and in both the Market Drayton and Ludlow areas, it is around 5 sq metres of water. Overall the unmet demand is very low in the main settlements within the County. The remainder of the unmet demand is distributed in low values, across the rest of the County.

9.31 **Twelfth key finding** - the total unmet demand of 328 sq metres across the County is a low total. There is not a sufficient level of unmet demand clustered in any one location, to consider increasing swimming pool provision, so as to increase access to pools for residents. (For context, a 25m x 4 lane swimming pool is between 210 – 250 sq metres of water, depending on lane width.

Used Capacity (how full are the Swimming Pools?)

9.32 Used capacity 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 busy to be able to swim comfortably, plus the changing and circulation areas become too crowded. The model assumes that usage over 70% of capacity used in the weekly peak period is busy and the swimming pool is operating at an uncomfortable level above that percentage.

9.33 **Thirteenth key finding** - the estimated used capacity of the swimming pools as a Shropshire County average, is 45% of pool capacity used in the weekly peak period. This is well within the Sport England benchmark of pools being comfortably full, at 70% of pool capacity used.

9.34 **Fourteenth key finding** - (the three bullet points) The findings on used capacity can be explained by some of the earlier findings, namely:

- The Shropshire County, demand for swimming equates to 3,111 sq metres of water, whilst the total supply is 4,121 sq metres of water. So there is a positive balance of supply exceeding demand by 1,010 sq metres of water in 2019.

- Nearly 90% of the total demand for swimming from Shropshire County residents is satisfied/met. This is the County's total demand for swimming located inside the catchment area of a swimming pool and the pools have enough capacity to meet this level of total demand.

- Unmet demand for swimming from Shropshire County residents is low, at 328 sq metres of water. This compares with an available supply of water space which is 4,121 sq metres of water. Of the total unmet demand, 98% is demand located outside the catchment area of a pool and only 2% from lack of swimming pool capacity.

9.35 The findings for each individual pool site do vary from the County wide average (Table 7.1). The estimated used capacity for swimming pools can vary for several reasons and it is important to set these out.

- **Firstly** - the public leisure centres will provide for all the swimming activities of: learn to swim; public recreational swimming; fun and leisure activities; lane and fitness swimming; and swimming development through clubs.

- The centres are accessible for public use as well as swimming club use. The opening hours are extensive and the centres are proactively managed to encourage and support swimming participation and physical activity. Finally, as public leisure centres there is not the requirement to pay a monthly membership fee to access the swimming pools, as there is with commercial swimming pools and this can be a disincentive to use a commercial swimming pool. All these factors contribute to the levels of pool usage at the public swimming pool sites.

- **Whitchurch Swimming Centre** has an estimated used capacity of 82% in the weekly peak period, at **Oswestry Leisure Centre** it is 57% at, **Market Drayton Swimming and Fitness Centre** it is 53% at **Quarry Swimming and Fitness Centre** it is 47% and at **Much Wenlock Leisure Centre** it is 40%

- **Secondly -** it is important to consider also the scale of each pool site and not view the used capacity percentage figure in isolation. The **Quarry Swimming and Fitness Centre** is the largest swimming pool site in the County, it has 4 individual pools and a total water area of 893 sq metres of water, which is 21% of the total water area available for community use, across all the 22 swimming pool sites in the County – it is a very extensive swimming pool site.

- So the **Quarry Swimming and Fitness Centre** can accommodate far more usage than any other swimming pool site. Its estimated used capacity of 47% in the weekly peak period has to be seen in this wider context, of the very large amount of water space and usage it can accommodate. Its usage compares very favourably with (say) the 63% of pool capacity used at the **Ellesmere Swimming Centre**, which has one pool of 20m x 8m and a water area of 160 sq metres of water. To repeat, it is important to consider the scale of each pool site and not view the used capacity percentage figure in isolation

- **Thirdly** - the estimated used capacity for the education pools for community use, not education use, ranges from **Moor Park School** with 19% to **Shrewsbury School** with 100%. The hours available for community use will vary at each education pool site and this will be reflected in the amount of pool capacity used. An education pool site which only has 10 hours of community use available a week, can have a high used capacity. The opposite will also apply, if a pool is available for say 30 hours a week for community use, then there is more time to fill and the used capacity can be lower.

- The programme of use at the education pools will be predominately for club use and learn to swim programmes. Very few education swimming pool sites provide for public recreational pay and swim use, unless there is a joint use agreement in place, whereby the pool is managed and operated for public as well as school use. Independent schools tend to make swimming pools available for extra-curricular use by school clubs, feeder schools and groups associated with the school, and not available for wider community use.

- So the used capacity of the education pool sites will reflect a much narrower programme of community use than the public leisure centres and for far fewer hours of access for community use.

- **Fourthly** - the smaller commercial swimming pool sites pool capacity used in the weekly peak period ranges from, Lion **Quays Leisure Club** with 19% to **Bannatynes**

Health Club with 80%. The type of use at the commercial pools is recreational swimming by the centre membership and some commercial pools may also provide learn to swim programmes. So again, a much more limited programme of use than at the public leisure centre, in terms of swimming activities and with access for only the centre membership

- **Fifthly** - if a pool site has few other pool sites in its catchment area then it will retain a high level of demand. The opposite can also apply, and if there are several pool sites with overlapping catchments, then this means the demand is shared between several pool sites. The latter appears to be the case in Shrewsbury (Map 2.2) Oswestry and the Western Rhyn areas. Whereas in the Ludlow and Much Wenlock areas the opposite applies, and there are no competing pool sites for the demand in those areas

- **Sixthly** – the estimated used capacity will reflect the amount of demand located in an area with areas that have the highest population density having the highest demand and vice versa. This may explain why the estimated used capacity for the Much Wenlock Leisure Centre is lower than in an area with a higher population density such as Shrewsbury.

9.36 The reasons for the used capacity at individual pools sites are a combination of these inter - related explanations and there is no one reason for the level of estimated used capacity. The findings should be taken as a guide and consulted on with the swimming pool operators.

Overall summary

9.37 The overall summary relates to the supply findings. There is a very extensive supply of swimming pools, both within Shropshire County and in the neighbouring local authorities, especially Herefordshire County. The fpm finding is demand for swimming pools can be met by the existing supply of swimming pools. The findings on the estimated used capacity, as a County average, indicates a good level of headroom, before the pools reach the Sport England benchmark of pools being comfortably full at peak times.

9.38 However the estimated used capacity of the public leisure centres is higher, and this reflects the all-round greater access to public leisure centres. They provide for all types of swimming activity – so there is a draw to these swimming pool centres.

9.39 There are 7 education swimming pool sites in the County and any reduction in the use of these pools for community use will most likely transfer to the public leisure centres. If the Council does not already have community use agreements with the education pools sites of most importance to the Council, it may wish to consider developing these agreements, so as to secure continued access for community use.

9.40 The average age of the Shropshire public leisure centre pool sites is 27 years and 29 years for all the pool sites, the Quarry Swimming and Fitness Centre opened in 1971 and was last modernised in 1995, so it is 48 years old. The Quarry Swimming and Fitness Centre is the largest swimming pool site in the County, it has 4 individual pools and a total water area of 893 sq metres of water, which is 21% of the total water area available for community use, across all the 22 swimming pool sites in the County, it is evidently the most important swimming pool site.

9.41 Options to consider the future for this centre will be part of the strategic study the Council is undertaking. The overall strategic finding from the fpm assessment is that the supply of swimming pools exceeds demand and so there is scope to consider the scale of any replacement Quarry swimming pool centre.

Facilities planning model

9.42 It is most important to set out the FPM study is a one year study based on 2019 data. It is a quantitative, accessibility and spatial assessment of the supply, demand and access to swimming pools in 2019.

9.1 In considering the provision of swimming pools across the County in the future, the FPM findings have to be placed within the wider role swimming pools play in meeting the objectives of Shropshire Council The FPM study provides an extensive assessment for this wider consultation and development.

9.2 Finally, swimming pools offer more scope than any other indoor sports facility type, to contribute to an active and healthy lifestyle by residents. They are the only facility type which provides for participation by all age groups and 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.

Appendix 1: Swimming Pools included in the 2019 Assessment

Facilities Included

Name of Facility	Type	Dimensions	Area	Site Year Built	Site Year Refurbished
ELLESMERE COLLEGE	Main/General	25 x 10	250	1950	2007
ELLESMERE SWIMMING CENTRE	Main/General	20 x 8	160	1972	2003
LION QUAYS LEISURE CLUB	Main/General	25 x 8	200	2008	2013
MARKET DRAYTON SWIMMING & FITNESS CENTRE	Main/General	25 x 13	325	1995	2012
MARKET DRAYTON SWIMMING & FITNESS CENTRE	Learner/Teaching /Training	12 x 5	60		
MORETON HALL SCHOOL	Main/General	25 x 10	250	1975	2008
OSWESTRY LEISURE CENTRE	Main/General	25 x 13	313	2011	
OSWESTRY LEISURE CENTRE	Learner/Teaching /Training	13 x 8	94		
OSWESTRY SCHOOL	Main/General	20 x 9	180	1975	
ST MARTINS SPORTS CENTRE	Main/General	25 x 10	250	1981	2004
VITAL HEALTH & WELLBEING (HILL VALLEY HOTEL)	Main/General	20 x 8	160	2007	
WEM SWIMMING AND LIFESTYLE CENTRE	Main/General	20 x 8	160	2005	
WHITCHURCH SWIMMING CENTRE	Main/General	25 x 9	225	1974	
BANNATYNE HEALTH CLUB (SHREWSBURY)	Main/General	20 x 8	160	2005	
QUARRY SWIMMING & FITNESS CENTRE	Main/General	33 x 13	413	1971	1995
QUARRY SWIMMING & FITNESS CENTRE	Main/General	25 x 10	250		
QUARRY SWIMMING & FITNESS CENTRE	Main/General	18 x 9	162		
QUARRY SWIMMING & FITNESS CENTRE	Learner/Teaching /Training	11 x 7	68		
SHREWSBURY SCHOOL	Main/General	25 x 13	313	2007	
THE SHREWSBURY CLUB	Main/General	20 x 6	120	2005	
BRIDGNORTH ENDOWED LEISURE CENTRE	Main/General	25 x 8	200	1976	

Name of Facility	Type	Dimensions	Area	Site Year Built	Site Year Refurbished
MOOR PARK SCHOOL	Main/General	18 x 9	166	1978	2015
MUCH WENLOCK LEISURE CENTRE	Main/General	25 x 13	313	2010	
RAF COSFORD SCHOOL OF PHYSICAL TRAINING	Main/General	25 x 15	375	1948	
TEME CHURCH STRETTON	Main/General	20 x 8	160	1980	
TEME LUDLOW	Main/General	25 x 13	325	1997	
TEME LUDLOW	Diving	10 x 9	85		
TEME LUDLOW	Leisure Pool	12 x 6	72		
TEME SPARC	Main/General	20 x 9	180	1972	2006

Facilities Excluded

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

Site Name	Facility Sub Type	Reason for Exclusion
CASTLE COUNTRY CLUB	Main/General	Too Small.
CASTLE COUNTRY CLUB	Learner/Teaching/Training	Too Small.
CASTLE COUNTRY CLUB	Learner/Teaching/Training	Too Small.
CONCORD COLLEGE	Main/General	Private Use/Too Small.
MERCURE SHREWSBURY ALBRIGHTON HALL HOTEL AND SPA	Learner/Teaching/Training	Too Small.
QUARRY SWIMMING & FITNESS CENTRE	Lido	Closed. Lido.
RADBROOK ELITE HEALTH & LEISURE CLUB (CLOSED)	Learner/Teaching/Training	Closed. Too Small.
BROOKSIDE LEISURE PARK	Learner/Teaching/Training	Private Use. Too Small.
DERWEN COLLEGE	Main/General	Private Use.
MARKET DRAYTON SWIMMING & FITNESS CENTRE	Lido	Lido.
PACKWOOD HAUGH SCHOOL	Main/General	Private Use. Too Small.
WYNNSTAY COACH HOUSE HEALTH & FITNESS CLUB	Learner/Teaching/Training	Too Small.
ALBRIGHTON PRIMARY SCHOOL	Lido	Private Use. Too Small. Lido.
BEDSTONE COLLEGE	Lido	Private Use. Lido.

Site Name	Facility Sub Type	Reason for Exclusion
BIRCHFIELD SCHOOL	Lido	Private Use. Too Small. Lido.
ELYSIUM HEALTH CLUB (ALBRIGHTON) (CLOSED)	Learner/Teaching/Training	Closed. Too Small.
HAUGHTON HALL HEALTH CLUB	Main/General	Too Small.
MUCH WENLOCK LEISURE CENTRE (CLOSED)	Main/General	Closed.
OLDBURY WELLS SCHOOL	Main/General	Private Use. Too Small.
PARK HOUSE HOTEL	Learner/Teaching/Training	Private Use. Too Small.
SEVERN CENTRE	Lido	Lido.
SEVERN CENTRE	Lido	Closed. Lido.
ST LEONARDS CE PRIMARY SCHOOL	Learner/Teaching/Training	Private Use.
SWANCOTE HEALTH & FITNESS CENTRE (CLOSED)	Lido	Closed. Lido.

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**

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

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**

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.

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.

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.

3. **How the model works**

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.

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.

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.

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.

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 **sport**scotland.

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

- National Halls & 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 Lives Survey - Sport England
- STP User Survey - Sport England & **sport**scotland
- Football participation - The FA
- Young People & Sport in England – Sport England
- Hockey Fixture data - Fixtures Live

4. **Calculating Demand**

This is calculated by applying the user information from the parameters, as referred to above, to the population[1]. This produces the number of visits for that facility that will be demanded by the population.

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)[2].

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

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.

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).

Based on travel time information[3] 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.

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

[1] 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.
2 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.

[3] 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.

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.

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. **Calculating the capacity of Sports Halls – Hall Space in Courts(HSC)**

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

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

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

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

7. **Facility Attractiveness – for halls and pools only**

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

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, programming and sports development. Additionally, the date of any significant refurbishment is also included within the weighting factor; however, the attractiveness is set lower than a new build of the same year. It is assumed that a refurbishment that is older than 20 years will have a minimal impact on the facilities attractiveness. The information on year built/refurbished is taken from Active Places. A graduated curve is used to allocate the attractiveness weighting by year. This curve levels off at around 1920 with a 20% weighting. The refurbishment weighting is slightly lower than the new built year equivalent.

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.

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.

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.

8. **Comfort Factor – halls and pools**

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 is gives each facility a "theoretical capacity".

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.

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.)

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.

9. **Utilised Capacity (used capacity)**

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

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.

For example; a 25m, 4 lane pool has a theoretical capacity of 2260 per week, during 52 hour peak period.

As set out in the table below, 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 theoretical capacity is 264 visits throughout the evening. In this instance the pool's utilised capacity for the evening would be 54%.

	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

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'.

10. **Travel times Catchments**

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

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 of Transport.

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

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.

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	73%	18%	9%

Sports Hall	75%	16%	9%
AGP			
Combined	83%	14%	3%
Football	79%	17%	3%
Hockey	96%	2%	2%

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

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

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

Artificial Grass Pitches						
	Combined		Football		Hockey	
Minutes	Car	Walk	Car	Walk	Car	Walk
0-10	28%	38%	30%	32%	21%	60%

10-20	57%	48%	61%	50%	42%	40%
20 -40	14%	12%	9%	15%	31%	0%

NOTE: These are approximate figures, and should only be used as a guide

Inclusion Criteria used within analysis
Swimming Pools

The following inclusion criteria were used for this analysis;

- Include all Operational Indoor Pools available for community use i.e. pay and play, membership, Sports Club/Community Association
- Exclude all pools not available for community use i.e. private use
- Exclude all outdoor pools i.e. Lidos
- Exclude all pools where the main pool is less than 20 meters OR is less than 160 square meters.
- Include all 'planned', 'under construction, and 'temporarily closed' facilities only where all data is available for inclusion.
- Where opening times are missing, availability has been included based on similar facility types.
- Where the year built is missing assume date 1975[4].

Facilities over the border in Wales and Scotland included, as supplied by **sport**scotland and Sport Wales.

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

Model Parameters used in the Analysis

Pool Parameters

<table>
<tr><td>At one Time Capacity</td><td></td><td>0.16667 per square metre = 1 person per 6 square meters</td></tr>
<tr><td>Catchment Maps</td><td></td><td>Car: 20 minutes
Walking: 1.6 km
Public transport: 20 minutes at about half the speed of a car

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

Frequency per week</td><td></td><td>
<table>
<tr><th>Age</th><th>0 - 15</th><th>16 - 24</th><th>25 - 39</th><th>40 - 59</th><th>60-79</th><th>80+</th></tr>
<tr><td>Male</td><td>11.26</td><td>6.62</td><td>9.38</td><td>7.61</td><td>4.48</td><td>1.40</td></tr>
<tr><td>Female</td><td>13.03</td><td>11.36</td><td>14.79</td><td>11.77</td><td>7.25</td><td>1.43</td></tr>
</table>
<table>
<tr><th>Age</th><th>0 - 15</th><th>16 - 24</th><th>25 - 39</th><th>40 - 59</th><th>60-79</th><th>80+</th></tr>
<tr><td>Male</td><td>1.10</td><td>1.07</td><td>0.93</td><td>1.05</td><td>1.33</td><td>1.64</td></tr>
<tr><td>Female</td><td>1.08</td><td>0.99</td><td>0.88</td><td>1.04</td><td>1.17</td><td>1.24</td></tr>
</table>
</td></tr>
<tr><td>Peak Period

Percentage in Peak Period</td><td></td><td>Weekday: 12:00 to 13:30; 16:00 to 22.00
Saturday: 09:00 to 16:00
Sunday: 09:00 to 16:30
Total: 52 Hours

63%</td></tr>
</table>


SPORT
ENGLAND